# SENATE—*Tuesday, May 16, 1989*

*(Legislative day of Tuesday, January 3, 1989)*

The Senate met at 9:30 a.m., on the expiration of the recess, and was called to order by the Honorable RICHARD H. BRYAN, a Senator from the State of Nevada.

PRAYER

The Chaplain, the Reverend Richard C. Halverson, D.D., offered the following prayer:

Let us pray:

*For my people have committed two evils; they have forsaken Me the fountain of living waters, and hewed them out cisterns, broken cisterns, that can hold no water.*—Jeremiah 2:13.

God of Abraham, Isaac, and Israel, in our contemporary culture we commit the same evils. We give preeminent attention to the body—aerobics, jogging, diets—and bodily appetites prevail. Shallow minds, dried up souls, empty hearts result. We indulge ourselves physically and starve ourselves spiritually.

Patient, gracious Father in Heaven, forgive us and turn our hearts to Thee for the refreshing renewal and spiritual health we need. In the name of Him who is the Way, the Truth, and the Life, we pray. Amen.

## APPOINTMENT OF ACTING PRESIDENT PRO TEMPORE

The PRESIDING OFFICER. The clerk will please read a communication to the Senate from the President pro tempore [Mr. BYRD].

The legislative clerk read the following letter:

U.S. SENATE,
PRESIDENT PRO TEMPORE,
*Washington, DC, May 16, 1989.*

*To the Senate:*

Under the provisions of rule I, section 3, of the Standing Rules of the Senate, I hereby appoint the Honorable RICHARD H. BRYAN, a Senator from the State of Nevada, to perform the duties of the Chair.

ROBERT C. BYRD,
*President pro tempore.*

Mr. BRYAN thereupon assumed the chair as Acting President pro tempore.

## RECOGNITION OF THE ACTING MAJORITY LEADER

The ACTING PRESIDENT pro tempore. The Chair recognizes the acting majority leader.

## THE CHAPLAIN'S PRAYER

Mr. FOWLER. Mr. President, I thank the Chaplain for his morning prayer and his continued service to our Creator and to this body. It was a wonderful prayer reflecting the words of Paul in his letters to the Romans:

I beseech you therefore, brethren, by the mercies of God, that ye present your bodies a living sacrifice, holy, acceptable unto God, which is your reasonable service.

I thank him for his continued stewardship on behalf of the people of this country and on behalf of all of us who serve.

## THE JOURNAL

Mr. FOWLER. Mr. President, I ask unanimous consent that the Journal of the proceedings be approved to date.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

## SCHEDULE

Mr. FOWLER. Mr. President, following the time for the two leaders, there will be a period for morning business not to extend beyond the hour of 10 a.m., with Senators permitted to speak therein for up to 5 minutes each.

At 10 o'clock this morning the Senate, Mr. President, will resume debate on the Senate Joint Resolution 113, the FSX disapproval resolution.

The Senate will also recess today from 12:30 p.m. to 2:15 p.m. to accommodate the party conferences.

The minority leader, I believe, is also at the White House this morning with the majority leader.

## RESERVATION OF LEADER TIME

Mr. FOWLER. Mr. President, I will reserve at this time, without objection, both leaders' time.

## QUORUM CALL

Mr. FOWLER. Mr. President, I suggest the absence of a quorum.

The ACTING PRESIDENT pro tempore. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. REID. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

## ORDER OF PROCEDURE

Mr. REID. Mr. President, are we in morning business now?

The ACTING PRESIDENT pro tempore. We are not yet in morning business.

## MORNING BUSINESS

The ACTING PRESIDENT pro tempore. Under the previous order, there will now be a period for the transaction of morning business not to extend beyond the hour of 10 a.m., with Senators permitted to speak therein for not to exceed 5 minutes each.

## LONG-RANGE ENERGY POLICY

Mr. REID. Mr. President, in 1974 I came to Washington, DC, and I was impressed, as everyone was at that time, by the tremendously long gas lines, people lined up for blocks and blocks waiting to fill their cars with gasoline. I had never seen anything like it.

It was not until a few months later that these same long gas lines were in Nevada. They were all over the United States. The gas crisis came and it went.

But in spite of this, the fact that we should recognize is the fact that a gas crisis could come again, and we have done nothing about establishing a long-range energy policy in this country.

In fact, Mr. President, we are importing more oil than ever, both in real terms and in percentage terms. There is presently no Government emphasis, no Government stimulus, no Government stress, no Government tax policy that would cause us to spend additional money on oil shale development, solar energy, wind energy, geothermal. No, we have no long-range energy policy and we are not developing one.

You would think, with the disaster that just occurred in Alaska, that it may help us see the light that we should have a long-range energy policy, but probably it will not. The sad part is this is not the only area of failure of this country to develop a long-range policy.

Mr. President, what do manganese, cobalt, platinum group metal, and chromium have in common? Mr. President, these are all materials critical to either the economic or the political security of the United States, but are available predominantly from countries of questionable reliability.

The United States is about 75-percent reliant on imports of chromium from South Africa, Zimbabwe, Yugo-

● This "bullet" symbol identifies statements or insertions which are not spoken by a Member of the Senate on the floor.

AUTHENTICATED U.S. GOVERNMENT INFORMATION GPO

slavia, and Turkey. Chromium, essential for the construction of automobiles, aircraft, insulation of high-temperature furnaces, and many other industrial applications, is being imported.

Mr. President, 95 percent of the United States cobalt supply is provided through imports from Zaire, Zambia, Canada, and Norway. This is crucial in the forging of alloys, the building of tool bits, and the refining of oil.

Manganese is crucial in the alloy process of certain high-strength steels used in various weapons systems crucial to this Nation's defense. One hundred percent of our manganese supply is imported from South Africa, Brazil, and Gabon.

Platinum group metals are essential in petroleum refining, chemical processing, and automobile exhaust treatment. They are also used in telecommunications equipment, medical and dental equipment. Ninety-two percent of our supply is imported from South Africa and the Soviet Union, with a little from Great Britain.

Without these materials many basic products we have all come to rely on would simply not be available. As my colleagues can see, we are very vulnerable to a complete or partial embargo of these materials. There are several policy options to consider to guard against such an eventuality. Two that spring immediately to mind are stockpiling and developing substitutes for these materials. But to do this, it will take a coordinated effort at the national level to devise a policy to address this problem. Within the White House is a council charged with exactly this mission. This was established in 1985. Unfortunately, in its 4 years of existence the National Critical Materials Council has done nothing to study, recommend, or in any other way further the development of a national critical materials policy.

Each year the administration has recommended no funding. For the fiscal year 1990 budget again they have recommended that it be defunded. And even though Congress has funded it in each of those years, the agency has simply not worked because the administration for reasons unknown has not wanted it to work.

I think this is a perfect example, Mr. President, of the words of Harold Laski that we must plan our civilization or perish. And certainly in the area of energy policy and a minerals policy we must plan or perish.

Mr. President, I suggest the absence of a quorum.

The ACTING PRESIDENT pro tempore. The absence of a quorum having been suggested, the clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. WILSON. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

The Senator from California is recognized.

(The remarks of Mr. WILSON pertaining to the introduction of legislation are located in today's RECORD under "Statements on Introduced Bills and Joint Resolutions.")

Mr. WILSON. Mr. President, I suggest the absence of a quorum.

The ACTING PRESIDENT pro tempore. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. FORD. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

## CONGRESSIONAL CALL TO CONSCIENCE VIGIL

Mr. COCHRAN. Mr. President, despite recent signs of change in the U.S.S.R., many Soviet citizens are still denied their basic human rights. This is particularly true of many Jews, who suffer discrimination in housing, education, and employment, and are often denied permission to leave the Soviet Union to live in another country. We in the United States must continue to call attention to the plight of these persons and to press for greater religious tolerance, freedom of travel, and fundamental human rights.

The Congressional Call to Conscience Vigil is an annual opportunity for Members of Congress to speak out on the denial of basic freedoms to Soviet Jews. Since 1978, Members participating in the vigil have made statements for the RECORD to heighten public awareness of cases of special need. I rise in this year's call to conscience to bring the attention of the Senate to the plight of the Uspensky family.

Igor and Inessa Uspensky are Soviet entomologists who previously worked at the Institute of Medical Parasitology and Tropical Medicine in Moscow. Igor is the son of Irina Voronkevich, a distinguished biologist, and Inessa is the sister of Alexander Yofee, an eminent Moscow mathematician and a leading refusenik. The Uspenskys have two children, Ilya, born in 1962, and Slava, born in 1968.

In 1979, the Uspenskys asked permission to leave the U.S.S.R. Soviet authorities not only refused them visas to emigrate to Israel; they also isolated Inessa and Igor from their scientific contacts and even threatened colleagues who remained in touch with them. After a lengthy campaign for their dismissal, the institute declared the Uspenskys "redundant," and by the end of 1983 they were without professional employment.

Visitors reported in January 1984 that Inessa had no job outside the home, and Igor was working part-time as an elevator operator. He continually worried that he might lose even that employment, since KGB agents were telephoning at intervals checking on his position. His fears were well-founded; he did lose his job on December 31, 1986.

In July 1987, the Uspenskys again asked permission to emigrate and were again refused, this time on grounds of "state security," under Soviet emigration regulations issued in January 1987 permitting officials to deny emigration to applicants having knowledge of "state secrets." Use of this regulation in the case of the Uspenskys was highly questionable, since Igor's work at the institute had never given him contact with classified material.

Beginning January 1, 1988, all Soviet Jews were required to provide evidence of first-degree relatives abroad in order to become eligible to apply for emigration. Under this requirement, the Uspensky's son, Slava, was informed on January 19, 1988, that his application to leave the Soviet Union could not be authorized. Later that same year, the entire Uspensky family was told they could not apply for emigration again until 1997, on the grounds, this time, that Igor's mother, Irina Voronkevich, held "state secrets." Since Irina, born in 1912, left her work at the Ministry of Agriculture in 1976, the Soviets in effect are claiming that she will possess classified secrets for 9 more years, until she is 85 years of age and has been out of government employment for 21 years.

Mr. President, Igor Uspensky and his family are still waiting for the opportunity to pursue their lives outside the Soviet Union. We want them to know—and we want the Soviet Government to know—that we are concerned about the Uspenskys and others who suffer denial of basic human rights. We call their case to the conscience of free men and women everywhere, and we urge our Government to continue to seek effective means to persuade Soviet authorities to relent in this situation and in similar cases.

## AIDS UPDATE

Mr. CRANSTON. Mr. President, according to the Centers for Disease Control, as of April 30, 94,280 Americans have been diagnosed with AIDS; 53,544 Americans have died from AIDS; and 40,736 Americans are currently living with AIDS.

Mr. President, 3,290 more Americans have developed AIDS and 1,933 Ameri-

cans have died from this horrible disease during the month of April.

Nearly 1 year ago, on May 25, 1988, I first began placing in the RECORD the most recent statistics concerning AIDS. At that time, 62,200 Americans had been diagnosed with AIDS and 35,051 Americans had died. Over the last 12 months, the number of individuals diagnosed with AIDS and the number of individuals who have died from AIDS have increased by more than 50 percent. After more than 8 years, this epidemic continues to claim American lives at an alarming rate. AIDS is still very much a crisis and, more likely than not the experts say, will remain one well into the next decade.

We cannot afford to become complacent. We must continue to be vigilant in fighting this virus. Although we succeeded in enacting sweeping legislation last year regarding many aspects of the AIDS epidemic, much, much more still needs to be done.

The spring 1989 edition of Issues in Science and Technology includes an article that puts forth a blueprint for action on AIDS. The article, entitled "A National Strategy on AIDS," is a reprint of a white paper that was written by Robin Weiss, director for AIDS activities at the Institute of Medicine [IOM]. It is based on the IOM report "Confronting AIDS: Update 1988."

The white paper calls on the Bush administration to take several actions to slow the spread of the epidemic, including developing a comprehensive plan for financing the care of individuals infected with the HIV, initiating a forceful program for the treatment of substance abuse, and instituting an aggressive and unambiguous educational campaign. The recommended nine point plan, if implemented, would bring us closer to the day when AIDS is eradicated. But we must begin now. We must not allow foot dragging to delay actions until hundreds of thousands more lives are lost and millions more are threatened. I will ask unanimous consent that the article be printed in the RECORD at the conclusion of my remarks and urge all my colleagues to read it.

Finally, Mr. President, I want to express my gratitude to Dr. C. Everett Koop for his years of service to the country as the Surgeon General of the Public Health Service. I was saddened to learn about Dr. Koop's decision to resign his post. He will be greatly missed by all who care deeply about stopping the AIDS epidemic and other vital public health issues. Dr. Koop is a man of dedication and conscience. He has been an outspoken voice for sound AIDS policy when others in the Reagan administration were silent. He has been a compassionate voice when others in the Reagan administration advocated counterproductive and ideologically based policies.

Mr. President, I will miss Dr. Koop's eloquence and candor, but I know he will continue to contribute to the development of AIDS policy and look forward to working with him. I join with many other Members of Congress in wishing Dr. Koop well.

I ask unanimous consent that the article to which I referred be printed in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

A NATIONAL STRATEGY ON AIDS

Early in January 1989, the presidents of the National Academy of Sciences and the Institute of Medicine observed the following in a letter to then President-Elect George Bush: "Americans have generated an enormous fund of knowledge about AIDS. We know its cause, we can test for the presence of HIV in the body, and we know what measures would, if successfully applied, slow its spread. Furthermore, the scientific understanding that lays the groundwork for the development of effective vaccine and drug treatment grows daily. Yet despite these triumphs, we have not successfully confronted the epidemic. Your Administration inherits the opportunity to harness our knowledge and turn the tide against AIDS."

The letter accompanied a "white paper"—a wide-ranging nine-point national program—designed to help turn that tide. Such a comprehensive strategy requires presidential commitment and leadership. But it also depends on the consent, participation, and skills of great numbers of people, in both the public and the private sectors, who contribute to progress in science, technology, and health and who facilitate its enlightened application. Thus the editors of this magazine thought that its readers would appreciate seeing the NAS/IOM white paper on AIDS:

During the next four years in this nation, the epidemic of human immunodeficiency virus (HIV) infection and its most severe manifestation, acquired immune deficiency syndrome (AIDS), will claim over 200,000 lives. The U.S. Public Health Service estimates that 1 million to 1.5 million people are currently infected with the virus. In the absence of effective therapy, the vast majority of those infected will develop AIDS and die. Although AIDS now kills fewer people than heart disease or cancer, its rank as a cause of mortality is quickly rising, and the primary sufferers of AIDS come from what is ordinarily a healthy and productive population group: young adults.

Stemming this agonizing epidemic requires presidential leadership. The epidemic poses dilemmas both for the public and the private sectors which will best be solved by forceful, coherent national policy. The obligation to formulate AIDS policy spans a variety of federal government departments and reaches beyond the Department of Health and Human Services (HHS) to the departments of Justice, Education, State, Defense, Energy, the Veterans' Administration, and other components of the Executive Branch. In addition, private organizations, foundations, volunteer groups, professional organizations, and state and local governments already have taken the initiative to create educational programs, formulate laws and regulations, and address other aspects of the epidemic. These efforts are an enormous contribution to the progress that has been made thus far against HIV infection and AIDS. Nevertheless, the absence of coherent national direction condemns many localities to begin anew when it comes to setting local policy and increases the likelihood that failed experiments will be repeated from place to place. The Bush administration can furnish overarching direction for all segments of the government and the private sector. Equally important, the president can set a tone that encourages aggressive action yet resists hysteria and insensitivity to the civil rights of infected persons.

Furthermore, foreign leaders will turn to the president of the United States for assistance and wisdom in addressing their own countries' HIV problems. The World Health Organization estimates that between 5 million and 10 million persons are infected with HIV worldwide. By 1991, AIDS may double the mortality rate for young and middle-age adults in some developing countries, and perinatal transmission in those countries may reverse hard-won advances in child and infant survival.

This paper proposes that the Bush administration take several actions, which we believe will help slow the spread of HIV and limit its damaging effects on this nation and on other countries: (1) Use the National Commission on AIDS effectively; (2) protect HIV-infected persons from discrimination; (3) develop a comprehensive plan for financing the care of those with HIV infection and AIDS; (4) initiate a forceful program for the treatment of substance abuse and the prevention of the associated spread of HIV; (5) institute aggressive and unambiguous educational programs and evaluate their effects; (6) ensure that HIV testing and other public health measures are used only when their purposes are clear and their results productive; (7) bolster efforts in surveillance, case reporting, and the gathering of information about risk behavior; (8) ensure that biomedical research (including drug and vaccine development and regulation) continues to follow fruitful paths; and (9) recognize our special responsibility in international health efforts to control AIDS.

USE THE NATIONAL COMMISSION ON AIDS EFFECTIVELY

President Reagan recently signed into law the AIDS Amendments of 1988, which establish a National Commission on Acquired Immune Deficiency Syndrome. Although the creation of a national commission is an important step, the commission's existence alone does not guarantee its effectiveness. The Bush administration can maximize the commission's impact in the following ways:

The president will appoint five members of the 15-member body, two of whom will be selected from the general public (the other three are the Secretary of Health and Human Services, the Administrator of Veterans' Affairs, and the Secretary of Defense). The two other appointees should be senior experts of national stature in areas of particular relevance to AIDS. They should not be chosen because they hold any particular political ideology.

The commission will submit its reports to the president and to the appropriate committees of Congress. In addition, however, the chairman should have direct access to the Oval Office. The work of the commission will have the greatest possible effect on policy if it is widely perceived that its chairman has the ear of the president. The president can endow the commission with sufficient national stature and credibility for its advice to influence all participants in the struggle against AIDS.

The commission is required to report its recommendations one and two years after its constitution. Although the reports will identify needed action, the commission will be most valuable if it is also consulted on a continuing basis as policy questions arise within the executive branch.

PROTECT HIV-INFECTED PERSONS FROM DISCRIMINATION

HIV transmission occurs through sexual contact, the use of contaminated needles or syringes, exposure to infected blood or blood products, transplantation of infected tissue or organs, and from mother to child either across the placenta or during delivery (and probably during breastfeeding). There is no evidence that HIV is transmitted by casual contact or by insects. Therefore, there are no grounds for discriminating against persons with HIV infection or AIDS because of fears that they pose a health risk through casual contact in schools, in the workplace, in housing, or in customary social interchanges.

However, such discrimination does exist, and fear of discrimination discourages some individuals at risk for infection from participating in testing programs, contact notification, and other potentially effective public health measures. Public health measures crucial in controlling the HIV epidemic depend on voluntary cooperation; for that cooperation to occur, people must believe that they will be protected from discrimination.

The president should ask Congress to enact legislation designed to prevent discrimination on the basis of HIV infection or AIDS in both the public and the private sectors.

DEVELOP A COMPREHENSIVE PLAN FOR FINANCING THE CARE OF THOSE WITH HIV INFECTION AND AIDS

The average lifetime medical expenses per AIDS patient in the United States, from diagnosis to death, are from $65,000 to $80,000. In 1986, estimated total direct costs for AIDS were approximately $1.64 billion—$1.1 billion for personal medical care and $542 million for nonpersonal expenses—representing 0.4 percent of total U.S. health expenditures. By 1991, direct costs associated with AIDS are projected to be $10.8 billion and to account for approximately 1.5 percent of national health care expenditures. Although the proportion of total health care expenditures devoted to AIDS will continue to be small through 1991, in certain metropolitan areas the economic burden to the health care sector will be great. For instance, in San Francisco, AIDS patients are expected to occupy 12.4 percent of all medical/surgical hospital beds.

According to the Health Care Financing Administration, Medicaid provides health care coverage for approximately 40 percent of all patients with AIDS. Public hospitals in states with stringent Medicaid eligibility requirements are faced with growing numbers of uninsured AIDS patients; the result is that many public hospitals are incompletely reimbursed for the care they provide. Medicare currently covers only 1 percent of AIDS patients, in part because they often do not survive the required 24-month waiting period to qualify for benefits. Private health insurance may pay for a dwindling share of AIDS patients as more poor and nonworking persons become sick and because insurers are making plans to limit their exposure to financial risk.

Solutions to financing AIDS health care can reflect the pluralism of the current health care financing system. Elements of a comprehensive financing strategy could include: enabling HIV-infected persons to secure or maintain private insurance through insurer tax incentives and government subsidy of premiums; modifying existing state Medicaid programs to make them more uniform and more efficient; shortening or eliminating the 24-month waiting period for Medicare benefits; establishing state risk pools; and establishing an AIDS federal grant program to direct funds to the states on the basis of a formula that reflects individual states' AIDS caseloads and resources.

The Secretary of HHS should develop an AIDS federal grant program to the states to ensure that AIDS patients and those with HIV-related conditions have access to appropriate and cost-effective care. This approach would offer some immediate financial relief to those hard-hit states and medical institutions that currently bear a disproportionate burden of AIDS care.

Another immediate need is to remove financial barriers to drug therapies. The Secretary of HHS should require all state Medicaid programs to reimburse for costly AIDS drugs that have been approved for marketing or that are under the Food and Drug Administration's (FDA) new mechanism allowing certain drugs still under investigation to be distributed.

Piecemeal solutions to the problems of health care financing must not sidetrack the need for a more comprehensive scheme. The Secretary of HHS should take the lead in developing a comprehensive national plan for delivering and financing care for needy HIV-infected and AIDS patients. The following principles should guide the development of such a financing strategy: (1) coverage from the time HIV infection is discovered, (2) consideration of relief for hard-hit communities, (3) shared responsibility between public and private sectors, and (4) payment mechanisms that encourage the most cost-effective types of care.

Initiate a forceful program for the treatment of substance abuse and the prevention of the associated spread of HIV. The gross inadequacy of efforts to reduce HIV transmission among intravenous (IV) drug abusers, when considered in relation to the scope and implications of such transmission, is the most serious deficiency in current programs to control HIV infection in the United States. IV drug abusers are the second largest group of AIDS sufferers, and the most likely to transmit HIV beyond the current high-risk groups. Several actions are necessary:

First, the Secretary of HHS should order a rapid, large-scale expansion of residential drug-free treatment, outpatient treatment, and methadone maintenance in order to provide immediate access for all addicts who request treatment. Methadone maintenance, an effective therapy for some heroin addicts, does not treat cocaine addiction. Yet IV cocaine abuse is increasingly related to transmission of HIV infection. Research to find effective treatment for cocaine addiction is urgently needed.

Second, innovative intervention programs must be begun to reach those IV drug abusers who are not in treatment. Former IV drug abusers, functioning as community health workers, can provide individual risk-reduction counseling; in addition, trials of sterile needle exchange programs, in which sterile needles and syringes are provided to drug abusers, should be implemented and evaluated.

Finally, long-term drug abuse prevention strategies are needed that begin with teens and preteens. Research and evaluation are necessary to determine which prevention methods work best.

Institute aggressive and unambiguous educational programs and evaluate their effects. Educational efforts to foster and sustain behavioral change are the only practical means now available to stem the spread of HIV infection. Information about the modes of HIV transmission must be conveyed in an understandable, yet scientifically accurate form. The message of AIDS education programs must also address sexual behavior and drug abuse, matters that are regarded by some as morally unsuitable for description in public health campaigns. Unsubstantiated concern that frank, straightforward educational programs can encourage IV drug abuse or sexual relations has stymied educational efforts. Explicit information on the risks associated with unsafe sex and drug abuse, and the way those risks can be minimized, does not promote or encourage such activities. Its sole function is to help people avoid an illness that endangers their lives and those of their sexual partners and children, and costs the nation billions of dollars.

Government at all levels should continue to fund factual educational programs designed to foster behavioral change. This may mean supporting AIDS education effors that contain explicit, practical, and perhaps graphic advice, targeted at specific audiences, about safer sexual practices and how to avoid the dangers of shared needles and syringes. This is the approach followed in the United Kingdom and in other western European countries.

In addition, the Secretary of HHS should see that more studies are conducted to determine the effects of various types of educational campaigns on specific populations. For example, there have been few systematic assessments of the effect of AIDS education programs or media presentation on the behavior of heterosexuals (as opposed to the impact on their beliefs or understanding about the disease). It is also essential to develop effective methods for reaching school-age children, youth who are just becoming sexually active, and persons at risk for HIV infection within minority communities.

The urgency of the HIV epidemic warrants a multiplicity of educational efforts, including the use of paid advertising to convey all types of AIDS-prevention messages on television and in other media. Although a number of federal government entities, including the military, the postal service, Amtrak, and the U.S. Mint, currently spend more than $300 million yearly for advertising, administrative restrictions from HHS have precluded the Centers for Disease Control (CDC) from paying for advertising in the past. But the recently enacted AIDS Amendments of 1988 now allow the CDC to purchase advertising time.

The Secretary of HHS should direct the CDC to purchase advertising for educational messages and should make certain that funds are supplied to do so.

Ensure that HIV testing and other public health measures are employed only when their purposes are clear and their results productive. The ability to detect antibodies to HIV has prompted various proposals for testing individuals and screening populations for evidence of HIV infection. However, these proposals must be assessed carefully to evaluate what they might add to interventions that are possible in the absence of

testing. The president can encourage a level-headed approach to testing strategies by conveying the belief that HIV testing alone is not a panacea. Several considerations follow.

First, it is essential that the purpose of any proposed testing plan be clearly spelled out; test results should be linked to actions that achieve individual or public health objectives. For example, donated blood, tissue, organs, and semen can be tested, and infected material discarded, thereby preventing transmission. This purpose is sound and has been achieved: The screening of blood for antibodies to HIV, combined with self-disqualification by potential donors at high risk for infection, has almost eliminated the transmission of HIV through blood and blood products. A common rationale for medical testing—to identify infected, asymptomatic persons so that they can be treated early—cannot be applied to HIV infection, since no therapy yet exists that prevents the progression of HIV infection to overt illness.

Another frequently cited purpose of testing, that knowledge of one's antibody status may encourage behavioral change, is a hoped-for but still unproven effect. In addition, it has been argued that uninfected persons can use the knowledge of others' test results to protect themselves from infection; or, in some situations (e.g., the military, jails, and other closed populations), authorities can intervene to protect uninfected persons by testing and then segregating infected persons. Extension of these strategies to the general population, however, is inappropriate and infeasible because 1 million or more people may be infected, the mean incubation period is eight to nine years, and the virus is not transmitted by casual contact. The testing of applicants for marriage licenses has also been tried, but such testing is costly, identifies very few infected individuals, and is not clear in its intent (if one of the applicants were infected, would marriage or pregnancy be prohibited?).

At this time, the only mandatory screening appropriate for public health purposes is that of donated blood, tissue, and organs. Voluntary testing, however, will play an increasingly useful role against the spread of HIV infection. The Secretary of HHS should ensure that voluntary testing, combined with pretest and posttest counseling, is available to all those who may be at risk for exposure to HIV. For example, serologic testing and counseling should be extended immediately to all settings in which IV drug abusers are seen or treated.

The technical aspects of HIV testing must also be considered. Although the current tests for HIV antibody are highly accurate, there will inevitably be false-positive and false-negative results (and the proportion of positive test results that are false is largest when the test is applied to populations with a low prevalence of infection).

The federal government should give more attention to establishing standards for laboratory proficiency in HIV antibody testing, setting criteria for interpreting assays, and instituting quality assurance procedures.

Other public health measures should also be carefully considered for their potential effectiveness in controlling the spread of HIV and for their conformity with social values.

Voluntary contact notification, for instance, may be useful in preventing the spread of HIV infection. Contact notification programs allow local public health officials or physicians to inform the sexual or needle-sharing partners of HIV-infected individuals who are afraid, embarrassed, or unwilling to notify partners themselves. These programs are of greatest value when directed at those who otherwise could be unaware that they had risked infection.

Mandatory reporting of persons who test positive for HIV antibodies, on the other hand, should not be required at this time. In fact, the effect of mandatory reporting may be to discourage individuals from seeking voluntary testing, a cost that does not justify its potential benefit. For determining how many people in a population are infected, well-designed studies are more useful than random reporting of cases.

Bolster efforts at surveillance, case reporting, and the gathering of information about risk behavior. By November 1988, over 76,000 AIDS cases had been reported to the CDC. Of these, over 40,000 have died. An additional 10 to 20 percent of cases are believed to have been missed by the case surveillance system. The Public Health Service predicts that by the end of 1992, 365,000 cases of AIDS will have been diagnosed.

Estimates of the total number of persons infected with HIV are less certain. Methods used to estimate the number of currently infected persons rely on information that is itself uncertain—for example, the prevalence of infection in certain subgroups (such as homosexual men and IV drug abusers), the sizes of these subgroups, and the latency period between infection and the onset of AIDS.

It is essential to maintain reliable data on current AIDS cases, to refine estimates of the extent of current HIV infection, and to predict accurately future trends in the epidemic. Several actions will serve these ends:

The Secretary of HHS should ensure that the CDC's personnel, space, and technical resources are adequate to the task of continuing epidemiological research and surveillance, including the development of mathematical models of the HIV epidemic.

The Secretary should also see that adequate research support is provided to the social and behavioral sciences so that more can be learned about sexual behavior, IV drug abuse patterns, and how to influence behavioral change.

Ensure that biomedical research continues to follow fruitful paths. Substantial progress has been made in defining the genetic structure of HIV and understanding how the virus replicates; less well understood, however, is how HIV compromises the human immune system and causes disease. Understanding the processes and consequences of HIV infection is crucial to the development of therapies and vaccines against HIV and AIDS. This understanding, in turn, is rooted in all basic research in the areas of cellular biology, virology, immunology, and genetics. For this reason, increasing the amount of funds devoted to AIDS at the expense of all other basic biomedical research is shortsighted.

Funding for basic research in all areas of biology should remain strong rather than be reduced in favor of AIDS-targeted research.

Current knowledge of the HIV proteins and their functions offers several potential targets for rational drug design. The search for therapeutic agents must also encompass the screening of existing compounds for potential antiviral activity. Both of these approaches to drug development require organizational cooperation among the government, the pharmaceutical industry, and academic health centers.

Once a drug appears to be a candidate substance for the treatment of HIV infection or AIDS, it begins the long journey toward licensure. The U.S. drug approval process, which is regulated by the FDA, is the most rigorous in the world: it generally involves tests in animals and then a three- or sometimes four-phase series of clinical (human) trails for safety and efficacy. Although the process has been criticized as slow and cumbersome, it has also been credited with protecting the American public from the harmful effects of inadequately tested drugs. In response to the AIDS crisis, the FDA has moved to speed up some portions of its review and has established a category of investigational new drugs (IND) called the "treatment IND," which allows manufacturers to distribute a drug for use (if the drug meets certain criteria) while it is still under investigation. Zidovudine (AZT), which was approved in September 1986 under a prototype treatment IND mechanism, received the fastest evaluation that has ever occurred within the FDA. In addition, new FDA regulations will allow the approval and marketing of certain drugs after Phase II testing.

However, the diversion of FDA personnel necessary to approve zidovudine resulted in a backlog of applications in the FDA's Division of Anti-Infective Drug Products. As the number of applications for treatment IND status grows, these personnel problems may become more severe. At present, the FDA is not a bottleneck in the availability of new drugs to treat HIV infection and AIDS. The paucity of new drugs is related more to shortcomings in the science of antiviral agents than to the drug approval process. However, as more promising new drugs are discovered or designed, the FDA, without additional resources, could become an impediment to speedy availability.

FDA's resources for new drug approval should be commensurate with the task. The need to borrow personnel from other parts of the agency should be relieved; the need for work space, which appears to be particularly acute, should also be addressed.

Although the FDA has responded with ingenuity to hasten the availability of new drugs against HIV, a note of caution is warranted. The treatment INDs (and certainly the widespread use of unapproved drugs obtained here or abroad) could interfere with the ability to execute conclusive clincial trials because new experimental drugs will be available to patients earlier than in the past.

In light of these concerns, the Secretary of HHS should direct the FDA to seek an outside evaluation of the treatment IND process and other new regulations designed to hasten drug approval or availability. This evaluation should take place after enough time has elapsed to determine whether new regulations have unanticipated consequences for any new drugs.

The urgency of the AIDS situation has brought the traditional scientific method for evaluating the effectiveness of treatment—randomized controlled clinical trials—under scrutiny. Criticism of this method grows in part from the frustration, fear, and anger of people with HIV infection, who may feel a lack of urgency in the drug development process. Yet, carefully controlled trials remain the fastest, most efficient way to determine what treatments work. Conducting well-designed trials from the beginning will benefit more patients, sooner, than any other approach. Poorly designed trials, or administering drugs without controls and "observing" the course of disease, can be inconclusive or lead to incorrect

conclusions. The widespread distribution of untested drugs makes it difficult to determine whether they are effective, especially if the benefits are real but small. The result of these approaches could include the continued prescribing of useless or harmful therapies.

Although the best-designed clinical trial would enroll the fewest people needed to demonstrate drug effectiveness, many persons with HIV infection want to participate in clinical trials.

The National Institutes of Health (NIH) should provide wider access to clinical trials by broadening their geographic base; by extending trials to previously untapped populations including women, IV drug abusers, and pediatric patients; and by testing all compounds that appear to have a possibility of effectiveness.

The prevention of HIV infection by vaccination continues to pose fundamental difficulties. Experiments with candidate vaccines in animals induce antibodies that fail to block subsequent HIV infection. These experimental results tend to mirror clinical observations of natural infection in patients, in which disease progresses despite the presence of antibodies and other immune responses. The advent of a licensed vaccine against HIV remains a distant prospect. Nonetheless, innovative research continues and may produce more promising results in the future.

In the meantime, the FDA has approved human trials for two vaccine candidates. These tests, designed to assess the safety and immunogenicity of the vaccine candidates, were approved in the absence of proof of protective efficacy in animals, a generally accepted prerequisite to human vaccine trials.

In the future, the FDA should approve human trials for HIV vaccine candidates only when protection against infection has been demonstrated in a suitable animal model or when the candidate rests on new knowledge of the relevant human response that cannot be adequately modeled in animals.

In addition, NIH, CDC, and other relevant government agencies should begin now to plan for large-scale human efficacy trials of as yet undeveloped vaccines. Such trials are complex to design, and their results will be difficult to evaluate. Because the trials must enroll sufficiently large numbers of subjects at sufficiently high risk of infection, the sites for vaccine efficacy tests will most likely include African and other developing countries. A process should be agreed on for joint decisionmaking among the countries involved; the World Health Organization is currently developing guidelines for the conduct of these trials.

The development of model systems, in which an animal infected with HIV or a similar animal virus shows the same symptoms and exhibits the same course of disease progression found in human AIDS patients, is essential to the campaign against the disease. Yet there is currently no such model. Chimpanzees and other primates are imperfect but nevertheless useful animal models, but they are in short supply for research purposes.

Plans for breeding, conserving, and otherwise expanding the present stock of chimpanzees should be examined. This expansion may require increased funding. In addition, the development of a mouse (or other small animal) model for AIDS is of utmost importance. A promising development in this area is the transplantation of human fetal immune system elements into immunodeficient mice. As long as efforts to develop small animal models are carried out under safe laboratory conditions, further work in this area should be strongly supported.

Existing facilities are inadequate for further advances in research against HIV: Very few laboratories are equipped to handle the virus safely.

The director of NIH, in consultation with research scientists from within and without the institutes, should assess the need for and costs of new intramural and extramural facilities for AIDS research. This information should be forwarded to the Secretary of HHS and to Congress for evaluation and subsequent action.

Federal appropriations for AIDS research have been growing steadily. At the present rate of increase, funding will reach the goal (previously recommended by the Institute of Medicine and the National Academy of Sciences) of $1 billion annually by 1990.

When federal research expenditures for AIDS reach this figure, an assessment of the need for further increases should be made. It is important to ensure that other research programs are not penalized by a long-term disproportionate growth of the AIDS budget.

Recognize our special responsibility in international health efforts to control AIDS. The rationale for U.S. involvement in international AIDS activities is more broadly based than the protection of American troops and tourists. AIDS can destabilize the work forces and the economies of developing countries whose advancement has been aided by U.S. dollars. AIDS can also reverse the child survival figures in countries where our help only recently has improved infant and child survival. Finally, some countries of the world offer important opportunities for collaborative AIDS research because they present varieties and prevalences of disease that do not exist in the United States.

The United States has an additional responsibility to international health efforts to control AIDS because of our exceptional resources in public health specialists and biomedical scientists, the large number of infected persons in the United States, and our relative affluence. American activities in international work against AIDS are conducted by many federal agencies. In addition, U.S. contributions to the World Health Organization Global Programme on AIDS (which provides support to national AIDS control and prevention programs and conducts global AIDS surveillance and research) were $1 million in 1986, $5 million in 1987, and about $15 million in 1988.

The Bush administration should plan now to provide a substantial increase in resources over the next few decades to be devoted to international AIDS prevention and control, reaching $50 million annually by 1990. Funds will also be needed to ensure that today's predominantly educational methods for preventing HIV transmission can be supplemented with appropriate vaccines and drugs if and when they become available.

Important as the above responses are, a further resource in the nation's efforts against AIDS is solely the provenance of the president—a resolve that the devastation caused by HIV infection will be prevented and its sufferers provided compassionate care, and an attitude that bespeaks the resolve.

## THE STATUS OF THE IMPROVED PROCESSING INSPECTION [IPI] REGULATIONS

Mr. DASCHLE. Mr. President, when Congress passed the Processed Products Improvement Act in 1986, it intended that public health safety would be raised. Instead, the regulations that the Department of Agriculture has promulgated for processing inspection pursuant to the act could at the least create the impression of decreased public safety. Despite the recent rash of food scares, such as cyanide in Chilean grapes, the United States food supply is probably the safest food supply in the world. However, as the recent scares illustrate, the public's confidence is easily shaken. The last thing the meat industry needs is a loss of consumer confidence.

Maintaining consumer confidence in the food supply should be a primary task of both the administration and the Congress. The best way to maintain confidence is to ensure that the inspection programs we operate, have the input and blessing of all parties involved in the industry, as well as that of consumers.

A recent tour of a packing plant emphasized for me the difficulties inherent in trying to base a discretionary inspection system on computer-analyzed statistics. Which tasks do you include in the data that is collected? What discretion do inspectors have to make decisions based on other factors not included in the official criteria? All of these are questions that the industry can help to answer. The industry should have been given more of an opportunity to help design the new regulations.

Every interested party, from the industry to the consumer groups, has called for the withdrawal of these regulations, because of USDA's failure to involve them in the formulation process. I fully endorse the withdrawal of these regulations. Once withdrawn, all of us can work together to develop regulations that will work and will fulfill the intent of the 1986 act.

Secretary Yeutter has delayed a decision on this issue until he has staff in place. I am hopeful that, with new people finally coming on board at USDA, we will be able to see the withdrawal of these regulations. Senator PATRICK LEAHY asked the nominee for Assistant Secretary for Marketing and Inspection Services, Jo Ann Smith, her views on withdrawing the regulations at her confirmation hearing last Friday. She said she was not allowed to comment at that time because the comment period was still open.

If Mrs. Smith is confirmed, by the time she assumes her post she will be free to make a decision on the regulations. I shall urge her to withdraw the regulations. With her extensive background in the beef industry I am hope-

ful that she will share the views of all interested parties.

## CONCLUSION OF MORNING BUSINESS

The ACTING PRESIDENT pro tempore. The period for morning business has expired. Morning business is closed.

## DISAPPROVING THE EXPORT OF TECHNOLOGY TO CODEVELOP OR COPRODUCE THE FSX AIRCRAFT WITH JAPAN

The Senate resumed consideration of the joint resolution.

The ACTING PRESIDENT pro tempore. The clerk will report the pending business.

The assistant legislative clerk read as follows:

A joint resolution (S.J. Res. 113) prohibiting the export of technology, defense articles, and defense services to codevelop or coproduce the FSX aircraft with Japan.

Mr. FORD. Mr. President, we are back to the discussion of the resolution of disapproval of the so-called FSX deal with Japan.

There was a great deal of intriguing debate last week as it related to the reasons for this particular arrangement with Japan. There was a lot of concern I think expressed by Members of this body why we should spend $7 billion of the taxpayers' money to develop the finest military aircraft in the world, and then we make arrangements with a country that has a deficit in balance of trade with us of roughly $50 billion a year, and that we have prospects of getting somewhere in the neighborhood of $400 million for a $7 billion investment.

I have never heard in the 14 years I have been in the Senate an attempt to substantiate a deal by some of my colleagues whose hearts are not in the position they are being required to take. As most of us know, this arrangement was made under the previous administration. This administration does not like it. This administration made an attempt to change it. Some high officials in this administration testifying before the committees indicated that the deal was already made, that we were already boxed into the corner and so let us go on with it.

Well, that left Congress out of the loop. At least we have an opportunity to debate it. We have an opportunity to look at the facts. We have an opportunity to look at the long-term effect on this country, our industry, and our working men and women.

Japan spends about $35 billion a year on defense, whereas the United States spends nine times that amount. One would, therefore, hope that the country of Japan would carefully spend their apparent small defense resources. This arrangement does not appear to be so.

Instead of buying 130 F-16's for about $3 billion, they are going to spend $1.2 billion on development, $8 billion on production, a total of approximately $9 billion. That is three times what the same number of F-16's would cost. There has to be a reason for this type of arrangement and this kind of expenditure from a country that the world has recognized as an economic power because of its ability to produce.

It is also possible that the cost of development will triple the stated Japanese estimate, or it would go to $3.6 billion instead of $1.2 billion in the development phase. How can any proponent of the FSX justify the extra $5 to $8 billion cost of the FSX in light of scarce defense resources on both sides of the Pacific? Do not forget that this money will be spent while the Department of Defense will be trying to get the Japanese to spend more money annually to meet our common defense goals. Proponents of the FSX also tried to justify the program on the grounds that a 40-percent work share of development will earn General Dynamics $480 million, and the roughly 40 percent work share of production will be around $2 billion for a total of $2.5 billion. They say that this amount is close to the $3 billion that GD would have gotten if the Japanese had bought the plane off the shelf.

That is strange. We are saying that General Dynamics is the only one invovled in this and so by lettting the Japanese develop the FSX General Dynamics will still get almost as much as they would have gotten had they sold this plane off the shelf.

Let us go back and think a minute what are the reasons for wanting to participate in an arrangement that is so bad, apparently, that it would cost the country of Japan so much more money than if they were just buying the airplane for defense. I think everyone agrees that the F-16 is the best and most sophisticated military aircraft in the world. There has to be a reason.

Let us think a minute about General Dynamics and their profit and what labor people have decided. They say the short-term gain is a long-term loss. The President of the union that represents 40,000-some workers at General Electric, William H. Bywater, stated:

The net effect of this deal will be to give Japan a leg up in another vital industry resulting in the loss of jobs for U.S. workers who have built the U.S. aerospace industry to the strongest industry of its kind in the world.

He goes on to say:

Likewise, it misses the boat in its failure to hold out for full production of the FSX in the United States of America as a down payment by Japan on longstanding commitments to bring down the $55 billion annual trade bonanza it enjoys over this country.

It is my opinion that the union is not fooled one bit by the fleeting promise of 40 percent of a temporary—and I underscore "temporary"—workload. They understand the tradeoff, and they understand it well. The tradeoff is short-term gain and long-term loss. Why do we on Capitol Hill not understand what the working men and women of this country understand very well?

Let me make another point or two. The argument of not buying the F-16's off the shelf ignores the fact that the Japanese are going to waste—really, are they going to waste it—billions of additional dollars reinventing the F-16.

It also ignores the fact that, if Japan bought off the shelf, it would also have to buy all spare parts for the life of the Aircraft Program. They would have to buy them from the United States and parts made by American workers.

Spare parts cost two to three times the original purchase price. Think about that. So if the purchase price is X, we are going to receive Y in spare parts. I think we are giving up double here, maybe triple. It is another whammy on the working men and women of this country, and it is an increase in our deficit as it relates to balance of trade.

So the total F-16 buy from the United States would be about $12 billion over the life of this program. The guarantee of $2.5 billion falls far short of the $12 billion that a buy would generate.

We hear the argument, "Oh, they will buy it from somebody else. They will enter into a consortium with somebody else."

Well, if they are going to buy something inferior, I doubt seriously that they would want to enter into those contracts. They cannot make the deal with anyone else apparently, or they do not want to make the arrangement with someone else. They want to make it with good old Uncle Sugar so we can spend more taxpayers' money and lose more American jobs.

Over the last few years we have given away $1 trillion in deficit and balance of trade, and millions of American jobs. And we are standing here today proposing to do more of the same. What is in the deal for the United States? Let us look at it for a minute. What is in this deal for us? The proponents claim that there is access to advanced Japanese technology. Well, Japan is good at promoting, and they are always promoting and proclaiming their so-called advanced technology.

But let us be honest. The Japanese have not been major players in the aerospace industry. In order to find out if there was in fact advanced Japanese technology to be gained, several

other Senators and myself commissioned a GAO study of the question. The GAO has just concluded their study, and has found that the claim of advanced technology by Japan is false. Their claim of advanced technology to offer this country is false. There is no advanced Japanese technology in two areas of our Department of Defense interest: The phase array radar and the composite wing. U.S. companies are far, far ahead in those two areas.

The report in the Washington Post this morning, "GAO Criticizes FSX Jet Fighter Deal With Japan." The General Accounting Office of this Government criticizes that arrangement. Now, just because a few of us are out here saying it was a bad deal, we have substantially weighted our position with the General Accounting Office's report that it is a bad deal.

The report says in the second headline, "U.S. Has Little To Gain From Joint Project, Senate Vote Scheduled Today."

Let me read the first paragraph of this report.

The General Accounting Office yesterday directly challenged assertions by the Bush administration that the United States will gain access to superior Japanese technology by joint development of a new generation fighter plane, the FSX.

The GAO in a declassified report released on the eve of our vote, said: "The United States is superior to Japan."

The Government's General Accounting Office says the United States "is superior to Japan" in the composites technology needed to produce a light but strong wing made of plastics, and is ahead in radar technology. These are the two areas in which the administration officials said the United States could gain technology from Japan. Here our own Government offices say they are wrong, and that we are ahead. Then why should we give them this technology? What do we benefit in return? We not only lose in the short term in my opinion, but we lose badly in the long term. There has to be only one reason why Japan is willing to pay billions and billions of dollars more than it is worth to secure this arrangement with this country; and, that is, to get into the aerospace business, and to be in competition with us after we give them our highest technology, technology that is much better than theirs. They will have that.

Why, the building of the FSX and the knowledge they gain from us will be like sending their engineers to college. They will earn a degree in construction of aircraft for the next decade, and into the future to be in competition with us. If they are so great at all of this technology, if they are supposed to be superior to this country in their ability to put communications and all the technology together, let them do it.

Let us not give away taxpayers' dollars. Let us not give away American jobs. I hear a lot about free trade. "This administration is for free trade." I did not know we were for giveaway trade. There ought to be something fair, fair trade, and in my opinion, there is nothing about this that is fair to the taxpayers of this country, the men and women who have worked so hard to make us the dominant power in aerospace. We say to them that we are going to take all this technology and give it to someone else at bargain basement prices, so they can come back and take your jobs away from you.

Now, down in Kentucky, Mr. President, we have a saying for that: "Something about that ain't right." Let me just make a few more points, and the distinguished Senator from Illinois is here, and I want him to take the floor. Let us look behind the reasons maybe; let us kind of get them out on the table and see if we can find the reason for the Japanese being so anxious to have this arrangement. Why not buy the world's best—and to them the least expensive—fighter aircraft, the F-16 Fighting Falcon? Why are they going to reinvent the wheel, as they have done so many times, and build their own airplane? I think there is just one word, Mr. President, and that is "protectionism," on their part, pure and simple.

It will take at least 10 years to build the FSX fighter, 10 years during which the Soviet threat will be handled by American taxpayers, with our F-16's sitting at Misawa Air Base in Northern Japan. F-16's are good enough now to defend them, but it is not good enough to buy off the shelf. The Soviet defense buildup of their Far East forces began in the early 1980's. This is the threat, the reason for the FSX. How did Japan initially respond? They just kept on producing their old fighter, the F-1, an inferior aircraft that cannot stand up to the Soviets either now or during the next 10 years. "Uncle Sugar" is there with their F-16's at Misawa defending their country. The F-1 cannot operate at night and has a blind spot so big that it is easy for an opposing pilot to kill in a dog fight.

So how are they responding now? Again, they are letting us defend them while they build their own unique, and I underscore "unique," airplane. You see, they need a unique airplane, a Japanese airplane, to handle the Soviet threat. And the first unique airplane will be ready to defend against that threat maybe by 1997, about 15 years after the Soviet buildup began.

The word they use is "unique." Let us talk about uniqueness for a moment. This is the same argument the Japanese used to exclude our commercial products, uniqueness. The mud in Kansai Bay is unique, so American construction firms cannot help at Kansai airport. They are over here building ours. They will not let us get over there because the mud must be unique. Japanese rice is unique, so they cannot import United States rice. Japanese stomachs are unique, so they cannot eat United States beef. The truth is that any one of several American fighter planes, with minor modifications, can fly the so-called special Japanese mission.

So, Mr. President, there must be some motive here, a motive somewhere that would cause them to spend so much more money to get something, and there is something wrong when we make a deal, when our own General Accounting Office says they have nothing to offer to us; they have nothing to offer to us in return. The Chair knows, and I know, and I think all of us know, it is about the Japanese meeting their stated national goal of having a full-fledged aircraft industry with which to challenge the United States by the beginning of the next century.

The last decade of this century will be their decade of the airplane. Lee Iacocca said, I believe, that the Japanese have had decades of this and decades of that, and the next decade will be the decade of the airplane. And we are helping them get ahead of us, if nothing else, in the giveaway of jobs. I just think the FSX is part of a sophisticated national effort to develop a viable aircraft industry, to be in competition with American workers.

As I said earlier, the work on this airplane could be the university where the Japanese engineers will go to school. It will be the laboratory and the training ground from which will spring the design, production, avionics, and other engineering teams necessary for the Japanese civilian aircraft industry. That is why the Japanese are so adamant with proceeding with the FSX. They see their military aircraft industry as a necessary and critical component to the high-tech industrial future, and we are giving it away. If the Japanese want an aircraft industry to try to compete with us, that is fine, but we should not be participants in a giveaway, so that they might proceed in that direction.

It is very naive to argue, I think, as does the administration, that they have scrubbed the F-16 technology list to remove commerically applicable technologies. The very existence of the FSX program provides a kind of university, as I said earlier, in which all these skills will be completed.

It is time that we realize that the stakes in the FSX program are a lot higher than whether Japan can build one military aircraft.

This debate, I sincerely believe, is about our national future. It just does not make sense to this country boy that they want to spend billions and billions and billions of dollars more than it would cost them to get the most sophisticated military aircraft in the world, to develop this new one for their own unique ability, and we will defend them for the 15 years it takes to put this in the marketplace.

If the Japanese continue to ignore free trade principles, then what kind of alliance can there be down the road? If they are going to go their own way, then so be it.

But let us not be deceived into thinking that they are acting as steadfast allies and trading parties, when in this particular case, it is this Senator's opinion, and I think you will find many other Senators' opinions, that it is not.

Mr. President, I hope my colleagues will think long and hard about the future, that they will look at what is in store for the future employment, future of the aviation industry in this country and the defense of this country.

Mr. President, I yield the floor.

The PRESIDING OFFICER (Mr. LIEBERMAN). The Chair recognizes the Senator from Indiana [Mr. LUGAR].

Mr. LUGAR. Mr. President, let me introduce for the RECORD some important arguments on this issue that have been presented to the Senate, first all in the form of a letter to the majority leader, Senator MITCHELL, from the Aerospace Industries Association. This letter is written by Mr. Don Fuqua, president of Aerospace Industries Association and it says:

DEAR SENATOR MITCHELL: You will soon be voting on S. 113, the resolution to disapprove the FSX agreement. I strongly urge you to vote against that resolution.

This association, which represents every major aerospace company in this country, supports the FSX agreement. We do so because Japan is our most important overseas market for both military and commercial aircraft. Our $3 billion in aerospace exports to Japan each year represents roughly 65,000 American jobs in the aerospace industry. Killing the FSX program will open up the Japanese market to our European counterparts and undercut our preeminent position in the Japanese and world market over the long run. Furthermore, it will likely result in a higher level of technology transfer to the Japanese.

The aerospace industry is neither naive nor suicidal. We have worked with Japanese companies for three decades. We have codevelopment and coproduction programs with companies all over the world. We believe we are fully capable of protecting the transfer of American technology, both in terms of the security restraints set by our government, and with respect to technology which is of commercial use to potential competitors.

Every time efforts have been made unilaterally to deny wealthy countries a product, whether soybeans to Japan, grain or pipelayers to the Soviet Union, or F-15's to Saudi Arabia, the net result has been a loss of American jobs and exports, and a boon to our competitors. This case is no different. Our competitors have been making overtures to the Japanese in recent weeks (see Defense News article with respect to the French). We would much rather our companies maintain their market in Japan, and have the U.S. control what technology is transferred, than turn the market and control over to our competitors.

I urge you to vote against the resolution. Our industry has every intention of maintaining its dominant world position and our market in Japan. Removing us from a role in Japan's fighter aircraft program for the next two decades will not help American aerospace, it will help our competition. I appreciate your attention and assistance to this matter.

Sincerely,

DON FUQUA.

I make that a part of the RECORD in full, and recite it, Mr. President, because I think it is important. We are talking about competition, what is best for American workers and what is best for American industry. U.S. industry ought to be allowed an argument, and it is interesing that all six major aircraft companies are in favor of the FSX, largely because 65,000 jobs are involved, as are billions of dollars of exports each year. That is not hypothetical; that is actual fact, and no wonder that the aerospace industry speaks out on this.

To be more specific, Mr. President, testimony was offered by Herbert F. Rogers, president and chief operating officer of General Dynamics Corp., a company that will be heavily involved in the FSX situation, before the Subcommittee on Arms Control, International Security, and Science of the House of Representatives on May 10, 1989. I quote in part from testimony offered by the president of General Dynamics. He says:

The FSX is intended to fulfill Japanese Air Self Defense Force mission requirements in the late 1990's. The threat which friendly fighters will face then will be at the very limits of the capabilities of fighters like the F-16 flying today.

I pause and offer this comment about that, Mr. President: We keep discussing the perceived mission of this aircraft as if it were identical with the capabilities and technologies of the 1970's. The Japanese and the United States concur that in order to have by the end of this century a fighter aircraft which meets the mission that we want Japan to undertake, there must be capabilties that are not contained in the F-16. This is the reason for the development of another aircraft with another mission, for another time, another decade and technology which is not presently there.

Mr. Rogers continues:

In the case of the United States, we will meet these future threats with very high technology platforms like the Advanced Tactical Fighter (ATF) and the Advanced Tactical Aircraft (ATA), systems now being developed which will incorporate technologies beyond today's F-16.

Japan recognized the magnitude of this future threat, weighed the options and chose to develop and build an aircraft of her own design. Based upon some thirty years experience in the licensed production of all their fighters and that acquired in the design and manufacture of FS-X's predecessor, the F-1, it was clear that Japan was fully capable of achieving this goal.

Namely the goal of building its own aircraft.

All of this was painfully apparent to General Dynamics; we have been trying unsuccessfully to sell F-16s in Japan since the late 1970s.

I think that is an important point, Mr. President. This is not a first offer. General Dynamics tried to sell the F-16 to Japan for about a decade. The problem that is painfully apparent to Japan and the United States is that the F-16 will not fulfill the agreed-upon defense mission. Also painfully apparent is that Japan was prepared to build an aircraft whatever time or money it took on its own.

Fortunately, Secretary Weinberger held to a course which sought U.S. involvement. He reached agreement in mid-1987 with his Japanese counterpart to jointly develop an aircraft which would meet the Japanese requirement based upon an existing U.S. system. This solution not only addressed the politically sensitive trade deficit, but ensured interoperability with U.S. forces in a critical theater of operations. The F-16 was subsequently chosen out of an all-U.S. field as the base-line aircraft to meet these requirements.

But the base line aircraft, not the specific aircraft to meet the requirements.

Indeed, I believe that the two major U.S. commercial aircraft manufacturers, Boeing and McDonnell Douglas, both support the concept of the FS-X program.

In the letter I have just read, Mr. President, earlier in this speech, all of the companies support FSX.

This is not surprising. The U.S. commercial aircraft industry was wise and confident enough to provide Japan with a key role in the production of the jetliners which she purchased in large numbers.

From the United States.

This approach, while entailing the transfer of some technology, has ensured continued U.S. dominance in the single largest overseas commercial aircraft market.

F-16 technologies have little application to commercial aircraft design or manufacturing. In those very few cases where a connection might be inferred, such as the digital flight control, the Administration has already made it clear that Japan will not be provided the critical know-how behind this technology. It is important to bear in mind that what is being provided is the "what", not the "how", of the basic F16 design. Be assured that the art of design is something that General Dynamics in its own competitive self-interest will not give up to anyone.

THE TRANSFER OF CRITICAL TECHNOLOGIES WILL BE CLOSELY MONITORED

The F-16 advanced technology—like digital flight control—will be protected in three ways. All data will be reviewed by the U.S. Government under thorough and long-

standing technology review and release procedures in which all U.S. agencies having relevant interest participate. A technical steering committee headed on the U.S. side by a general officer will have hands-on supervisor responsibilities over the program. Finally, General Dynamics calling on the experience garnered in many off-shore F-16 co-production programs, will most carefully control the flow of proprietary know-how.

VALUABLE TECHNOLOGIES WILL FLOW BACK TO THE U.S. AS A RESULT OF FS-X

It is important to note that all of the FS-X modifications which enhance F-16 performance come from and are fully funded by the Japanese. In other words, the U.S. will have the unique opportunity to participate in the advancement of the state-of-the-art on a cost and technological risk-free basis.

Two technologies which are of special interest to the U.S. are the composite co-cured wing—a large, integrated composite aerodynamic structure—and the gallium arsenide phased-array radar—a radar which brings a unique degree of efficiency, resolution and reliability together in a small package. The essential but often overlooked point about these two technologies is not that they are unknown in the U.S.—indeed, much attention has been paid to them—but that the Japanese have applied their unique manufacturing skills to them. Preliminary evidence suggests that they have succeeded in developing mass producible, cost-effective systems—something yet to be done in the U.S. If that is the case, then FS-X advances will be directly applicable to improving the F-16 to meet U.S. needs in the severely constrained budget environment already upon us.

JAPAN IS AMERICA'S LARGEST AEROSPACE MARKET: KILLING FS-X WILL HARM THE UNITED STATES MORE THAN JAPAN

The potential loss of revenues, of export opportunities, for U.S. firms will far exceed the nominal 2.5-3.0 billion dollar FS-X program. Here's why.

Disapproval of FS-X may force Japan into an indigenous development program, their originally intended course of action. This approach will be considerably more expensive than FS-X co-development. When considering Japan's defense budget, this will produce two principal effects. In the short term, monies that could have been spent on off-the-shelf purchases of other U.S. aerospace defense systems like AWACS and AEGIS will no longer be available. This could represent a very near term loss of 3-5 billion dollars in U.S. exports, while reducing Japan's ability to effectively contribute to the defense burden in the Western Pacific.

Some will say that Japan will not "go it alone" but, failing in the United States, will seek help elsewhere. This I submit is an even worse prospect. Only one other region can and will offer the assistance which Japan will seek—Europe. Forcing Japan into the willing embrace of the Europeans will result in all of the bad effects of which I have already spoken while enhancing the competitive strength and market penetration of America's principal fighter competitor. The spector of a Japan-Europe aerospace connection is a sobering thought.

INTERNATIONAL COOPERATION IN AEROSPACE IS GOOD BUSINESS

Aerospace leadership is preserved and enhanced by competing and working in the marketplace—not by dropping out of it. We must guard against excessive nationalism at a time when international interdependence is a fact of life. Cooperating with Japan on the FS-X will enhance the U.S. position by progressing the state of the engineering art, providing jobs which would otherwise not exist, generating the flow of dollars back to America. Participation in FS-X ensures that the U.S. approach to design continues as a Japanese standard, with the important side-effect that Japan's weapons are usually ours, compatible and interoperable with our own. The use of a U.S. baseline system by Japan brings with it U.S. control over the markets to which that system when fully modified might be introduced—a kind of control with important political and economic consequences. Cooperation ensures that new technologies can be acquired on a more cost-effective basis at a time when even the simplest technology is expensive to obtain. But, most importantly, cooperating with Japan ensures that the two aerospace industries will complement each other and helps to maintain a vital relationship which is important to the military and economic defense of the free world.

In conclusion, there has been an important debate going on about our national economic objectives, policies and supporting strategies. It has been about America's competitiveness, our standard of living and how to protect it, about the global exercise of free and fair trade. Fundamentally, however, it has been about how to balance national security and foreign policy objectives with national economic objectives. I believe that such a debate is healthy and timely, and perhaps it has been fortunate that the FS-X program has been the catalyst for this debate. On the other hand, I believe that the FS-X is an excellent example of a program that realistically promises to achieve that desired balance and should be supported by Congress accordingly.

Mr. President, that statement, coming from the President of General Dynamics, speaks to the heart of the competitiveness issue. The heart of the technical problem, the heart of the transfer of dollars from Japan to the United States. This is testimony by a U.S. company that is expecting to get the business. It is a company that abhors the thought, as I do, that that business is going to Europe, that there could be a Japanese-European axis of cooperation and development of an aircraft that would leave us out in the cold.

I heard earlier this morning, Mr. President, the distinguished Senator from Kentucky say somehow we spend $7 billion and we are going to get $400 million back for that. I respectfully suggest to my distinguished colleague that we have not given away $7 billion. Most of that amount is sunk costs which we have already paid to develop the F-16, costs which have been incurred whether or not the Japanese or anyone else buys the aircraft. In point of fact, the Japanese will pay back to the U.S. some of the cost of developing the F-16 and these funds go directly to the U.S. Treasury. We are, in fact, setting in motion new technology research that others are going to pay for.

We still have the F-16. We are going to continue to make sales of the F-16. We probably will improve the F-16, given this cooperative research, but Japan is going to pick up the entire tab for this research. We are going to receive 40 percent of the work share in terms of both the development and the production of the aircraft and, most importantly, Mr. President, we are going to stick with the Japanese effort.

In Friday's debate, I pointed out that critical in my own understanding of this entire situation is the fact that the Japanese were fully prepared to go it alone. We did not come into the situation blindly. We came in because of our self-interest. Secretary Weinberger, Secretary Shultz, and President Reagan said to Japan, "We don't want you proceeding out there alone developing an aircraft industry, developing a war potential, developing an independence of activity that does not bode well for the history of Asia, for the history of the world."

The Japanese agreed, or at least a majority did. There are many in Japan fully prepared to go it alone. They say, "We have the money. We have the skills. We have the ties around the world to build this aircraft, to proceed now independently in our defense effort, in our foreign policy."

Mr. President, this debate is about whether the United States is going to stay with Japan, to be often intrusive into Japan's affairs, by developing an aircraft that we jointly see and share the fruits of that technology and the product of that alliance. It is very important in our own history; very important, I believe, in terms of peace for our children. As we take a look at the geopolitics in this world, this, I think, will be perceived as a debate that was a turning point, one way or the other.

We asked Japan to stay with the FSX. In fact, we have demanded of Japan attention to our position because, as the distinguished Senator from Kentucky pointed out, we protect Japan. And we have said, "Because of that, we are a very special friend. We have a very special position in your affairs." And they have agreed.

They have ceded to all of the requests that we have made with regard to paying for this, while we look in, to giving us 40 percent of the production and development with jobs in this country, 2½ billion dollars' worth of business in this country, for which we have no risk, and which helps our balance of payments. And, in return for all of that, for the rest of the century, we stick together and we keep an eye on developments in Japan and Asia and likewise make certain we do not have the adverse combination of Japan and European countries ganging up against us in this competition in the aerospace business.

For these reasons, Mr. President, it is very important to defeat this resolution of disapproval, to proceed with support of the President, support of our country's position which has been negotiated by two administrations.

I yield the floor.

The PRESIDING OFFICER. The Chair recognizes the Senator from Kansas [Mrs. KASSEBAUM].

Mrs. KASSEBAUM. Mr. President, I doubt that there are very many Kansas constituents who would look on this sale as one of their top priorities. I think that would be true for the majority of constituents in most of our States. There is a great deal of concern abroad in the land today about the United States role with Japan. But I think it is very important for us at this time to keep this particular relationship and sale in perspective.

I heard the distinguished Senator from Kentucky [Mr. FORD] who chairs the Aviation Subcommittee, speak to this being potentially the decade of the airplane for Japan. I just do not believe that is so and I have shared his concerns about aviation.

I would like, Mr. President, to say why I support the FSX agreement that we have concluded with the Japanese and will vote against the resolution of disapproval.

In my view, this agreement does not raise the specter of America in decline. In fact, I believe this agreement is an important symbol of how we can successfully pursue a defense policy for the 1990's and beyond, that is consistent with a viable economic policy.

I would like to commend the Bush administration for its responsiveness to many of the concerns that were expressed in Congress in January and for its successful efforts in obtaining clarifications from the Japanese to the original memorandum of understanding.

In assessing the FSX deal, I believe we must start by recognizing that the United States strongly supported Japan's efforts to acquire a new fighter which would be capable of meeting the security needs in the Pacific in the late 1990's. One of the main criticisms of the deal is that Japan should have bought the F-16 fighters off the shelf. If is argued that this purchase would have expedited the Japanese acquisition of the fighter planes and also would have been a significant contribution to our trade balance.

Mr. President, I believe this option has been blown out of proportion. The F-16 has not been sold off the shelf for over the past 15 years and is a plane which we produce jointly with a number of our allies. Furthermore, Japan has never bought off-the-shelf technology where large numbers of planes were involved. The Japanese have either attempted their own development, as with the F-1, or entered into a licensed joint production agreement, as in the case of the F-14, the F-15, and the P-3.

I believe it is important to underscore, Mr. President, that the option that the Japanese preferred was to develop their own fighter to meet their own specific needs. It was the United States that argued for a joint development/production deal.

The American public's concern about our trade imbalance is strongly shared by everyone in this body, but the fact of the matter is that our fiscal policies, our large deficits, are much more closely related to our trade imbalance than any aspect of this agreement. I think, as a matter of fact, Mr. President, we should be far more concerned that we have to rely on the Japanese to contribute about $62 billion to our budget. That weakens our hand far more in any negotiation than this type of agreement.

In testimony before the Foreign Relations Committee, Commerce Secretary Mosbacher estimated that the financial return to the United States from the FSX joint development deal equaled the benefits from any direct purchase of the F-16.

Under the agreement, the United States would receive 40 percent of the work share of the development and production phases of the FSX. The administration has estimated that U.S. industry will receive about $2.5 billion of work during the life of the program and about 22,000 man-years of labor over the life of the deal. All will be financed by the Japanese.

It would be the same money and jobs if the F-16 were sold directly. This is the first military joint development—in contrast to production—program that the United States has entered into with an ally and it should be closely scrutinized. I believe this agreement meets the test.

One of the major benefits of this deal is that it provides us the ability to be directly involved in the Japanese military aircraft industry and to gain access to the technological improvements. This, obviously, would not be the case if the Japanese pursued development alone.

Perhaps an even more disadvantageous outcome for the United States would have been if the Japanese had decided to develop their new fighter with one of our major European competitors in the aviation industry, as was so, I think, succinctly stated by the Sentor from Indiana, Mr. LUGAR.

The agreement clearly provides for a significant technology flow back from Japan to the United States. This is an important reversal of the usual pattern of technology flow. Under the agreement, there is an automatic flow back to the United States of technology that the Japanese derive from United States technology, and the United States is guaranteed the option to purchase solely Japanese-developed FSX technology.

The Bush administration also ensured that the technology transfer to Japan is appropriately limited and carefully controlled. U.S. technical data and data that is derived from U.S. technology cannot be transferred to a third country. And the FSX itself cannot be sold or transferred without the consent of the United States.

I believe these are important facets of the agreement.

Furthermore, I do believe that the terms of this agreement protect our aviation industry in the four major areas of concern: airframe, avionics, the engine, and the software.

The airframe technology that we are providing is 15 to 20 years old. The avionics will be developed by Japan and the technology will be available to the United States. Strict supervision of the software is provided under the agreement. And the engines for the development phase will be provided off the shelf from the United States.

The arrangements for the engines in the production phase remain to be worked out, but the Japanese have already been put on notice, and many of us have expressed concerns about this in the production phase, that under no circumstances will sensitive United States engine technology be transferred.

Mr. President, I believe it is very important that, when we look at our relationship with the Japanese that we neither exaggerate their diplomatic or technical prowess, or underestimate our own. We simply cannot just sit on the sidelines and let others become the dominant players in the next decade. There is nothing to be feared in this agreement. In fact, I think it is something that should be viewed as an opportunity and a challenge.

I urge my colleagues to defeat the resolution of disapproval.

I yield the floor, Mr. President.

The PRESIDING OFFICER. The Chair recognizes the Senator from Illinois [Mr. DIXON].

Mr. DIXON. Well, Mr. President, may I first say, before I make a few remarks of my own in opposition to the FSX sale, that I am always disappointed to have to disagree with the distinguished lady from Kansas who, I think, brings a wonderful sense of good common sense to this place. I have been delighted to agree with her a number of times on a variety of issues, including budgetary issues on one occasion where I supported her good idea for a freeze several years ago that would have saved us a lot of the budget problems we have now.

If I was not a Democrat I would wear a "Run, Nancy, Run" button like they all do on the other side, Mr. President, because she is a great lady and a wonderful person. I admire her

and have the deepest personal affection for her.

There have been a lot of good discussions here about what this deal is about. I made a few speeches myself. I want to talk just a little bit more this morning on a few points that I think are important to be shared with my colleagues about this deal. I think I have about eight points that I would like to make in sort of a cogent way to share with my colleagues some of my thoughts about this FSX deal as we get down to voting time.

Here is the first one: This is not sharing the burden. We talk about sharing the burden. In the first place, nobody shares the burden with poor old Uncle Sam, and this is not sharing the burden.

Mr. President, based on current estimates, the final cost of the FSX Program for Japanese taxpayers will be roughly $48 million a plane for each of the minimal 130 planes that will be built—$48 million. This will make the FSX considerably more expensive than any fighter we ever produced in this country. It will cost about 2½ times what the F-16 cost. Think of that: 2½ times what the F-16 cost, the finest fighting aircraft in the world; 50 to nothing; 50 kills, no losses in hostile situations, 2½ times as much, over 50-percent more than the cost of a new F-18, about 20-percent more than the cost of an F-15.

Further, the estimates on FSX unit costs may rise markedly before production is complete in the late 1990's. My experts tell me they will rise and many believe that development costs have been significantly underestimated and that production costs are likely to increase as well. Here we have something in the first instance immensely expensive to the Japanese taxpayers, a tremendous cost to them when they are not carrying their share of the burden right now in connection with the defense of Asia.

The second point: I think it is inconceivable that we should be selling our technology to help our greatest competitor build yet another industry that will compete against our own. Given our current deficits, Mr. President, why are we not pressing the Japanese to spend this money more efficiently as we did in the case of the Israeli Lavi Program? Israel is a great ally of ours, but we jawboned them and we jawboned them—I put it in the RECORD, the RECORD is replete with it—until we talked them out of a codevelopment program.

Now, listen to this, I say to my colleagues, with the FSX money Japan is going to buy, Japan instead could buy 130 F-16's off the shelf—bang, they have them right now—130 F-16's off the shelf, plus have enough to equip an F-16 wing to replace the United States 432d F-16 wing at Misawa, Japan, right now. In other words, they can have all these F-16's, build them—130—and then have enough more F-16's to replace our entire United States 432d F-16 wing at Misawa, Japan, and bring home those Americans to America and have burdensharing where the Japanese do the job that they ought to be doing in that part of the world. They would even have money for associated costs as well. This will permit us to save millions of dollars by deactivating the 432d. We would gain the profits from the same in a short period of time and still have the defense that both our countries require.

Mr. President, we annually spend, believe it or not, $35 to $45 billion; up to $45 billion on our Pacific forces. We are borrowing money to do it. We need new ideas, and if they are unwilling to constructively respond, I think we ought to reconsider that relationship. It is just that simple.

Let me talk about mission requirements. Some of the FSX proponents in this deal have said that the F-16 cannot perform the 1,000-nautical-mile mission that is planned by the Japanese. That is not what a Department of Defense factfinding team found, Mr. President. What did they find? A team of military experts from this country, the Sullivan mission, went to Japan in 1987. The Department of Defense sent them there. What did they conclude? They concluded that the FSX design was too narrowly defined and that any of three existing American planes—the F-15, the F-16, or the F-18—would serve Japanese defense needs more adequately—more adequately—than the FSX, and if the Japanese based the new planes along the coast rather than inland, the 1,000-mile requirement would not even be needed in the first place.

Let us talk about defense needs neglected. That is point three. I think one clear insurmountable shortcoming of the FSX is the very long waiting period before it is available for delivery—a long, long wait as compared to buying off the shelf the F-16. Building roughly one FSX per month for 10 years to meet a Soviet threat that exists now I think is ludicrous. Experts say that Japan cannot now defend their northern island of Hokkaido, and they cannot do it now, yet it will take 15 years—15 years—to completely replace the aircraft they now have defending the island, the F-1. I think that is irresponsibility.

Let me make another point. Point four: Japan is serious about building a world-class aerospace industry. I have probably said that 100 times in the last week. In this last day, I want that burned into the minds of my colleagues. I want it burned into the mind of every American because the record will show I am right on this. Years from now they will say, "You were right." The Japanese Government is serious about building a world-class aerospace industry.

Here is a quote from our own U.S. Trade Representative. The U.S. Trade Representative has signed off now. I am not picking on her. I want to make a direct quote, as we say in southern Illinois:

> The Japanese Government plans to make aircraft production one of Japan's major industries within 20 years.

I love their long-term plans. Mr. President, why do we not plan anything in long terms? Why does not our Government think ahead by decades instead of worrying about now, today, what is going to happen tomorrow? Mr. President, what is going to happen in the year 2000 when my 2-year-old grandson is old enough to understand? Let us plan. But the Japanese Government plans to make aircraft production one of Japan's major industries within 20 years.

The U.S. Trade Representative, direct quote:

> This would mean direct competition with the U.S. aerospace industry, which is the largest in the non-Communist world.

I could go on. I will exclude parts that are not particularly important.

> If Japan's target goal is met, future lost sales to the U.S. industry would be significant.

That is the U.S. Trade Representative of this administration.

Here is a consulting firm of Booz-Allen and Hamilton—

> reasonably predicted that the Japanese aerospace industry is poised for extremely rapid growth projecting that the industry sales will rise—

Now, listen to this—

> from $7 billion today to $29 billion by 2000 expressed in constant dollars.

They are thinking, Mr. President, they are thinking ahead.

As far as the world market for commercial airliners is concerned, the extremely high cost involved in developing and producing these planes makes the ability to raise capital absolutely critical to succeed, thus the very deep pockets of Japanese industry, especially when backed by the Japanese Government, make Japan unusually well suited to compete in this market.

Who can argue with that?

Point 5. I call it gaining valuable experience. The most important aspect of the FSX agreement to the Japanese is likely to be the experience they will again gain in developing and—listen to this—integrating—remember that word, integrating—a complex modern aircraft. What Japan's competitiveness in the airplanes parts business has not provided Japanese industry with is an understanding of systems integration—systems integration—the art of fitting together all of the tremendously complex systems that go into a modern jet aircraft. The FSX exercise requires the modification of virtually

every system involved in the aircraft—the whole schmeer as we used to say in southern Illinois, the whole schmeer. Aircraft analysts argue that this is one of the most difficult tasks in the development of any plane and of fighters in particular, and if the FSX can be made to fly, the Japanese will take a quantum leap forward in the area of aircraft manufacturing. There they go, Mr. President, zooming away with our technology.

Point 6. This agreement places that American stamp of approval—bang—on a plan which provides that the Japanese will once again produce a product domestically in their country which they could buy from the United States of America and get a product of at least equal quality and at a dramatically much lower price.

Why do we continue to go along with that? Some people say free trade, free trade, free trade, free trade because it is cheaper, free trade because it develops competition, free trade because it drives down the price. No, this deal does not drive down the price. This deal drives up the price. Why? It drives up the price, lets them make the aircraft at more money and at the expense of American workers.

Point 7. Trade imbalance. The cumulative effect of this deal is to add, Mr. President—not subtract, add—to the already dangerous trade imbalance. I hate to tell you this, Mr. President. I was elected in 1980, and I came here in January 1981. Listen to this. In 1980, the United States had a $9 billion trade deficit with Japan. Is that not unbelievable, $9 billion? That is only 9 years ago. By 1984, the deficit jumped to over $30 billion, and for the last 4 years it has averaged over $50, and in total—listen to this; this is staggering. I am on the Armed Services Committee. Authorized for the year in which we are now operating is $300 billion. Listen to this. This is for the defense of the United States of America, the greatest free nation of the world—authorized for 1 year $300 billion—we have had to borrow $303 billion from the Japanese since the end of 1980 to cover the cost of Japanese products which we were not able to pay for by selling goods or services to Japan. We have cost ourselves more than the cost of an annual defense of this Nation in connection with that one imbalance of trade—$303 billion—and we want to add to it today.

Finally, point 8, competition. My friend, and he is my friend—he is a great Senator—the senior Senator from Indiana in one of his talks last week on this issue—and I respect him very much—stated that this FSX program would net nearly the same amount of money that would be gained from an outright sale of the F-16. I guess that is the administration's position.

With all due respect to him and the administration, that is not the case. The $3 billion received from an outright purchase would be in hand within a few years; we would have it, and would be followed by a spare parts and support package that is often three times the cost of the planes themselves over the course of the plane's lifetime. So listen to this. This means the United States would gain approximately $12 billion by an outright sale during the lifetime of the plane rather than the $2.5 billion that we will receive under the terms of the contract because of the spare parts and support package.

Mr. President, I will have more to say later, but I want to make this final comment. This deal has no features in my view—and I will examine that later before the vote—not one, in the interest of the United States. We are selling it too cheap. We are getting back nothing in return—Washington Post article today and the General Accounting Office cleared it. We are selling it to an ally that in the end will not give us a good deal on the later negotiations, and finally we are selling it to an ally that in the past has transferred secret information to other countries. All of that, I think, is in the worst interests of the United States, not the best interests of the United States.

I will have more to say about that later, Mr. President, but I thank my colleagues for permitting me to make these eight salient points at this point in time. I will develop later my thesis on the fact that there is nothing in this contract, nothing in this memorandum of understanding, nothing in the letters of understanding supporting the MOU that in any way develops a decent deal for the United States in connection with this arrangement.

I yield the floor.

The PRESIDING OFFICER. The Chair recognizes the Senator from Washington [Mr. GORTON].

Mr. GORTON. Mr. President, I have listened with great interest to the eloquent statement of my friend and colleague from Illinois. I disagree with him on the bottom line of this proposal and intend to vote against his resolution. I simply wish to point out at this stage the distinguished Senator from Illinois has built an elaborate and a beautiful and a highly desirable structure, perhaps one even could call it a castle, but he has built it upon a foundation of sand. The sand foundation upon which the arguments of the Senator from Illinois are based is the proposition that if his resolution of disapproval should be accepted by the Congress over the objection of the President, the Government of Japan, an economically strong and viable and highly independent nation, will suddenly change direction and purchase, for the purpose for which it has designed the FSX, the F-16 aircraft from the United States.

Mr. President, that will not be the consequence of rejecting this sale and passing this resolution of disapproval. I doubt that there is a Member of this body who would not have preferred a Japanese purchase of F-16 aircraft. I doubt that there is a Member of this body who would not have preferred that many of our allies and friends around the world purchase American systems for their defense rather than building their own.

But the fundamental fact with which we must deal here today in the Senate of the United States is that for good reasons or bad, for valid or invalid, most of our major allies in this world wish to have a capability to provide their own defense equipment. The inevitable consequence of the acceptance of this resolution will be that the Government of Japan will build its own FSX or possibly, I believe the possibility to be remote, that it will build it on an agreement similar to the one which is before us today with the Government of France or with some European consortia.

The Japanese Government is simply not going to buy F-16's. Because that is true, the entire edifice, as lovely and attractive as it is, constructed for us by the Senator from Illinois will come crashing to the ground. As we take this particular opportunity and weigh this particular opportunity against the consequences which will inevitably ensue, if this resolution of disapproval is accepted by the Congress, we have the alternative where the Japanese will go ahead on their own, and will almost certainly sooner or later be able to develop the same techniques and the same technologies that we, partnered with them, will include in this aircraft. And we will simply be out $2 to $2.5 billion or so which will be the share of General Dynamics in connection with this agreement. And we will certainly be without any new technologies which are developed as a result of the FSX agreement.

Also, I have been told, as an ally and a friend of the world, for some reason or another it is totally untrustworthy, and that in fact we really are not good allies of the Government of Japan. It would be a mistake to reject this proposed sale on the ground that there is a better solution which we have any potential opportunity to create. We do not.

Much has been made by proponents of this resolution of disapproval of the loss of American technology, of the creation of a competitor in the field of production of civilian aircraft. I think that argument underestimates far too greatly the genius and effectiveness of Americans in this world. The implication of almost all of the arguments in favor of this motion of disapproval is

that we are somehow or another inferior, that we simply cannot compete in this field or in any other field unless we somehow create an artificial advantage for ourselves.

Mr. President, I am not so pessimistic about the American future in any field of technology, much less aircraft. Nevertheless, I would not offer myself to this body as an independent expert on civilian aircraft technology. As the President well knows, I represent the single State which is most dependent upon the production of civilian aircraft, whose economy has the greatest and the most to lose if the Senator from Illinois is correct.

It would certainly have been negligent of me not to have consulted with the Boeing Co. in connection with this agreement. I did that shortly after I learned of this controversy in February of this year, and was told by the chief executive officer of the Boeing Co. that they not only did not disapprove of the agreement, but that they recommended that I vote in favor of it. The Boeing Co. did not fear the competition which could potentially be created by this agreement—I emphasize not between the Government of Japan and the Boeing Co., but between the Government of Japan and General Dynamics, a competitor of the Boeing Co., and in many areas.

The Boeing Co. itself, as is the case with almost everyone else in this field, has entered into certain joint production arrangements not only with Japan but with the wide range of other companies which wish to purchase its equipment but want to get some technology out of those purchases.

More recently, as recently as last week, the Boeing Co. and other members of the aerospace industry were asked to testify before a House committee on this very subject. I have here, Mr. President, the statement of Philip M. Condit, the executive vice president of the Boeing Commercial Airplane Co. I ask unanimous consent that it be printed in the RECORD at this point.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

BOEING TESTIMONY—TECHNOLOGY TRANSFER IMPLICATIONS OF THE UNITED STATES/JAPAN FSX AGREEMENT FOR THE HOUSE COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY, MAY 11, 1989

I wish to thank the Committee for extending an invitation to Boeing to participate in today's hearings. I am Phil Condit, Executive Vice President of Boeing Commercial Airplanes.

Boeing has not been directly involved in the FSX arrangement and has, therefore, not been exposed to the details of the Memorandum of Understanding (MOU) agreement other than through public reports, I, therefore, cannot respond to specifics concerning that agreement, but I offer the following observations to provide perspective on Boeing's view of its relationship with Japanese industry in the commercial airplane arena. We hope that this perspective will be helpful in understanding the issues being raised in the FSX debate.

Boeing's relationship with Japanese industry has evolved from subcontracting, to risk sharing participants in a Boeing airplane program, to discussing a planned equity relationship in a new airplane program. Subcontracting began in the early 70s when Mitsubishi Heavy Industries (MHI), Kawasaki Heavy Industries (KHI) and Fuji Heavy Industries (FHI) built trailing edge flaps and rudders for the 747 SP Joint venture discussions were initiated with the Japanese industry in 1972 and ultimately resulted in a risk sharing Program Participant role on the 767 in which Japanese industry shares the market and resulting financial risk. An MOU was signed in March 1986 by Boeing and Japan Aircraft Development Corporation (JADC, a quasi-government owned consortium) and MHI, KHI and FHI to jointly develop, produce and market an all new short-to-medium range, medium size commercial transport, designated the 7J7. The Japanese companies would collectively have a 25% equity role, would share in all investments, risks, sales financing and revenues in proportion to their equity position and would share in jointly developed technology in an agreed upon manner.

Boeing feels that its cooperation with Japanese industry has enhanced our long term objectives of growth, stability and profitability and that this cooperation will continue to enhance these objectives as we engage in commercial aircraft competition for world markets. The trend toward internationalization recognizes that global markets require global cooperation. Accordingly, we think that arrangements of this type are likely to increase in the future. We must recognize this trend in our business planning and government policy to assure that U.S. industry has adequate opportunity to compete in this environment.

The Japanese aerospace manufacturers are typically a small part of a larger, broader based heavy manufacturing company. Even the largest aerospace manufacturer, Mitsubishi Heavy Industries, has only 6,500 employees in its aerospace operations, and its aerospace business accounted for $1.8 billion, or 15% of the total company sales, in the fiscal year 1987. Comparable figures for Boeing were 136,000 employees and sales of $15.5 billion in 1987.

Although Japan's international cooperative relationship in aerospace has substantially increased through licensed production of U.S. military aircraft, a role in Boeing's 767 Program and subcontracts from both U.S. and European aircraft manufacturers during the last 15 to 20 years, the employment in Japan's aircraft industry has not increased. The statistical data published by the Society of Japanese Aerospace Companies in 1989 indicates the total Japanese aircraft industry employment in 1969 was 27,540 and has remained relatively stable for approximately 20 years. It was 27,410 at the end of 1987.

Through our frequent contacts with Japan's Ministry of International Trade and Industry (MITI) and the Japanese aircraft industry, we are familiar with the stated Japanese interest and objectives in commercial aircraft. A major challenge that Japan would face in independent development is the fact that opportunities for launching new commercial airplanes are very limited and that they would have to compete in the same world market against well established U.S. and European manufacturers. Japanese industry and MITI are well aware that any commercial transport airplane program is characterized by high commercial and technical risks and a relatively low rate of return.

Japan's national project, the YS-11, a 60 passenger turboprop civil transport, and such independent private sector undertakings as the development and production of the MI II MU 2/300 and the FHI FA 200/300, were not commercially successful. Moreover, the industries in which Japan has achieved significant commercial success have traditionally been those with large domestic markets such as steel, textiles, shipbuilding, consumer electronics, cameras, watches and automobiles. Unlike these industries, the Japanese domestic aircraft market is small, representing about 5% of the world commercial market. Because of these factors, the government is promoting international cooperative programs to develop commercial airplanes, rather than an independent approach.

With the exception of the YS-11 in the 1960's, Japanese airlines have depended on foreign made commercial aircraft, particularly those made in the U.S. Japan is the largest foreign customer of Boeing Commercial Airplanes in terms of total dollar value of aircraft purchased. Boeing's latest forecast indicates that Japan is expected to remain the largest foreign customer for the foreseeable future.

A valid concern regarding global cooperation is the sharing of technology and know-how, both in military and commercial cooperation. We must recognize that the U.S. does not have a monopoly on technology and that reasonable international cooperation can be structured so that both parties benefit from the arrangement. We believe the government has established institutional safeguards that prevent the irresponsible transfer of technology, which we assume are in place to judge the FSX arrangement.

Boeing has become a leader in the commercial airplane industry by providing a family of superior products. It is our objective to remain a leader in the industry by continuously advancing technology, product quality, safety and productivity to new levels. We feel we can, and must, accommodate increasing industrial cooperation in a changing business environment.

Mr. GORTON. I do not need to read extensively from that testimony. I can perhaps summarize it by reading one paragraph of a statement at the same hearing made by Joel Johnson, the vice president, International Aerospace Industries Association of America, on the 10th of May at that House hearing, less than a week ago.

Mr. Johnson says:

To conclude, we believe that at this time the FSX deal as negotiated is probably about the best agreement that is realistically achievable. We would encourage the Congress to allow for its implementation, with the proviso that the U.S. Government should monitor closely the willingness of Japan to make available technology to the United States. We do not believe it would be in our interest to encourage the Japanese to walk away from this agreement and pursue their original objective of building a new aircraft without U.S. involvement.

There is a great deal in that statement, Mr. President. First, of course,

the idea of this agreement was not a proposal of the Government of Japan. The Government of Japan proposed to build this FSX on its own. It was the previous administration which insisted with the Japanese that we have a codevelopment or coproduction agreement. This was this current Bush administration which insisted on increased safeguards in connection with the agreement. If Japanese industry had its way, it would be going it alone on this project. So by rejecting the agreement we cut off our noses to spite our faces.

I believe in this case we should follow the advice of the experts, the people in the American aerospace industry, as to what the future implications of the agreement are, and follow their advice by rejecting this resolution of disapproval.

I wish to debate one other set of comments. It has seemed to me increasingly clear as this debate has gone on not only in the last few days in this body but ever since the agreement first became public that the debate in which we are engaged here is a surrogate debate. I do not believe it is so much about the FSX and this agreement within the narrow bounds of the details of the proposal as it is about the overall relationship between Japan and the United States.

The senior Senator from Illinois clearly referred to that in his last set of remarks. He pointed out quite accurately the alarming increase in our bilateral trade deficit with Japan from some $9 billion in 1980 to more than $55 billion last year.

It is the concern which Americans rightly have developed over the imbalance in that relationship, and over what it means to the economy of the United States, which is the true undercurrent surrounding this debate on the FSX.

I not only do not deprecate or minimize that concern; I share it, and I share it overwhelmingly. I simply point out that that issue ought to be debated on its own merits and on a much broader field than this debate over the FSX.

Before the end of the month, under the terms of the 1988 Trade Act, the administration will be required to designate certain countries with unfair trade practices for treatment under the so-called super 301 provisions. It seems to me overwhelmingly clear that Japan should and must be included as just such a nation. I believe we have for far too long a period of time ignored or minimized the artificial restraints upon the sale of United States goods and services in Japan, and that our unwillingness to negotiate decisively or to take precise, firm, and tough positions, has exacerbated the trade deficit, which the Senator from Illinois so rightly criticizes. Nor am I willing simply to accept at the end of any such debate the fact that only 10 or 15 or 20 percent of our bilateral trade deficit from Japan may result directly from unfair restrictions on the sale of American goods and services in Japan.

I believe firmly that this Nation should set a goal for the reduction of that bilateral trade deficit, rather than negotiating toward the reduction of restrictions on particular commodities, items or services. I believe that it is appropriate and necessary for the trade representatives and for the President to set very publicly what those goals are, and to have sanctions readily available, and with a willingness to use those sanctions, if the goals which we set from the point of view of the progress of our own economy are not met.

That, it seems to me, Mr. President, the use of trade legislation, which we have on the books, partly due to the good work of the Senator from Texas, who is here on the floor today, and perhaps a followup to that legislation, if it is necessary to do so, should be used to reduce dramatically the imbalance in trade between the United States and Japan.

This FSX issue, however, should not be used as a surrogate for that debate. Taken on its own terms, the FSX agreement is good for the United States, as well as being good for Japan. It is vastly preferable to its alternative.

We should reject this motion of disapproval and should move on to debate over those overall trade relationships, with a goal which will benefit the United States, not only in the long run, but in the short run, as well.

Mr. BRYAN addressed the Chair.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. BRYAN. Thank you, Mr. President. This marks the third occasion that I have taken the opportunity to express my opposition to the proposed transfer of American technology. My initial reaction, when I heard it, was one of skepticism; the more I have learned about it, the less I have liked it. Indeed, I must say that after spending some days in Nevada, from Reno to Las Vegas, from Carson City to Wells, from Eureka to Laughlin, I am always impressed with the great common sense that the American people have.

One of the distinguishing characteristics of the American democratic system is the great faith and wisdom that we place in the average American citizen. Since the election of Andrew Jackson in 1828, that has been one of the hallmarks of our system.

I must say, as I visited with my fellow Nevadans, they asked me, "Senator, why are we proposing to advance and transfer this technology to the Japanese?" I am hard-pressed to come up with a satisfactory answer. Indeed, I say that that innate common sense that served us so well as a nation is reflected by the view, in my judgment, of the overwhelming number of Americans, certainly the overwhelming number of Nevadans in my State, which is that this makes no sense at all.

Last year our Nation experienced a trade deficit in the range of $137 billion, and the largest trade deficit on a country-by-country review is with Japan. That amounted to some $55 billion, or about 40 percent of that deficit.

The approval of the FSX agreement in providing this technology to Japan will enable them to further their own commercial and military aircraft industry. In the long run, Mr. President, it will only enhance our trade deficit. The United States is, without question, the world's most sophisticated and successful producer of military and commercial aircraft, and as Americans, we ought to be very proud of that fact. The Japanese, our friends, our allies, are also our greatest economic competitor.

Mr. President, they do not just plan for this year or this session of Congress; they plan for the future, the end of this decade, and into the next century. As we have painfully learned, the Japanese are willing to invest today at a considerable loss in order to secure a long-term advantage in the world's marketplace. Through the coproduction agreement which this proposed sale involves, we provide in effect a technological base for Japan to become, over the next few years, a major force in the world's aerospace market, our strongest industrial export sector.

Mr. President, that simply makes no sense. It is time for America to review our trade policy and to adopt a long-range view of what that policy ought to be with our trading partners. Free trade, yes, Mr. President, but fair trade as well. The Japanese have been superb negotiators. In my view, we have negotiated this agreement to their advantage, not to our own.

Mr. President, we can be fair, but we must be tough. The fact is that Japan has not displayed a very active approach in reducing this massive $55 billion trade deficit that exists between our countries. By purchasing our existing F-16's, Japan would be displaying a good-faith effort in reducing this trade imbalance, and by so doing, acquire the world's most sophisticated fighter aircraft and enabling them to perform the mission which we have asked them to provide, and that is protecting the sealanes in the Pacific. It has been estimated that the FSX may cost as much as $30 million more per aircraft than if they purchased the existing F-16's directly.

Mr. President, we have heard a lot about our responsibilities to our trading partners and to our allies—particularly, that this negotiation was initially consummated by the previous administration, that some changes have been made, some improvements, and some refinements, and that we somehow have an obligation to go forward, to make sure that this is complete. We are told that the Japanese are working to reduce that trade imbalance, and, yet, as we hear that echoing throughout this Chamber, we are also made painfully aware that our United States Trade Representative, Carla Hills, just released a report in conjunction with the Trade and Competitiveness Act of 1988 which addressed the trade barriers in foreign nations.

Trade barriers were found in Japan to United States exports of many fields: Superconductors, agricultural products, telecommunications, optical fibers, aluminum, and construction, just to name a few.

We are told, Mr. President, that those markets will eventually open up, but I think we need to ask ourselves when, how soon, and why, when there is an opportunity to make meaningful improvement in that trade deficit with the purchase by Japan of F-16 fighter aircraft, are they delaying?

We began this morning's deliberation in this body, as we do each and every day, by invoking the aid of the Diety. Our distinguished colleague, the junior Senator from Georgia, served as the acting majority leader this morning, and he shared with us a biblical Scripture of St. Paul to the Romans.

The Romans had an expression, Mr. President, that I think addresses precisely what we need to hear and what we need to do. In Latin, it is "factum non verbum"—deeds, not words.

So, Mr. President, I respectfully submit that it is time for us to listen less to talk and to call upon our Japanese friends, our allies, for deeds. And those deeds, Mr. President, will do more to address the trade imbalance between our two countries, with all of the talk and all of the discussion which has characterized those trade relations for the last 8 or 9 years.

In my view, Mr. President, this agreement makes no sense for America, for our trade situation, and for America's future, and I would respectfully urge my colleagues to support the resolution that is offered in disapproval.

(Mr. KOHL assumed the chair.)

Mr. BENTSEN. Mr. President, a few months ago, Masaaki Kurokawa, who is the chairman of Nomura Securities, came up with an interesting way he thought Japan could solve the American trade deficit. He said, "Let's strengthen the yen. Let's lower the value of the dollar. Let's bring it down from 135 to the dollar to 100 to the dollar." He said, "That is the way to take care of it."

Very simply, what would the United States have to do in return? Just one thing: we would give Japan California, or at least turn it into a joint economic zone to be shared by both countries.

There are those that think Japan already owns California. Actually, they have a way to go. But proposals like that one make me doubt that Japan is very serious when we ask them for the kind of help that we have given them for decades.

We went through the process of devaluation of the dollar; resulting in a 30-percent increase in our exports to other countries. What effect did it have on Japan? Minimal, if anything at all. We have actually seen our trade imbalance since that time increase with Japan.

They are absolutely determined to have market dominance. How did they react to the reduction of the value of the dollar? They dropped their prices and dumped products in the United States. We had an interesting situation where the Japanese would come to the United States to find products that were made in Japan selling far below the price that they sold for in Japan.

There were some interesting Japanese merchandisers who decided to take advantage of that situation. They set up a marketing deal where they would buy Japanese products in the United States and ship them back to Japan. They made enormous profits, until the Japanese Government caught on and began to put up barriers to stop them.

Japan means to dominate any sector of the economy that is at the high end, calling for top research, top salaries and long-term top profits.

We have extended help to all of our allies. Why? Because we wanted a system of mutual security for the allied democracies that depended not just on tanks and guns and planes—and certainly we have enough of those—but on the freedom to buy and sell to each other, whether we are talking about selling beef to the Japanese or Toyotas to people in the United States.

One of the ways we did that was by deliberately reducing our trade surplus, which was overwhelming at the time Harry Truman—and General George Marshall, Secretary of State Marshall—laid down the Truman doctrine before the Congress in 1947. As James Fallows has pointed out in his recent piece in the Atlantic, the U.S. trade surplus from 1946 to 1950 just about vanished. It was a good thing. Open markets for the exports of our allies improved standards of living far beyond anything that happened in any Communist country. Now, Japan's per capita income has substantially passed ours. It has an enormous budget surplus. The rest of the world owes it more money than to any other country in the world.

Now, today, we are asking the Japanese to reciprocate. I do not know of any better example of their recalcitrance than the FSX. It is not a cultural problem. It is not some ingrained belief that they cannot buy from another country; not, as one of their spokesmen told us, when we were talking about beef, that "their intestine is of a different length than ours," and, therefore, they should not be buying our beef.

Is the FSX the best deal that we can get from the Japanese? Maybe it is. Certainty Secretary Mosbacher has worked hard and long trying to turn that deal around and has markedly improved the terms of the deal over what the last administration had done.

If we had this deal to do over, I would not accept the terms of what has been accomplished; but, under these circumstances and with the assurances now specified in black and white, I am not going to oppose this codevelopment and coproduction plan.

I have listened to my good friend, the senior Senator from Illinois, who has eloquently articulated his position I agree with so much of it. But my concern is that the horse is out of the barn. It has gone too far. We cannot put it back together.

But the story of the FSX points to three important lessons that will cost us dearly to ignore.

First, how did we set about to negotiate the deal? We sent the Pentagon and the State Department—people seeking some foreign policy objective for our country, not really concentrating on the domestic economy and how important that is to the national security of our country.

I have just returned from a trip to Brussels. As I said a few moments ago to the President of the United States, in Brussels, they are forming Europe 1992—where they are trying to set up industrial standards and procurement policies that will affect the rest of the world, where the walls are coming down within Europe. The question is—Will there be a wall built around Europe and how will it affect us? An economy will be created with 80 million more people than we have, with a gross national product comparable to our own. You go to Brussels and find that Gucci Gulch has moved there. We have over 2,000 consultants working around here. Now they have over 2,000 consultants in Brussels. Major companies around the workd are represented there as they work out their agreements. The USTR has one person in our mission to the European Community; the Agriculture Department has five.

Do you know how many people the Department of Commerce has there?

Zilch; none; not one. There is a turf fight between the State Department and the Commerce Department. Commerce people are excluded. Europe is talking about industrial standards, an arcane field in some ways. It requires expertise in commercial production to understand the implications of standards. This could be another FSX deal at its initiation.

Let us be involved in Europe 1992. Let us send the kind of people to Europe who understand where we are coming from and what it means, who can explain and sell our point of view. The Finance Committee was just in Europe. We made our points on financial services. Some of us had backgrounds in that. I think we had an impact. They changed their regulations on financial services, insofar as the recommendation of the European Commission to the various parliaments of the 12 countries.

But we have to keep our commercial interests in mind in negotiation. We did not do that, in my opinion, when it came to the question of the FSX, until very late in the day.

The second part of the lesson is that our problems with competitiveness are inextricably linked with national security. Unless we are strong here at home, we cannot maintain the defense efforts that we have to support.

Is it that we are becoming less competitive because of a lack of American ingenuity? Do not believe that.

When it comes to Nobel prizes, the Japanese have won fewer than 10. Americans? Over 150. That is the sort of thing we have been able to do with research and ingenuity.

If you look around your homes you will see the fruits of American ingenuity today. The problem is the labels on them. Who developed the microwave? American scientists at Raytheon. Who makes them? Japanese and Korean companies make 90 percent of them.

Who invented color TV? American scientists at RCA. Who makes them? European and East Asian companies make 97 percent of them; and 85 percent of those bought by Americans.

Who invented the VCR that stands right beside your television set? Stick out your chest—it was Americans. And then duck your head because—who makes them today? Japanese, Koreans, and European companies produce over 99 percent of them.

It is no better when we walk into our factories. Who invented the world's first memory chip? AT&T and Texas Instruments. Today, Japanese companies produce over 80 percent of the world's memory chips. And how dependent our Defense Department is on those memory chips.

In our country, we say, "Read my lips." The Japanese say "Read my chips." It works. We buy them, even at the Defense Department.

We cannot let America become the research laboratory for the manufacturers in the rest of the world. We have to be as strong on the assembly line as we are at the drafting board. We have to accelerate the transfer of research to applied technology in commercial production.

Now, look at what is happening with the FSX. We are a leader in world aviation. Europe, on the other hand, has spent from $10 to $12 billion subsidizing the Airbus, with no profits for the foreseeable future.

Do you have any illusions about the Japanese wanting to dominate that market? To be premier in that market? To develop that kind of competitive force in that product?

Do you have any doubts about that?

Look at the numbers. It will cost the Japanese two to three times as much per plane to coproduce the FSX as it would have to buy the F-16 off the shelf, the most modern fighter aircraft in the world. If they wanted to add something to it, we could have well done that. Clearly, they want that technology so they can build not just the FSX, but an aircraft industry.

I think they want to be premier in every line of high technology that pays the top salaries, involves top research, and results in long-term top profits.

There are those that argue we ought not to be offended by that or by the Japanese attitude toward trade; that they are merely showing the tough, hard-nosed competition that is the sort of thing we admire in America.

I think in many cases that is true. I also know there remains in America strains of the anti-Japanese virus created during World War II. The fact is that Japan has done much that is admirable. We must be careful not to excuse our own failures by laying them at the doors of competitors.

But I know how the hired guns in Washington react. Any time you criticize Japan around here, there will be some who will immediately charge us with Japan bashing. Are we overlooking some things? The Japanese are not just competitors; they are our allies. Moreover, they profit enormously by the fact that we shoulder the defense burdens of our allies. Right now it costs us from $5 to $7 billion a year for the United States to maintain its forward presence in Japan. Our purpose is to defend the democracies of Asia. Japan pays less than half of that.

Am I for rearming the Japanese? No. However, I think they can do some things for defensive purposes. But if they became once again the dominant military power of Asia, they would strike fear throughout that area.

I was talking to a group of Japanese businessmen last year. They said, "Senator, your trade deficit is the result of your budget deficit."

I said, "Well, that is interesting. I have seen a number of countries that have a budget deficit that have a surplus in trade."

I said, "I think about the disparity between the amount of money we spend for defense and the amount you spend. You spend 1 percent; we spend 5 percent. We keep 55,000 American troops in Japan. It costs us a substantial amount of money. You are the No. 2 economic power in the world; yet, we pay about $1,100 per person per year for defense while our Japanese counterparts pay about $163."

I said, "Why don't you, as the No. 2 economic power in the world, belly up to that responsibility? Why don't you pick up the tab for the American forces that are here to help defend the democracies of Asia?"

I said, "I will tell you something else. If we spent the 1 percent you spend instead of 5 that we spend we would have a substantial budget surplus. If we spent 1 percent, I will tell you you would have chaos in Japan because 53 percent of your oil comes from the Persian Gulf and you would not have the American Navy down there to keep those sealanes open."

There are those who argue that the FSX is a national security issue for the Japanese. In fact, no national security consideration could seriously have prohibited Japan from buying the F-16. Where is the difference between the mutual security interests of Japan and the United States today as allies? There are none in the Northeastern Pacific. Japan has no basis for invoking the GATT exception for national security on the FSX deal.

There are those who point to the persistent cultral forces in Japan blocking truly open free trade. That is one of the points made by James Fallows. But the Japanese decision on the FSX was not the result of some cultural difference. It was purely a Government decision. It was not someone in a supermarket in Japan deciding, "Well, I remember this Japanese product. I am comfortable with this. This I am going to buy." Or someone who says, "Well, it is made in our country, therefore, I am going to buy it." None of that kind of an ancestral reaction.

It was a decision by the top policymakers of a country. It was a decision by the same people who said when Nakasone was the Prime Minister, let us send a buying mission to America to show them we are going to turn it around, that we truly want to buy American products. There was a lot of television, a big fanfare. They bought a few American baseball bats, some California wine, but after the television extravaganza was over, that deficit remained and even grew subsequent thereto.

And then there was the Maekawa Commission, let by the former presi-

dent of the Bank of Japan—and I believe he is sincere when he made this kind of an offer. He called for redirecting Japanese consumption inward—as they did after the 1986 agreement on semiconductors, which promised a much more open market for our producers than actually occurred, as they did after the recent agreement to buy paging devices from Motorola, when they excluded motorola from the profitable areas of the financial districts while giving those to the domestic producers.

In contrast to our attitude after World War II, Japan seems bent on subordinating everything to running $50 to $60 billion a year trade surplus, even to the point of excluding superior imports and endangering the national security of the United States.

It is not just America that gets excluded from the Japanese markets. Japan is an equal opportunity protectionist. It freezes us all out. The policy endangers all allied democracies. While talking to Europeans, they said that is their fear, that is their concern, and that is the kind of resentment that is building up. Japan must understand that. This happened to them before. They felt walled in, they felt excluded, and they meant to break out of it, and finally resorted to the military to try to accomplish that.

But as I talked to people in Europe, they said, "We are not worried about you. You have an open market. You are the biggest consumer in the world. You are our largest customer. We do not want to hit you."

I said, "Well, I think that is true. I do not really think you do, but it is the ricochets that worry me as you try to include us and exclude them.

My friends in Japan should keep that in mind because such a policy carried on and on will endanger Japan. It will create barriers to their products around the world.

In Mending Wall, Robert Frost's narrator describes a man who says good fences make good neighbors. But then the narrator goes on to say, "Before I build a wall, I'd ask to know what I was walling in or walling out."

Deals like the FSX are building blocks in the wall around Japan. They will block not foreign competition, but the friendship and the openess Japan will need from its allies. It is a wall that needs to be dismantled block by protectionist block. Tough competition is well and good, but Japan should not expect us to give away the store in the process, much less California, and the administration should not let them.

Mr. President, I yield the floor.

Mr. D'AMATO addressed the Chair.

The PRESIDING OFFICER. The Chair recognizes the Senator from New York [Mr. D'AMATO].

Mr. D'AMATO. Mr. President, the whole manner of the FSX deal has been bothering me more and more each day. I think what upsets me the most is the deliberate confusion of the facts by many of the proponents of this deal. I am even bothered by the initials FSX.

People in the Pentagon are famous for coming up with catchy acronyms for their programs, but this one just does not roll off the tongue—FSX. There have been some gems, though. Take, for instance, the passive infrared guidance system, PIGS, or the global atmospheric research program, GARP, or how about the study of advanced technological targets for intelligence research and exploitation, SATTIRE.

To make the name FSX easier to say, I think we would pronounce it fiddlesticks. Webster's unabridged dictionary's definition of fiddlesticks is one word—"nonsense." That is just what this deal is, nonsense. It is nonsense for the Japanese to spend three times as much and take twice as long to get a fighter airplane. It is nonsense for the United States to sell $7 billion worth of F-16 technology for a song, and it is nonsense to believe that Japanese technology will flow back to the United States when we are the leaders in all of the areas involved. As we clear away the fog and the smoke that has been generated and sue the spin doctors for malpractice, what is left? What is the essence of the argument on whether we should allow this agreement to go through or not? A noted scholar long ago pointed out that politics is the business of deciding who gets what. Perhaps an examination of who is getting what in the fiddlesticks deal will lend clarity to the matter.

The first and foremost player in this political game is Japan. What is it they want from this deal? From history and negotiations, their consistent statements, their paramount goal is to have a fighter development program. It is also true that they are concerned about the defense of their homeland.

But if that was their primary concern, Mr. President, the defense of their homeland, then would they not buy the F-16 off the shelf, have them cheaper, have them quicker than fiddlesticks? No, Mr. President, the Japanese want to develop not only fighter airplanes but a whole new industry. This is their goal. We should not forget it or be distracted by secondary arguments.

Mr. President, my colleagues have heard the arguments. Invariably when I talk to them, whether on the record or off the record, I hear statements like this: "Well, if we could get the Japanese to buy the F-16, it would be great. It's the fair thing, it's the right thing." But they will not. Is that what we teach our children? Is that how we deal with friends? We admit that it is the fair thing, it is the right thing, it is the economical thing, it is the best way of burdensharing.

I am sick and tired hearing my colleagues come to this floor and say Japan is sharing the burden. Is this true burdensharing? No. Far less. True burdensharing, true comity, as it relates to friends, means meeting legitimate needs and in this case would be to buy the F-16.

If we do not have the courage and the guts to stand and say to our friends, "Do what is right," how are we going to ask anybody else to do what is right? We have an area that is so clear. This is not shaded. Maybe it is about time we said to our allies and so-called friends, be fair. There is not a legitimate reason for them to turn down the purchase of the F-16. The United States of America now is acting in a cowardly manner. Every area of the executive has sold out. The Defense Department should hang their heads in shame. What nonsense to talk about technological flowback. When one reads the GAO report, it clearly states there is none. We are superior in all these areas, and yet we have make-believe comity. Is it because we are afraid that we may be held hostage as a result of the great economic clout that Japan has? If we continue to conduct ourselves in this manner and give away our industrial base and technological achievements, what will the future hold? How will we deal with the Japanese if in a matter that is so clear they are able to give us the business with fiddlesticks, with nonsense? What happens when there are areas of true disagreement, shades, where the question is not so crystal clear? What happens then? I fear that matters will grow worse. Talk about the economic colonization of America. No one could have believed it a few years ago. We have people writing about the purchase of California, making it a free area, the Japanese yen being used as our currency.

Two weeks ago, Mr. President, I visited my dad in the hospital. He is recovering from minor surgery. He asked me what we were doing in the Senate. I told him about the FSX. My dad is a veteran of World War II. He listened and asked some questions and I tried to answer as best I could. He said to me, "Son, it sounds to me like this is Pearl Harbor without bombs." He said, "Worst of all, it sounds to me that here we have a clear warning and your and your fellows down there don't have the courage to do what you should be doing."

Mr. President, we are not talking about the purchase of sushi, and Sonys, and Toyotas. We are talking about the sale of our industrial base in an area that is important. My staff has developed a very comprehensive paper on the strategic areas where the Japanese have targeted our technolog-

ical areas of expertise. Nine of them concern areas as they relate to fighter airplanes, 8 of them related to submarines, 20 some odd in areas that will determine whether or not the United States is able to be competitive in future centuries and Japan has targeted them. Are we going to continue to sell and give away the technological achievements that in so many cases we, the United States, have discovered and have literally frittered away?

Mr. President, if we cannot stand now, if we succumb to the pressure and the subtleties of those who say, "Oh, this would be terrible if we insisted on doing what was right?" Can you imagine? That is the argument. No one will argue about the merits of whether or not the Japanese should purchase the F-16. They simply respond, "Well, they won't do it."

Mr. President, we have not lost the ability then to take measured response to the request of a reasonable proposition. We still are a valued trading partner and still have economic clout of our own. But if in this instance we are fearful of asking the Japanese to do what is right, what is proper, what will be in our mutual interest as it relates to defense and trade, then when can we be expected to stand up and ask for fairness and assert ourselves for what is right.

I thank the Chair.

Mr. CHAFEE addressed the Chair.

The PRESIDING OFFICER. The Chair recognizes the Senator from Rhode Island.

Mr. CHAFEE. I wonder if the Senator from New York will yield for a couple of questions.

Mr. D'AMATO. I yield for a couple of questions.

Mr. CHAFEE. What does the Senator propose? Here we have a situation where the Japanese said they are not going to buy the F-16 and so working from that decision we work it around until we end up getting 40 percent of the deal. It seems to me that is pretty good bargaining. The Senator talked about getting tough.

Mr. D'AMATO. May I respond?

Mr. CHAFEE. Let me finish, if I might. The Senator said, "Let's get tough." What is the solution of the Senator from New York in getting tough? What do you do?

Mr. D'AMATO. As the Senator has indicated, there have been statements to the effect that the Japanese indicated long ago they would not buy the F-16. Never did we seriously pursue that. Never did we, or did our people in our deliberations say we insist that you buy the best plane at the cheapest cost, that we are not going to codevelop and that if you go it on your own and turn us down as it relates to this, then we will have to take actions that will treat your products in a similar way. You cannot have it two ways and say on one hand that we should have the right to free access to your markets, where our products are superior and cost about the same or less and on the other when you have them saying, "No, America, we have the right to turn you down."

Mr. CHAFEE. Now, let us just pursue this. First of all, bear in mind that the French produced their own fighter, the British produced their own fighter, and the F-16 is licensed to a series of other countries. But you have not yet crossed that threshold. They do not yield to our persuasion. They are not going to buy it. They are going to build their own. What are the further steps one takes?

Mr. D'AMATO. The distinguished Senator from Rhode Island knows there are many. There are many subtleties that can be practiced before one embarks upon a course of action that makes it known that he is serious. I suggest that there is a great array of weapons in the arsenal of trade, and that this is a matter of trade and fairness, and that we have not been treated fairly. I also suggest that the Congress of the United States is a legitimate place to say enough is enough. There are those who say this will embarrass the administration, no one will take our word.

We have a democracy. A deal is not a deal until we the Congress have signed off.

The distinguished Senator from Rhode Island could mention any number of actions that would be appropriate. But we have failed to stand up to the Japanese and insist on fairness. That is my point.

Mr. CHAFEE. We are in a very unusual situation here where if somebody does not buy our product——

Mr. D'AMATO. Which is the best.

Mr. CHAFEE. For their own reasons they choose not to buy our product. Assume it is the best.

Mr. D'AMATO. The cheapest.

Mr. CHAFEE. The cheapest.

Mr. D'AMATO. And can be produced earlier.

Mr. CHAFEE. It can be produced earlier. Every one of those facets can be met, just as the Europeans could have bought our Boeings and our McDonnell Douglas aircraft and they chose not to. They chose to go ahead and build an Airbus. They were illogical. They were unreasonable. They were not fair, but they did it.

Now the Japanese are saying the same thing. And by the way, there is nothing secret——

Mr. D'AMATO. Will the Senator yield?

Mr. CHAFEE. Could I just finish.

There is nothing secret about building an airplane. The Japanese do not have to rely on our technology or these codes. If they concentrate on it, they can build a good airplane just as we are doing.

Mr. D'AMATO. Will the Senator——

Mr. CHAFEE. But the Senator has not yet told me. So there is the situation. They are not going to buy it and he is going to get tough. Tell us, what is the Senator going to do?

Mr. D'AMATO. There is a whole array of things that the Senator from Rhode Island knows are available to us. Let us not forget that there is a great difference between a country that is running a $50 billion a year trade surplus, which is Japan, and our European allies. There is a matter of trade and we are inextricably linked. I should think that the Senator from Rhode Island would concede that the Japanese are not spending $500 million for nothing; that certainly the Japanese have never given away money, and in their purchase of this technology they are receiving a bargain.

Mr. CHAFEE. Well, I have tried to get an answer.

The PRESIDING OFFICER. Under the previous order, the Senate is supposed to stand in recess at this time.

Mr. CHAFEE. I ask unanimous consent we might continue for 10 minutes.

The PRESIDING OFFICER. Is there objection? Without objection, it is so ordered.

Mr. CHAFEE. Mr. President, I have great respect for the Senator from New York, and I have listened to this debate here, much of it carried on at the top of the lungs of various participants, but we have not yet received an answer about what we can do. I wish the Japanese would buy the F-16 and, as the Senator from New York has pointed out, that makes sense. It makes sense from their point of view, from our point of view, from the defense point of view. But they are not going to do it. So we have worked out this deal.

I think it is a pretty good deal. I think the fact that we went from zero up to 40 percent is pretty good going. What do we have? What is our leverage?

Mr. D'AMATO. If the Senator will yield, I know the next thing that will be said is, "You are going to start a trade war." But I think there comes a point in time when America can and should say if you are not going to buy the best and cheapest, deliver it at the earliest, we will selectively bar certain products from coming into this country where our industries can benefit.

It is an incredible irony while the Congress is being called upon to stop the production of the F-14, the best plane that we have serving the Navy at the present time, we are going to coproduce this plane because we are being blackmailed into it because we do not have the courage to stand up and say to the Japanese "Treat us fairly."

If we want to consider any number of products which come to the United

States from Japan, we can say they will not come in. Now, some may suggest that this will start a trade war but at some point and some time we have to stand, and if we cannot stand now when the issue is so clear, we are talking about fundamental fairness, I suggest it is going to be much more difficult in the future.

Mr. CHAFEE. We have a very interesting proposal here, that because somebody does not buy our product we think they ought to buy, we turn to them and say, "All right; if you won't buy our product which we think you ought to buy and we say it is a very fine product, therefore we are going to prevent you from selling other products here in the United States."

Mr. D'AMATO. That is a question of fairness and fair play. Is that not the principle of which we talk about free trade and fair trade? Is that not the underlying principle? Do we not have reciprocity, or is it just free trade and fair trade when you are allowed to sell your products here, but when we have something that is superior, you say, "Oh, no; we are going to do our own." I do not think that is free trade and fair trade. If you want to call me a protectionist for saying let us see to it that these principles are adhered to, then I take the burden and I will accept that label. But I do not think that is being protectionist.

Mr. CHAFEE. That is an unusual definition of not being protectionist, but I will point out to the Senator in addition, if his proposals were followed, we would be violating treaties that we ourselves have entered into. Maybe he wants to brush right by that and is not concerned. But we are starting down, I think, a very slippery path. If we are saying to somebody if you do not buy what we have, we say to other nations in the world, if you are buying an airbus, you ought to be buying a McDonnell Douglas. It is the best plane going. We say we have objectively analyzed it, and therefore, if you do not, we are going to prevent you from selling your products in the United States. That is a very interesting proposal. We might as well understand the terms that we are talking about here.

Mr. LEVIN. If the Senator from Rhode Island will yield, how is that any different from Super 301 where we say if you will not buy our telecommunications or you will not buy our auto parts or you will not buy this and that, we then have the right to put some restrictions on your VCR's, your cars, and your cameras? They are different products, but we authorize the President in his Super 301—to put pressure on the President—to finally respond to Japanese unfair trading practices, and that is the gut issue here.

They should buy our F-16's and there is a way to make them buy our F-16's. That is to tell the Japanese that if they will not buy our product that we can make cheaper and better than they can—and the F-16 is a cheaper, better product that can be made more quickly than the FSX—if they will not buy the product that we can make more efficiently, more cheaply, and more quickly to meet their military needs, then we are going to have to place some restrictions on our goods because we need a two-way street in trade.

We are not beginning down a slippery slope. We have slid down a slippery slope. We are at the bottom of that slope. We have a $40 billion trade deficit.

I am not mad at the Japanese. This is not Japan-bashing. I am mad at us. I am mad at us because we will not act to protect our own economy and our own jobs.

So, focus the fire right here on Washington. We are not aiming this at Tokyo. This is aimed right here at Washington. We should act to protect our own economic interests. They should buy our F-16's. That is the issue.

Mr. CHAFEE. That is a wonderful way to proceed. I have a house to sell. People are not buying it. They ought to buy it. What is the matter with them? They are not paying the price I am asking. Something is wrong, and I think I have a right to sue them.

Mr. LEVIN. Is the Senator saying there is no unfairness in the area of trade?

Mr. CHAFEE. The Senator's interpretation of 301 was certainly a highly unusual one. I am somewhat familiar with it, having been involved with that for a number of years. But the interpretation that the Senator has given to it is somewhat broader than Super 301 is. But all I am saying is those who are out there objecting to this deal ought to come up with a solution.

I think whoever worked this deal out did a good job. They came from a situation where people were not going to buy it at all, are going to manufacture their own, and worked it up until we are now getting 40 percent of the work. That is a pretty good deal, I would say, and whoever bargained that, I think, should be commended.

I urge that we vote down this resolution of disapproval.

Mr. BYRD addressed the Chair.

The PRESIDING OFFICER. The Senator from West Virginia.

AMENDMENT NO. 101

(Purpose: Relating to the cooperative arrangement with Japan regarding the FS-X weapon system)

Mr. BYRD. Mr. President, I send an amendment to the desk.

The PRESIDING OFFICER. The clerk will report.

The assistant legislative clerk read as follows:

The Senator from West Virginia [Mr. BYRD], for himself, and Mr. PELL, Mr. DANFORTH, and Mr. MOYNIHAN, proposes an amendment numbered 101.

Mr. BYRD. Mr. President, I ask unanimous consent that further reading of the amendment be dispensed with.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment is as follows:

Strike out all after the first word and insert in lieu thereof the following:

SECTION 1. CODEVELOPMENT OF THE FSX WEAPON SYSTEM.

(a) IN GENERAL.—The President shall ensure that all technology, defense articles, and defense services provided by the United States or any United States corporation or entity to Japan pursuant to the agreement described in subsection (b) to codevelop the Support Fighter Experimental (FSX) weapon system shall be subject to the requirements of subsections (a), (c), and (d) of section 3 of the Arms Export Control Act.

(b) DESCRIPTION OF AGREEMENT.—The agreement referred to in subsection (a) is the agreement for which the President submitted a certification pursuant to section 36(d) of the Arms Export Control Act on May 1, 1989 (transmittal no. MC-9-89).

SEC. 2. COPRODUCTION OF THE FSX WEAPON SYSTEM.

(a) IN GENERAL.—In the event that the United States and Japan seek to coproduce the FSX weapon system—

(1) the United States and Japan shall negotiate and sign a Memorandum of Understanding (MOU) containing the terms and conditions for that coproduction; and

(2) such MOU shall—

(A) prohibit the transfer to Japan of critical engine technologies (including, but not limited to, hot section and digital fuel control technologies); and

(B) prohibit the sale or retransfer by Japan of the FSX weapon system or any of its major subcomponents codeveloped or coproduced with the United States.

(b) APPLICATION OF ARMS EXPORT CONTROL ACT.—Technology, defense articles, and defense services resulting from any coproduction of the FSX weapon system by the United States and Japan shall be subject to the requirements of subsections (a), (c), and (d) of section 3 of the Arms Export Control Act.

(c) POLICY ON UNITED STATES WORKSHARE.—It is the sense of the Congress that any Memorandum of Understanding (MOU) between the United States and Japan on coproduction should specify that the United States share of the total value of the coproduction shall be not less than 40 percent of that value, including the value of manufacturing spare parts and other support items which are part of the lifetime maintenance costs of the FSX weapon system.

SEC. 3. GAO REPORT.

(a) IN GENERAL.—Beginning 6 months after the date of enactment of this joint resolution, and every 12 months thereafter, the Comptroller General of the United States, after consultation with appropriate officials of United States agencies represented on the Technical Steering Committee, shall submit to the Speaker of the House of Representatives and the chairman of the Committee on Foreign Relations of the Senate a report describing the progress made in implementing the Memorandum of Understanding (MOU) Between the United States

Department of Defense and the Japan Defense Agency on Cooperation in the Development of the FSX Weapon System, signed on November 29, 1988, and related documents thereto.

(b) DEFINITION.—For purposes of this subsection, the term "Technical Steering Committee" refers to the FSX Technical Steering Committee established jointly by the Japan Defense Agency and the United States Department of Defense.

SEC. 4. IMPACT OF MOU'S RELATING TO THE FSX WEAPON SYSTEM ON THE COMPETITIVE POSITION OF THE UNITED STATES.

(a) SOLICITATION OF RECOMMENDATIONS.—In the implementation of the Memorandum of Understanding (MOU) and related agreements between the United States and Japan regarding the codevelopment of the FSX weapon system, and in the negotiation, renegotiation, and implementation of future memoranda of understanding and related agreements concerning coproduction of the FSX weapon system, the Secretary of Defense shall regularly solicit and consider comments or recommendations from the Secretary of Commerce with respect to the commerical implications and such agreements and the potential impact on the international competitive position of United States industry.

(b) REVIEW BY SECRETARY OF COMMERCE.—Whenever the Secretary of Commerce has reason to believe that any such memorandum of understanding or related agreement has, or threatens to have, a significant adverse impact on the international competitive position of United States industry, the Secretary of Commerce may request a review of the agreement. If, as a result of the review, the Secretary of Commerce determines that the strategic commercial interests of the United States are not being served, the Secretary of Commerce shall recommend to the President any modification to the agreement he deems necessary to ensure an appropriate balance of interests.

(c) CONSIDERATION OF RECOMMENDATIONS.—(1) The President shall consider the recommendations of the Secretary of Commerce concerning—

(A) the commerical implications of any such memorandum of understanding or related agreement, and

(B) the potential impact on the international competitive position of United States industry,

in determining whether such memorandum of understanding or related agreement shall be implemented or agreed upon.

(2) Any such memorandum of understanding or related agreement shall not be implemented or agreed upon if the President determines that such agreement is likely to have a significant adverse impact on United States industry that outweighs the benefits of implementing on entering into such an agreement.

SEC. 5. DEFINITIONS.

As used in this joint resolution, the terms "defense article" and "defense service" shall have the same meanings as are given to those terms in paragraphs (3) and (4), respectively, of section 47 ot the Arms Export Control Act.

AMENDMENT NO. 102 TO AMENDMENT NO. 101

(Purpose: To prohibit the export of technology, defense articles, and defense services to codevelop the FSX aircraft with Japan)

Mr. DIXON. Mr. President, I send an amendment to the desk.

The PRESIDING OFFICER. The clerk will report.

The assistant legislative clerk read as follows:

The Senator from Illinois [Mr. DIXON] proposes an amendment numbered 102 to amendment No. 101.

Mr. DIXON. Mr. President, I ask unanimous consent that further reading of the amendment be dispensed with.

Mr. LEAHY. Mr. President, reserving the right to object, will there be an explanation of what these two amendments are?

Mr. DIXON. In due time, may I say, Mr. President, there will be an explanation. I would be glad to explain very briefly.

Mr. LEAHY. That is all right. I do not object.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment is as follows:

Strike out all after "section" on line 3, page 1, and insert in lieu thereof the following:

(a) the proposed export of technology, defense articles, or defense services pursuant to a license and technical assistance agreement with Japan described in subsection (b) to codevelop the Support Fighter Experimental (FSX) aircraft is prohibited.

(b) An agreement referred to in subsection (a) is an agreement for which the President submitted a certification pursuant to section 36(d) of the Arms Export Control Act on May 1, 1989 (transmittal No. MC-9-89).

Mr. LEVIN addressed the Chair.

The PRESIDENT pro tempore. The Senator from Michigan.

Mr. LEVIN. Mr. President, I would be happy to withhold the request for recognition if the majority leader seeks recognition. I did want an opportunity, if I could, to seek unanimous consent to delay recess for 10 additional minutes so that I can make a statement. If that does not fit with the leader's plans, so be it.

Mr. MITCHELL. I thank the Senator from Michigan.

## OATH ADMINISTERED REGARDING IMPEACHMENT TRIAL OF WALTER L. NIXON, JR.

Mr. MITCHELL. Mr. President, I note the presence in the Chair of the President pro tempore and the presence in the Senate Chamber of the distinguished Senator from Rhode Island, and I understood the distinguished Senator from Texas was here as well, and that the swearing in of the Senators from Rhode Island and Texas in connection with the pending impeachment proceeding is required. I ask that the Chair proceed to the swearing in.

Could I have the attention of the Senator from Michigan. It is my understanding that the Senator from Michigan also was not sworn in connection with the impeachment proceedings.

Mr. LEVIN. That is correct.

Mr. MITCHELL. Then I ask that the Chair administer the oath, as soon as the Senator from Texas enters, which I understand will be momentarily. Mr. President, I ask unanimous consent, to accommodate the Senator from Michigan, that following such swearing in, that the recess for the party caucuses under the previous order not commerce until the hour of 12:55 p.m.

The PRESIDENT pro tempore. Without objection, both requests are granted.

Mr. MITCHELL. Mr. President, I note the presence now of the distinguished Senator from Texas, and I ask that the President pro tempore administer the oath to the Senators from Rhode Island, Texas, and Michigan.

The PRESIDENT pro tempore. Without objection, it is so ordered.

The Senators will please raise their hands and be sworn. Do you solemnly swear that, in all things appertaining to the trial of the impeachment of Walter L. Nixon, Jr., judge of the U.S. District Court for the Southern District of Mississippi now pending, you will do impartial justice according to the Constitution and the law, so help you God.

SENATORS. I do.

## DISAPPROVING THE EXPORT OF TECHNOLOGY TO CODEVELOP OR COPRODUCE THE FSX AIRCRAFT WITH JAPAN

The Senate continued with the consideration of the joint resolution.

Mr. CHAFEE. Mr. President, I have been listening with great interest to my colleagues debate the fighter support experimental, or FSX, agreement. Those in opposition are adamant frequently at the top of their lungs, in their belief that the United States would be unwise to proceed with this agreement. Their reasoning, is based on their view of Japan as an unreliable ally and an unfair economic adversary.

I wish to say a few words in support of the FSX agreement. I disagree with its opponents, that Japan is an unreliable ally. Quite the opposite: I think this is a relationship that is important to the United States and which should be cultivated, not severed. And second, I believe that the FSX agreement will not diminish the competitiveness of American industry. Indeed, I think this agreement helps, not hinders, our companies, and it decreases, not increases, our trade deficit with Japan.

Let us look at the facts:

First, many opponents of this FSX deal argue that Japan should buy American-made F-16 aircraft outright, off the shelf. Now, no one in his right mind would dispute that this would be the most desirable outcome for the United States.

In the mid-1980's, it became apparent that Japan needed to modernize its aging F-1 aircraft—which were built in Japan—in order to continue to pull its weight in terms of the common defense in the Pacific. In 1987, the Senate voted unanimously for a resolution expressing its sense that Japan should purchase F-16 aircraft from us, rather than develop its own. This would have been the most lucrative option for the United States, the most comfortable in terms of protecting our technology, and arguably the cheapest option for the Japanese Defense Agency.

But the fact is, the Japanese were determined to develop their own advanced fighter aircraft. They have the money to do so, they have plenty of time and patience, and they are not proscribed by any treaty or agreement from doing so. In short, there is nothing stopping the Japanese from going ahead with their plans to develop this new plane, just as the French and the British do.

So it was in the economic and security interest of the United States to persuade Japan to allow us to codevelop, and eventually coproduce, the FSX. Otherwise, there would be no work for United States companies, no Japanese yen coming into this country, no hope of obtaining technology from the Japanese, no control over the future use or sales of the FSX, nothing.

I will make this point again. The emphasis of the last few days' debate has been misleading. The choice between the FSX agreement and an outright purchase of our F-16 aircraft by the Japanese does not exist. Rather, it is a choice between participation in this cooperative endeavor, or no participation whatsoever. Let us keep this straight.

In fact, we would be doing Japan a favor by rejecting this deal. The Japanese Government has been under a great deal of domestic pressure not to go through with it. They would be quite glad to keep all the business within their borders, and delighted to retain autonomy over the final product. And I am certain that they would be relieved not to live through a debate such as this one. At any rate, we should bear in mind that the FSX agreement is our idea, not theirs. We pursued it because it is in our interest.

Another point that I have heard made and that I have read in various editorials is that this deal is somehow a giveaway to Japan. I fail to see how this is a giveaway. Again, let us look at the facts:

The entire cost of the FSX program will be funded by Japan.

Based on an estimated development budget of $1.2 billion, the U.S. development work share will be about $450 million.

Based upon an estimated production budget of $5 billion for 130 planes, the U.S. production work share will be about $2 billion.

This deal stands to create more than 22,000 man-years of employment in the United States.

There will be automatic flowback to the United States of FSX technology that is derived from F-16 technical data.

Mr. President, this doesn't look like a giveaway to me. On the contrary, it looks like a pretty good deal.

For those of us who are troubled by our large trade deficit with the Japanese—about $50 billion—this deal should come as good news. In the course of development and production of the FSX, this agreement stands to eliminate 5 percent of this trade deficit.

For those who have called upon Japan to assume a greater share of the defense burden, this agreement should be heartening. Japan has committed $6.2 billion for this program. The decision to build a new class of fighter aircraft, in order to fulfill the mission of sea-lane surveillance and antishipping, is an important part of an overall trend in Japan to spend more on its defense and on cooperation with its military allies. This trend should be encouraged.

The technology transfer involved in FSX codevelopment has also been a sticking point. Many critics of this deal fear that: First, sensitive, state-of-the-art F-16 technology will be transferred to the Japanese, allowing them to advance significantly in the civilian aviation industry; second, the Japanese will sell the FSX to third countries for profit, or worse yet, they will sell it illegally to our adversaries; third, the technology the United States gets in return has no real value to us; and fourth, the Commerce Department has not given its input as to whether this deal will hurt U.S. industrial competitiveness.

It is essential to point out that the F-16 technology that would be transferred to the Japanese does not represent the leading edge of United States fighter aircraft technology. According to former Secretary of Defense Frank Carlucci, this technology is over 10 years old. Furthermore, the United States is developing its own advanced tactical fighter [ATF] capability, not a speck of which is part of the FSX deal.

Nor is this transfer of F-16 technology without precedent. Belgium, Denmark, the Netherlands, Norway, Israel, and Turkey have all coproduced portions of the F-16.

There is much disagreement over whether Japan could use this technology to develop a commercial aviation industry. But the fact remains that no one has proven that fighter jet technology is applicable to wide-bodied commercial planes. And what astounds me as I listen to the debate on this point, is that the aerospace industry in this country supports the FSX agreement. Not merely General Dynamics, which will codevelop the plane with Mitsubishi Heavy Industries, but also Boeing and McDonnell Douglas and Rockwell and Raytheon. All of these companies are for the deal.

The very industry that opponents of the FSX agreement want to protect does not want to be protected.

If Japan wants to develop a commercial aviation industry, it will. I have no doubt that Japan can do it. But our companies do not seem daunted by this prospect, and with good reason. The American aeorspace industry leads the world, and has what it takes to stay on the cutting edge.

Critics of this deal argue that the Commerce Department did not have the opportunity to gauge the deal's potential effect on U.S. industrial competitiveness.

Again, I think these critics are overzealous. After all, it was Secretary of Commerce Mosbacher who urged that the Bush administration take a fresh look at this deal, which had been negotiated by the Reagan administration. At his urging, greater restrictions were placed on the flow of commercially applicable American technology to Japan. At his urging, stronger assurances were obtained that the United States would garner a 40-percent share in the production of the FSX.

Now Secretary Mosbacher supports the deal, and urges us to do the same. I for one am prepared to take his word for it that the Commerce Department had significant input in the final FSX agreement.

To conclude, I urge my colleagues to look clearly and realistically at the FSX agreement with Japan.

If the Congress disapproves this venture, the United States stands to lose: Jobs; funds that would decrease our trade deficit; access to useful technology; control over future use of the FSX aircraft; a say in transmission of FSX technology to third countries; the willingness of Japan to contribute to the common defense; and the good will of an important ally.

I hope other Senators will take a good look at this deal, and realize it is in the best interest of the United States.

Mr. LEVIN addressed the Chair.

The PRESIDENT pro tempore. The Chair recognizes the Senator from Michigan.

Mr. LEVIN. Senator BINGAMAN's subcommittee held hearings on the FSX. During those hearings I asked a witness from the Pentagon whether the F-16 would meet the military requirements that Japan had for a new fighter. His answer was that the F-16 could meet Japan's needs. I also asked this witness whether Japan could meet its

commitment to defend the sealanes more quickly if it purchased our F-16's than if it were to develop and produce the FSX. His answer was that there was no doubt that this commitment could be met more quickly if Japan purchased the F-16. I then asked a witness from the Commerce Department if it was cheaper for Japan to buy the F-16 than to produce the FSX. Her answer was "Yes."

Mr. President, the F-16 is adequate to meet the defense mission requirements that Japan has for a new fighter aircraft, and Japan can fulfill their commitment to defend the sealanes more quickly with the F-16, and it is cheaper for Japan to buy the F-16 than it is to develop and produce the FSX.

That being true, there is a question that permeates this debate—it is the underlying question, the fundamental issue—why will Japan not buy our aircraft? We buy their TV's, we buy their cameras, their VCR's, their cars; why will Japan not buy our F-16? It is the best plane for the best value.

Now, one answer to that question is contained in a recent report called the National Trade Estimate, which is produced by the U.S. Trade Representative. Under the category of aerospace, the report states the following:

> Japan has targeted its aerospace industry development. A coherent Japanese plan is in effect, and the Japanese Government plans to make aircraft production one of Japan's major industries within 20 years. This would mean direct competition with the U.S. aerospace industry, which is the largest in the non-Communist world.

If we need further indication, we should listen to the Japanese themselves. Yotara Eda, president of MHI, who testified in the Japan Economic Journal in January of this year, said, "The technology that we will develop and accumulate during the FSX project will be instrumental in the development of next generation planes, such as hypersonic and supersonic transports."

Now, I realize, Mr. President, that there is significant debate on the question of whether the FSX deal will provide Japan with information which will be transferable to their commercial aerospace industry. At a recent hearing, I asked the Commerce Department witness if this agreement would help Japan to further their commercial aerospace industry, and the answer was that it would help, but only minimally, because the United States will control the technologies that will be transferred to Japan.

The assumption is that we will not provide the Japanese with technological information that will allow them to get knowledge about aircraft systems integration that could be transferred to the commercial sector. Well, then you have to ask the question, why is it that Japan is willing to spend an estimated two to three times more to develop and produce the FSX than it would cost them to purchase the same number of F-16's, and why is it that this agreement would mark the first time that the United States would assist Japan in designing and developing a fighter aircraft?

The answer comes again from the Japanese themselves. We should remember very, very clearly what it is that they are saying about the FSX deal. I quote them again, the president of MHI, "The technology that we will develop and accumulate during the FSX project will be instrumental in the development of next generation planes, such as hypersonic and supersonic aircraft."

I think one of the key questions which has been asked here has been pressed by our friend from Rhode Island. That question is: They will not buy our F-16's; how are you going to force them to do it? What do you do if they refuse to buy the plane which makes the most sense for them, at least in the short term, in terms of carrying out their military mission, a plane which we know from testimony, unanimous testimony, can carry out the Japanese military mission, which can be produced more cheaply than the FSX; what do we do about it, if they refuse to buy our products? What do we do if they refuse to buy our—and then you can fill in the list yourself in any State that you happen to represent. It might be rice or might be timber, might be citrus or auto parts, or it might be telecommunications equipment. It is a long list.

But what do we do? Are we helpless, and do we say in that case, heck, we will take 40 percent of the jobs? So what if we are digging a hole for our own aerospace industry and helping the Japanese to put us out of business. We will take what we can get. Is that our response to the challenge here? My answer is, it must not be. We must end that kind of response. We must at long last tell the Japanese and others, because they are not alone in discriminating against American goods, that if you will not buy our planes, that we are not going to be able to buy the items that you produce in the quantity that you are now selling them in the United States.

That is what Super 301 is all about. It is to put some pressure, finally, on our own administration to respond to unfair trading practices, and this is an unfair trading practice. They should buy our F-16's, the way they should buy our rice and auto parts and our citrus, and on and on and on, and our beef. Why do we tolerate restrictions on American beef going to Japan if they are free to sell everything that they produce here? It is costing us jobs, and it is going to cost us part of our future, and we have to put an end to it.

And if you get away from that question, once you leave that question, then you start rationalizing this sale. But come back to the question: Why will they not buy our F-16's and what can we do to force them to open their markets to our products?

What can we do? We have to tell them simply, honestly, straightly, as an ally and as a friend, in a very straightforward fashion, that there is going to have to be a change. "You are going to have to buy our products or we are going to have to put some restrictions on your products."

There is no other way that you can function in this world. If you cannot trade your things to the other countries, then you are going to end up being a second- or third-rate economic power if you continue to buy and buy and buy and buy without being able to sell.

I believe it is that prospect, that there would be some restrictions, some reciprocal restrictions on their sales here of the products that they flood our market with, that prospect and that prospect alone is going to persuade the Japanese to engage in fair trade and to buy the products that we make better and that we make cheaper and that we make faster, and that is the F-16.

Again, if you assume they will not buy our F-16's and that you cannot do anything to force the issue, and if you assume that they can get away with it, then you start justifying the argument that 40 percent of the loaf is better than none.

And that is the assumption that we have ot turn around. We have to blow the whistle on the one-way traffic in trade. We must say firmly to Japan that, "If you will not buy our F-16's, that your government, which closes markets of Japan to so many of our goods, that your government's actions are going to precipitate a response here and we are going to have to treat you no better than you treat us in the area of trade."

So a vote to ratify the FSX deal, Mr. President, is much more than that. It is a ratification of Japan not buying our F-16's. That is what this vote is all about.

It is not just, "Are you for the FSX deal?" The vote is whether or not we are going to accept the situation where they will not buy the plane which can be made faster, better, and cheaper and which will meet their military needs. It is a ratification, I believe, if we do ratify this deal, of the seeds of the destruction of our competitive edge in aerospace.

We have a long history of coproducing aircraft with the Japanese, but we have never before worked with them on the design and development of a military aircraft. This agreement will allow them to work in concert with

one of the masters of the U.S. aerospace industry, General Dynamics, in the design and manufacture of a highly sophisticated aircraft.

This situation is analogous to a circumstance in which a person with little experience decides to become a master woodworker, a profession that demands a high degree of skill and knowledge. This person has two choices—to learn about the subject on their own and work through the trials and failures until they get it right, or to become an apprentice to a master woodworker. To observe the master's technique and tricks of the trade, would allow the apprentice to become more proficient at this profession in significantly less time than it would take to learn it alone.

I believe that even if stringent technology transfer restrictions are observed, by being apprenticed to General Dynamics in this project, the Japanese will learn more that is useful to their commercial aircraft industry in a shorter period of time than they would have on their own.

And what can they learn in spite of controlled technology transfer—systems integration.

This is the process of getting past all the obstacles that arise when manufacturing a very complex machine like a modern fighter aircraft.

Even though we will be withholding the computer codes for the flight computer, we will be assisting the Japanese in making the whole aircraft fit together.

In collaborating with GD on the development and design of the FSX, Japan will get a firsthand understanding of how to design and manufacture a first-rate airframe and then fit all the other complex parts such as the engine and the other hardware and software.

According to a recent MIT study on Japanese aircraft production—

> Systems integration—with its blend of stiff technical and managerial requirements—is the most challenging aspect of aerospace production and, given the infrequency of full scale production programs, also the hardest set of skills to develop.

And, when Japan has acquired enough knowledge to sustain a productive domestic commercial aerospace industry, the United States aerospace industry can kiss away the Japanese market; and more—we will have helped put in place the competitor who will cut into our market. Aircraft trade is one of the few areas where the United States enjoys a huge surplus with Japan, as well as worldwide. United States exports in aircraft and components to Japan have risen significantly over the past few years. For example, in 1988 the United States exported $2.7 billion in aircraft and related items to Japan, while we imported just $425 million in these items from Japan.

But, we must remember that the United States has a huge $55 billion trade deficit with Japan. Our trade deficit with Japan is larger than the next five largest trade deficits we have with other nations. This deficit has arisen in part because the Government of Japan has a policy of putting up massive trade barriers that protect their domestic industries and keep United States products out. This policy was recently highlighted in the USTR report, which alleged that here were currently over 30 trade barriers constructed by the Japanese Government.

If Japan constructs a viable commercial aircraft manufacturing industry you can then add a few more billion to our present trade deficit, further eroding our economic and national security.

Finally, Mr. President, let me reiterate: Nobody should get mad at the Japanese or any other country that takes advantage of our foolish trade policies. The focus of our people's anger for our shortsighted policies should be right here in Washington. We can control our own economic destiny like other countries control their economic destinies and like other countries fight against that one-way street in trade.

This FSX deal is bad for America, simply because Japan should be buying our planes, not our expertise. They should be buying our planes. And it is that simple and it is that vital to our country's future.

So I want to commend our friend from Illinois for the fight he has been leading here. It is a much more important fight than one deal, one vote on one deal. The implications of this vote, I believe, are far reaching and will have a dramatic impact on what the understanding is in other countries about our determination or our lack of will to insist that our economic future is going to be a bright one because the street in trade is going to be a two-way street and not a one-way street.

I thank the Chair and I yield the floor.

Mr. DIXON. Mr. President, I think now it is appropriate for us to go out for the conference luncheons and return about 2:15 or so after the conference luncheons.

But I want to say, in as strong a manner as I possibly can, that every Senator here ought to be indebted to the Senator from Michigan for his very clear articulation of what we can do if they will not buy the F-16. All this talk boils down to all our friends saying "Oh,"—when they wring their hands—"I might as well go along with this. The horse is out of the barn. The deal is done. Nothing we can do about it. What are we going to do if they don't buy the F-16?"

The Senator from Michigan told us what we can do if they do not buy the F-16. The Senator from Michigan has articulated what the policy of the United States of America ought to be. And I congratulate him, because, in his usual, clear, concise, cogent manner, the Senator from Michigan has gone right to the heart of this thing and said, "Yes, sir, yes, ma'am, there is something we can do. When we have the best product at the cheapest price and they will not buy it, there is something we can do."

And the challenge, the challenge, Mr. President, for the Senate, the challenge for the Congress, if this administration does not have the willingness to do it, is to go foward and to do it ourselves. And that is what this great debate is about.

I am indebted, as I usually am, to the intellectual capacity and the precise ability of my friend from Michigan to articulate perfectly the simple issue involved here.

I suggest, Mr. President, that we recess now until after the two conferences on the two sides and return at 2:15.

## RECESS UNTIL 2:15 P.M.

The PRESIDING OFFICER. The Senate will stand in recess until 2:15.

Thereupon, the Senate, at 12:55 p.m., recessed until 2:15 p.m.; whereupon, the Senate reassembled when called to order by the Presiding Officer [Mr. STANFORD].

## DISAPPROVING THE EXPORT OF TECHNOLOGY TO CODEVELOP OR COPRODUCE THE FSX AIRCRAFT WITH JAPAN

The Senate continued with the consideration of the joint resolution.

The PRESIDING OFFICER. The Senator from West Virginia.

Mr. ROCKEFELLER. Mr. President, I oppose the resolution of disapproval of the FSX agreement. I believe that the proposed arrangement on FSX, now that it contains the so-called clarifications that President Bush successfully obtained from Japan, is acceptable. It is not an ideal agreement. I would have preferred that Japan buy a fighter off-the-shelf from the United States, but that was never a realistic possibility. The current agreement will result in $2.5 billion for the United States in the codevelopment and the coproduction stages of this project, which translates into 22,000 man-years of work. Rejection of this agreement would mean that Japan will either develop a fighter indigenously or negotiate an arrangement with a European country for coproduction. In either of these cases, it would result in no sale by the United States.

I am also satisfied with the understandings on technology flow, in both directions, that are in the clarifica-

tions obtained by the President. Most important, and I think this is the most significant aspect of the entire FSX issue, I am pleased that the Department of Commerce, USTR, and other agencies concerned about American trade and competitiveness have finally become part of the process when considering this type of defense arrangement. It will require vigilant monitoring by the Congress to ensure that these agencies continue to be integrally involved in that process, and I, for one, will work hard to make sure that happens.

Finally, this agreement contributes to our security goals in Asia. The FSX will help Japan meet the defense commitments it made in the early 1980's to defend its territory, coastal waters, airspace, and sealanes to 1,000 miles, an important priority of the United States. It also means that the integration of Japanese and American forces will grow and our defense relationship will remain strong.

Throughout the postwar era, America's relations with Japan and many other countries have been defined principally by traditional security and foreign policy concerns. The world has changed, however, and trade, technology, economic, and financial matters have taken on a much greater importance in defining the U.S. national interest. We no longer have the luxury of a defense policy that excludes these vital components of our national strength. We must learn to blend our defense interests with equally important economic interests into a unified, manageable, and coherent foreign policy. The FSX issue has forced us, for the first time, to address this conflict between our traditional defense policy and critically important trade and competitiveness issues. It is unfortunate that it took such an internal battle to force those who would prefer to look at the world only through the narrow focus of defense to open the decisionmaking process to the realities of today. But it was necessary, and it succeeded.

Let me review the history of the FSX to demonstrate just how far we have come. Earlier this decade, Japan recognized the need for a new fighter to deal with the expected threat in the Northwest Pacific in the late 1990's and beyond. Initially, Japan wanted to build an indigenous fighter, independent of United States or other foreign technology. This would have been a mistake. American military aircraft are the best in the world. Japan would have had to spend far more than if they had purchased a fighter from the United States and would probably end up with a less capable aircraft. Scarce Japanese defense funds would probably be diverted from other important projects. Following considerable pressure on Japan, including an amendment to the trade bill that I fully supported, Japan decided, in October 1987, not to follow the route of domestic development and instead to enter into discussions on codevelopment and coproduction with the United States.

In November of last year, the two governments signed a memorandum of understanding on codevelopment, and in January, General Dynamics, the manufacturer of the F-16 on which the FSX will be based, signed an agreement on codevelopment with Mitsubishi Heavy Industries, the prime contractor in Japan.

Until this point, the government-to-government negotiations were carried out in the traditional way with the Department of Defense talking directly to its counterpart, the Japan Defense Agency. The Department of Commerce and other agencies responsible for our trade and technology policies were not involved in these negotiations, despite the direction contained in the Fiscal Year 1989 Defense Authorization Act that the Secretary of Defense must, when considering defense-related agreements, solicit and consider information and recommendations from the Secretary of Commerce about the effects on the U.S. industrial base.

The memorandum of understanding dealt only with the development stage of the FSX and did not include the proportion of production that would be allocated to American industry. Also, questions were raised about technology that would be transferred to Japan—technology that might hasten Japan's development of a competitive aircraft industry. Finally, there were doubts as to whether Japan would actually transfer technology back to the United States as a result of FSX development.

Congress stepped into the picture, with many of us insisting that the President seek clarifications from Japan before formally notifying the Congress of the FSX agreement. We also introduced measures, not yet enacted, to make the Secretary of Commerce a statutory member of the National Security Council and explicitly to strengthen the role of the Secretary of Commerce in the negotiation and implementation of defense memorandums of understanding such as this one to assure that adequate consideration is given to the impact on U.S. industry's international competitiveness.

The result of this activity is the agreement before us. As I said before, it is not an ideal agreement, but it is one that helps enhance our security objectives while not damaging America's competitiveness.

We face a unique situation in our relationship with Japan, and that is what has made this matter so difficult for us. Japan is at the foundation of our strategic and political relations in Asia and the Pacific. Japan is the key to our defense strategy in the Pacific and to the regional elements of our global defense commitments. We have no more important or closer ally in Asia.

At the same time, Japan represents the greatest economic challenge, or threat if you prefer that word, we have ever faced. In sector after sector, Japan is challenging our ability to compete in the world and in our own domestic marketplace. Never before in history has our principal economic competitor also been one of our closest military and political allies. We must determine how to cooperate in defense while also maintaining our economic security. These two elements, each vital to U.S. security, need not be mutually exclusive. We must learn how to blend the two elements, and I believe that we have begun this learning process with the FSX. This change in thinking in the United States is something that many of us have been insisting upon for years. I think the change has come as quite a shock to Japan and our other allies who watch us so closely. It has come as a shock to many Americans as well.

There are three messages that I hope will emerge from the FSX debate. These messages are directed at Japan, at our other military allies and trading partners, and at the administration.

First, the United States remains a strong ally of Japan. We will meet our defense commitments, and we expect Japan to do the same. Second, it is no longer business as usual where we permit a one-way flow of civilian and defense technology from the United States to Japan. If Japan expects to be treated as an equal partner, it had better act like one. The bilateral agreements we signed in 1983 and 1985, for example, under which Japan was to allow the unrestricted export of military technology to the United States, can no longer be ignored. The Science and Technology Agreement with Japan that we revised and renewed last year, and which includes provisions for a more equitable and balanced access to research facilities in Japan, must show results. Third, the United States is redefining the term "national security" to include both the traditional defense component and economic factors. We will give a higher priority to trade, technology, and competitiveness concerns as we make national decisions in the future.

My final point relates to the general problem of implementation of agreements with Japan. Americans believe that once you sign an agreement, you have a contract that will be self-enforcing. This is not the case with Japan where an agreement is only the first half of the process. Equal effort must go into the implementation phase, monitoring and assuring en-

forcement of the agreement. Our Government, unfortunately, has a history of inattention to this critical stage. We stop paying attention after the agreement is signed and are then surprised 6 months, or a year, or 2 years later to find that nothing has happened. This cannot be allowed to occur with the FSX.

In sum, I believe the FSX debate has resulted in positive change in our policymaking process. We must work hard to ensure that these changes are institutionalized in our Government. We must also watch closely to assure that Japan fully complies with the terms of this agreement. I will vote to defeat the resolution of disapproval.

Mr. GRASSLEY addressed the Chair.

The PRESIDING OFFICER. The Senator from Iowa.

Mr. GRASSLEY. I thank the Chair.

This controversy over how and when and under what conditions Japan will develop an advanced fighter aircraft is not just on that issue alone because it seems to me like it is only part of the significant questions that ought to be raised about our military and trade policies, and specifically trade policies, with one country, Japan.

While no one can deny that the United States has a strategic interest in defense cooperation with Japan, we must not forget and we ought to remind the Japanese that as with trade, defense cooperation has to be a two-way street.

The real question that we have to ask ourselves is will this proposal be a good deal for both parties. From what I have been able to glean from the various briefings that I have attended, I have concluded the answer to that question may legitimately be "maybe." The major concerns I have with this deal are, it is my understanding that the agreement was intended to provide the United States with future technology and manufacturing processes. Yet, in the briefings that I had, I was informed that the technology we may be talking about in a few years is either available and superior to technology currently available in Japan or potential technology that we may gain from Japan in this codevelopment is just that, potential technology.

Mr. President, I have particular concerns regarding the approximate 40 percent of the work share in the codevelopment of the FSX. First of all, as it has been reported, the work share percentage is not even in the memorandum of understanding. It is in a side letter that was subsequently negotiated. As we all know, side letters have questionable legal status. Some have even argued that side letters are not worth the paper on which they are written. In addition, it is unclear what the term "approximately 40 percent" means. Does it mean more than 30 percent, but not more than 40 percent? We do not know. Furthermore, how will the work share be calculated? It is just not very clear, and that troubles me.

More importantly, this shaky work share agreement only applies to the development stage or the first six aircraft. A whole new memorandum of understanding has to be renegotiated for the production phase. This should be of great concern to our country. After development has been completed, the Japanese will clearly be in the driver's seat. At this point technology transfers will have been completed and the crucial experience in systems integration of which the Japanese have dreamed will have been gained. What will happen during the new negotiations when the United States demands this 40 percent work share on the production phase? Well, it may be at that point the Japanese can say to us, "Thank you very much; it has been nice doing business with you, but we don't need you any more."

At that point the United States will either capitulate or be cut out of the deal completely. Apparently, to the best of my knowledge, no one has been able to verify anything of substance the Japanese currently have that would even give a glimmer of value to the United States for what we are about to give up in technology. In fact, Mr. President, the General Accounting Office—this is from a briefing we had—concluded that its research of the facts could point only to what the United States was giving up to the Japanese, but the GAO was not able to point to anything specific that the United States was gaining from the transaction.

We have heard that the Japanese planned to build an advanced fighter aircraft with or without the assistance of the United States. We have heard that the Defense Department lobbied strongly for the United States to go into the codevelopment arrangements with the Japanese. The reasons that the Department of Defense gave for such an arrangement were that it had—and I want to stress the word "had"—the potential of getting back advanced technology and learning new manufacturing processes to enable us to reduce the cost of building an aircraft.

In all fairness to the Department of Defense, I should say that they did tell us it was not the flowback of technology that was of initial consideration but, rather, protecting U.S. interests and having control over the aircraft from reexport.

Mr. President, we have heard that the Japanese want to build this aircraft for reasons of national pride and security. Quite honestly, I can accept that premise. What I cannot accept, however, is whatever happened to the United States doing similar things for our own security and, more importantly, when will national pride be of as much concern to our Government.

When you talk about the Japanese, you so often hear the reason they cannot buy American products is that they do not meet the quality level expected by the Japanese or they do not meet the specific needs and requirements of the Japanese due to cultural considerations or they might say that national pride does not permit.

Mr. President, with a situation of an advanced fighter plane for the Japanese, in this particular case, it is a situation where American technology, cultural and quality considerations, when you take all those into consideration, we clearly meet or exceed any excuse for not buying American.

Mr. President, in March 1982, the General Accounting Office report on military coproduction of the F-15, several things caught my eye that I believe are relevant to our discussions on codevelopment of the FSX. This report talked about how Japanese producers had made large capital investments in new plant facilities and purchased advanced equipment such as Boron composites, titanium processing, titanium chemical milling, new profiles, siding presses, and modern surface and heat treatment facilities and equipment. In addition to these purchases they also had employee training from U.S. coproduction partners.

Now, you may ask what does all this have to do with the codevelopment of the FSX. What it has to do with our discussion today is directly related to what the report so clearly stated as far back as 1982. For example, we need to understand that the major aircraft manufacturers in Japan are subsidiaries of firms that are engaged in a variety of heavy industry other than aircraft, industry such as shipbuilding, automobiles, electric and nuclear powerplants; and we also need to recognize that in Japan military and civil aircraft are mixed throughout the production process. But, more important, we need to understand that the civil aircraft production reaps benefits from the advanced processes and technology.

Mr. President, let me now get to the heart of that discussion. According to the 1982 GAO report, they talked about MITI's strategy for the Japanese aircraft industry. Apparently MITI has outlined a development approach and strategy for the aircraft industry through joint ventures, consortia of Japanese producers and Government support. Through these efforts MITI hopes that Japan will gain sufficient experience and standing to increase its share of the world aircraft market.

Mr. President, my concern is that while I have talked about the possible offshoots from military to civilian

aviation, I am also concerned about other commercial applications. I am concerned about the economic and national security aspects of the United States, and I am concerned about the trade deficit we currently are experiencing with our trading partners in Japan.

Mr. President, I am concerned that while we have looked at this codevelopment agreement in the view of safeguards and not wanting to either let potential technology be lost, we have done so without a clear understanding of the potential gains and losses.

We need to begin to look at the effects on our own economic and national security and the loss of technological superiority that we now clearly own. We need to reinstill in American workers our confidence in their ability to compete in the world market, based on their management, labor, and intellectual skills. As a government, we need to provide the tools for the American worker, not just to compete with foreign counterparts, but with the foreign governments who are an integral part of many industries of the MITI strategy.

If we learn nothing from this agreement, other than a need for our Government to get all of the various agencies working hand in glove on future agreements, this debate will have offered a major contribution to the country's future.

In other words, I am talking about DOD getting into it early, Commerce Department getting into it late, and the Special Trade Representative, I do not believe, in it at all.

Mr. President, I began my statement a few minutes ago by saying that there is no clear evidence that the agreement is either blatantly good or bad. However, Mr. President, I will conclude by saying that everything I have learned to date has not convinced me that it is fair. And that, in my estimation, is the bottom line, when I look at a transaction, whether it be selling military equipment or agricultural products. The point is, Mr. President, that we are looking at a great big deep black hole.

There are so many ends, unanswered questions, and unknown variables in this whole FSX process, that no one knows where the process will lead us. I am afraid it may lead to disaster, and I believe this uncertainty effectively undermines any argument for proceeding with the agreement as it is currently written.

It is for these reasons that I plan to vote for the resolution of disapproval.

I yield the floor.

## UNANIMOUS-CONSENT AGREEMENT

Mr. MITCHELL. Mr. President, I now ask unanimous consent that the vote on a Dixon second-degree amendment to the Byrd amendment occur at 4 p.m. today.

I further ask unanimous consent that the remaining time for debate on the Dixon amendment be equally divided between Senators LUGAR and DIXON on their designees.

I further ask unanimous consent that if the Dixon amendment is defeated, there be a time limitation on Senator BYRD's pending first-degree amendment of 1 hour to be equally divided between Senator BYRD and Senator LUGAR or their designess.

I further ask unanimous consent that there be 10 minutes on a Heinz perfecting amendment to the Byrd amendment relating to a GAO report and that there be 10 minutes on a Dixon perfecting amendment to the Byrd amendment relating to a report to the relevant congressional committees.

I further ask unanimous consent that the vote occur on the Byrd amendment after the time has been used or yielded back.

I further ask unanimous consent that if Senator DIXON's amendment is agreed to, the Senate then vote immediately on the Byrd amendment, as amended.

I further ask unanimous consent that immediately upon the disposition of the Byrd amendment the Senate proceed without any intervening action to third reading and final passage of Senate Joint Resolution 113.

I further ask unanimous consent that no other amendments or motions be in order to the resolution and that the agreement be in the usual form.

I further ask unanimous consent that immediately following the disposition of Senate Joint Resolution 113 and a motion to reconsider and table, the Senate turn to the consideration of a resolution by Senator MURKOWSKI relating to Japanese involvement in Libyan chemical weapons development and it be considered under the following time agreement: 30 minutes on the resolution to be equally divided between Senators PELL and MURKOWSKI or their designees, that no amendment be in order, that no motions to commit be in order, and that the agreement be in the usual form.

Mr. DANFORTH. Mr. President, reserving the right to object.

The PRESIDING OFFICER. The Senator from Missouri.

Mr. DANFORTH. Mr. President, if I could direct a question to the majority leader, whom I congratulate for his efforts to put together this agreement, suppose that the Dixon amendment is agreed to. Is it my understanding the majority leader has asked that if the Dixon amendment is agreed to, we then vote on the Byrd amendment?

Mr. MITCHELL. That is correct. It would be the Byrd amendment as amended by the Dixon amendment.

Mr. DANFORTH. Mr. President, let us assume that the Dixon amendment is defeated. Then we would proceed to the Byrd amendment. Is that correct?

Mr. MITCHELL. That is correct.

Mr. DANFORTH. Then let us suppose that the Byrd amendment is defeated. Would we then be back on the Dixon resolution and vote on that?

Mr. MITCHELL. According to this, we would go without any intervening action to third reading and final passage of the resolution.

Mr. DANFORTH. Mr. President, I do not want to be a fly in the ointment. I would like to speak for about 15 minutes sometime before the first vote. There is plenty of time to accommodate that, but it dependes on who gets recognized and how many Senators are on the floor. I wonder if the agreement could build in, or if the representation of the Republican floor leader could build in to either a formal or informal agreement that I might be recognized for 15 minutes.

Mr. LUGAR. Mr. President, may I respond to the distinguished Senator that, because the Senator is going to vote against the Dixon amendment—therefore, time will be controlled by this Senator—we would be willing to yield 15 minutes of the time allotted to this side to the Senator from Missouri.

Mr. SHELBY. Mr. President, reserving the right to object, I, too, would have really no objection to the unanimous-consent request except I would like at least 10 mintues to speak on behalf of Senator DIXON's resolution.

Mr. DIXON. Mr. President, I have no problem at all in allocating from my time 10 minutes to the distinguished Senator from Alabama if we have time to do this adequately. I might also say I am told that the senior Senator from South Dakota has also indicated he would like 5 minutes. But I do not know. I am also told the Senator from Ohio [Mr. METZENBAUM] would like 7 minutes. So I have a little difficulty in knowing which side those numbers would be subtracted from. I do not know how much time we are going to have left. That presents a little bit of a dilemma.

Mr. MITCHELL. Mr. President, in order to accommodate the various requests that have been made, and to permit the managers to proceed, may I suggest that my request be amended to seek a vote on the Dixon second-degree amendment to the Byrd amendment at 4:30 p.m.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. MITCHELL. Mr. President, was the unanimous-consent agreement just approved?

The PRESIDING OFFICER. Is there objection?

Mr. LUGAR. Mr. President, reserving the right to object, and I shall not

object, but I wanted to raise the question at this point with regard to the vote of the Byrd amendment. Is it my understanding, and I think the majority leader has clarified this, but let me ask again, that in the event that the Dixon amendment expressing disapproval of the FSX deal is adopted, therefore that kills the deal at least so far as that amendment, that the Byrd amendment is to this in essence failed resolution. In other words, the Dixon resolution has the impact of a negative to kill the deal.

Mr. MITCHELL. That is correct.

Mr. LUGAR. My query is the logic of attaching an amendment to a motion which has in essence stopped something as opposed to somebody proceeding forward and therefore there being conditions to that constructive action.

Mr. MITCHELL. The answer is I believe that it presents Senators with a choice. If they are for proceeding with the transaction, they should vote against the Dixon second-degree amendment. If they are in opposition to the transaction, they should vote for the Dixon second-degree amendment. if that prevails, that in effect becomes what the Senate will be approving.

Mr. LUGAR. I understand that answer. I suppose I again wonder aloud in the event that Senators vote to stop the deal, to then offer amendments to that stoppage, sort of gratuitous action I suspect, would not have any effect in policy except maybe as a statement perhaps to be observed without particular import.

Mr. MITCHELL. The answer to the Senator's question is that in the provisions of the unanimous-consent agreement which I have sought, if Senator DIXON's amendment is agreed to, then the Senate will vote immediately on the Byrd amendment as amended by the Dixon amendment. There will be no intervening amendments. In effect, Senator DIXON's position will have prevailed.

Mr. LUGAR. If the leader will indulge me for one further inquiry, at what point should the 10 minutes on the Heinz perfecting amendment and the 10 minutes on the Dixon perfecting amendment happen?

Mr. MITCHELL. Those will ocurr in the event the Dixon amendment is defeated.

Mr. LUGAR. Only in the instance of defeat.

Mr. MITCHELL. That is correct.

Mr. LUGAR. So they would not intervene before the vote on this.

Mr. MITCHELL. That is correct.

Mr. WIRTH. Reserving the right to object, Mr. President, I will not object, but just for a point of information we have the time split evenly divided between a quarter of 3 and 4:30. Is that not the case under the pending unanimous-consent request?

Mr. MITCHELL. That is correct.

Mr. WIRTH. Of the time that is available on the side controlled by the distinguished Senator from Indiana, 15 minutes to date has been allocated to the Senator from Missouri. Is that correct?

Mr. LUGAR. That is correct.

Mr. WIRTH. How much time does that leave under the control of the Senator from Indiana?

Mr. LUGAR. As I read the clock, roughly 40 to 50 minutes.

Mr. WIRTH. Remains to the Senator from Indiana.

Mr. LUGAR. Minus 15; so 30 to 40 minutes.

Mr. WIRTH. I understand the desire to move along. I know the distinguished Senator from New Mexico wants an allocation of time, and I do as well. Is this the time to ask the distinguished Senator from Indiana, and the majority leader, to be included in this unanimous-consent request? I would like to be able to speak for 7 minutes. I do not want to speak for the Senator from New Mexico. It seems to me as long as we are allocating this time we do not want to be left with a minute or 2 at the end of the afternoon.

Mr. LUGAR. Let me respond to help the leader, and I will make time available both to the distinguished Senator from Colorado and New Mexico following the adoption of the request.

Mr. MITCHELL. Mr. President, may I amend the request to ask that the vote on the Dixon second-degree amendment to the Byrd amendment occur not later than 5 p.m.? Let me explain that—so that all of the Senators who have expressed an intention to speak to this important issue be accommodated. I think it is very important that no Senator feel he or she has been cut off or prevented from expressing this views. This is an important issue. I want to emphasize that. Every Senator ought to have the full opportunity to express his or her views but in the event all of the time is not used we do not then just have to wait around. So that under this request, as amended, the vote would occur not later than 5 p.m., if the time is not all used and yielded back. And the vote will occur as soon as that occurs.

Mr. GRASSLEY. Reserving the right to object, does that take into consideration the fact that I had no conditions on my speaking at the time I gave up the floor for this unanimous-consent agreement? I would like to finish my remarks and not be hurt by any agreement. That is why I came over here early in the first place.

Mr. MITCHELL. The Senator has full opportunity to express his views. I think if he spoke for 50 or 60 more minutes, he would present problems for the manager on this side. But I take that not to be the Senator's intention.

Mr. GRASSLEY. That is not the case.

Mr. MITCHELL. So, Mr. President, therefore, I renew the request, as amended, that the vote occur not later than 5 p.m.

The PRESIDING OFFICER. Is there objection? If not, it is so ordered.

## UNANIMOUS-CONSENT AGREEMENT

Mr. MITCHELL addressed the Chair.

The PRESIDING OFFICER. The majority leader.

Mr. MITCHELL. Mr. President, I now ask unanimous consent that the majority leader, after consultation with the minority leader, return to the consideration of the conference report on the minimum wage, H.R. 2.

I further ask unanimous consent that when the Senate considers that conference report, it be under the following time limitations: 2½ hours equally divided between Senators KENNEDY and HATCH, or their designees, with 30 minutes of Senator KENNEDY's time under the control of the majority leader.

I further ask unanimous consent that at the conclusion or yielding back of time the Senate proceed without any intervening action to vote on the conference report.

The PRESIDING OFFICER. Is there objection?

Mr. LUGAR. Mr. President, reserving the right to object, I shall not object, I simply want to state that this request has been cleared with the minority leader, and on his behalf I am prepared to accept the request.

The PRESIDING OFFICER. Is there objection? If not, it is so ordered.

Mr. MITCHELL. Mr. President, I thank my colleagues.

## DISAPPROVING THE EXPORT OF TECHNOLOGY TO CODEVELOP OR COPRODUCE THE FSX AIRCRAFT WITH JAPAN

The Senate continued the consideration of the joint resolution.

Mr. BINGAMAN addressed the Chair.

The PRESIDING OFFICER. Who yields time?

Mr. LUGAR. I yield 10 minutes to the distinguished Senator from New Mexico.

Mr. BINGAMAN. Mr. President, I rise today to speak in opposition to the resolution before us, which would disapprove the proposed FSX agreement between the United States and Japan.

I do so with some reluctance because I regret finding myself on the opposite side of this issue from my good friend from Illinois, Senator DIXON, with

whom I have worked closely on the Armed Services Committee on many matters and on this issue in particular.

Our paths on this issue have only recently separated. And I will explain in a few moments why they have.

But first let me make a few general points about the context in which this issue arises.

I have followed this matter closely for 3 years now. I saw from the outset a very high potential for this issue to become a lightning rod for broader frustrations in the United States-Japan relationship. I share those frustrations over an intractable trade deficit which Japanese protectionist policies exacerbate, over Japanese carelessness in exporting technology to the Soviet Union in the Toshiba case and to Libya in the chemical weapons case, and over Japanese reluctance to take on a greater role in our common defense and on third world debt.

I have been particularly concerned about the trade deficit. When I first visited Japan in early 1985, a senior Japanese official predicted to me that the bilateral trade deficit, then about $35 billion, had turned the corner. Any further increase in the Japanese surplus would be as unacceptable there as it is here. Now the deficit stands at $55 billion and it is likely to worsen significantly if the dollar continues its recent gravity-defying climb. And we have an administration locked in debate over whether to cite Japan under the Super 301 provisions of last year's trade bill. That should not even be a close call.

I have fought for honest implementation of the semiconductor agreement with Japan and supported sanctions for Japan's failure to live up to that agreement. I have criticized Japanese performance under the telecommunications agreement, and believe that that needs to be cited by the administration in its 301 actions.

I recognized from the outset of my involvement in the FSX deal back in 1986 that we could not keep these trade tensions separate from our defense relationship with Japan. That was essentially Secretary Weinberger's stand. I did not think then nor do I think now that such delinkage of defense from trade was possibly sustainable.

That is why I worked with Senator BYRD and Senator DANFORTH in 1987 to try to get this issue before the Congress and to try to change the way it was being viewed by the State Department and the Defense Department. In the summer of 1987 I was a cosponsor of the Byrd-Danforth amendment to the trade bill which urged Japan to buy an off-the-shelf American aircraft. That amendment was passed by the Senate 96-0. But frankly the amendment got more attention in Japan than it did here. I think it did play a role in convincing the Japanese not to pursue a totally indigenous aircraft and instead to codevelop and coproduce a variant of the F-16.

The Japanese announced that decision in the late summer of 1987. My view at the time was that that was potentially a step in the right direction, if the codevelopment and coproduction agreement were properly negotiated. I regretted that we had not been able to persuade the Japanese to buy an F-16 off-the-shelf. I regret that we didn't make a stronger attempt to persuade the Japanese that summer. I agree with my colleague from Illinois that that would have been the better alternative from the point of view of both the common defense and reducing the bilateral trade deficit.

This codevelopment decision by the Japanese Government was fundamentally protectionist, at least as mainstream American economists define protectionism. It reflects a Japanese industrial policy aimed at preeminence in the long run in high technology, high value added industries where they believe their natural comparative advantage lies.

But I would point out that the Japanese are in lots of company in taking a protectionist approach to the aerospace industry. Our European allies are currently developing both the European fighter aircraft and the Rafale. And Sweden is beginning production of the Gripen. We as an alliance are suffering from our economic rivalries. The term often used for this state of affairs is "structural disarmament." Unlike the Soviet Union, which truly is the arsenal of the East bloc, we in the West habitually duplicate R&D and production of weapons systems. Only the United States can afford to produce enough aircraft to get unit prices down. Our allies all produce very expensive aircraft in small quantities. I do not condone this state of affairs. I hope someday that the Nunn amendment for cooperative development and production will lead to a more productive Western arsenal.

But if we judge the FSX deal as clarified by President Bush in comparison with the European developments, it looks pretty good. The Japanese are modifying a United States plane, as we requested our European allies to do. The Japanese will pay for this entire development. Not a cent will come from U.S. taxpayers. Indeed, it is vital that we look at this agreement on its own merits compared to realistic alternatives. We cannot use it to solve all the problems in our relations with Japan or all the problems we have internally in this country with fostering an environment that will arm us for competition in the international marketplace.

Last year, the Armed Services Committee took two actions on the FSX deal as it was then evolving.

First, we were concerned that the Japanese had taken the lead in defining what codevelopment and coproduction meant. In the committee's report last year, we made it very clear that simply transferring American technology to Japan in exchange for a license fee would be unacceptable. We laid down conditions that I think are still appropriate to our consideration of the FSX deal today. Our conditions were that the United States get meaningful workshare in both the development and production phases and that that technology derived from U.S. technology in the development of the plane flow back to us expeditiously and without charge. Privately we told the Defense Department that "meaningful" meant 35 to 45 percent.

I ask unanimous consent that the Armed Services Committee's report language be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

JAPANESE FIGHTER DEVELOPMENT (FSX/F-16)

The committee has closely followed the discussions between the United States and Japanese Governments on the development and production of the FSX aircraft for Japan.

Last year, the Japanese Government decided to codevelop and coproduce the FSX with General Dynamics on the basis of F-16 technology. While the committee would have preferred outright purchase by Japan as the most efficient use of defense resources, particularly in light of a 1987 trade deficit with Japan of over $60 billion, the committee regarded codevelopment and coproduction as the next best alternative.

The committee is concerned, however, that the United States and Japan have very different views of the way in which a codevelopment and coproduction program should be carried out. The committee's view is that U.S. officials should ensure that before export licenses are issued for detailed F-16 airframe technical data, agreed U.S. participation in the codevelopment and coproduction provides meaningful workshare for U.S. industry on the FSX/F-16 airframe and that Japan flows back expeditiously and without charge any technological improvements substantially derived from technology provided by the United States. The U.S. Government should not enter into a memorandum of understanding with the Japanese Government on FSX/F-16 that simply transfers American technology and jobs to Japan with nothing more than a license fee in return.

Mr. BINGAMAN. Mr. President, the second thing we did last year was that we urged DOD to get the Commerce Department involved in the negotiation of this and similar MOU's with our allies. We were concerned that DOD and State were not adequately factoring in U.S. economic interests. We thought that our allies did a much better job of integrating their national security and economic policies.

The allies do this almost as a matter of personnel policy. In the FSX case, one of the chief Japanese negotiators from the Japanese Defense Agency,

Mr. Yamamoto, is actually on detail from MITI, the Ministry of International Trade and Industry. He naturally thinks of trade and economic development first and defense second.

What we did with last year's Defense bill is include a provision, section 824, which directed the Secretary of Defense to regularly solicit and consider the views of the Secretary of Commerce in the negotiation of MOU's such as the FSX MOU.

I ask unanimous consent that that provision be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

PROVISION AS AUTHORED BY SENATOR BINGAMAN IN THE 1989 DEFENSE AUTHORIZATION BILL

SEC. 824. DEFENSE MEMORANDA OF UNDERSTANDING.

Chapter 148 of title 10, United States Code, as amended by section 821, is further amended by inserting after section 2503 the following new section:

"§ 2504. Defense memoranda of understanding

"In the negotiation and renegotiation of each memorandum of understanding between the Secretary of Defense, acting on behalf of the United States, and one or more foreign countries (or any instrumentality of a foreign country) relating to research, development, or production of defense equipment, the Secretary of Defense shall—

"(1) consider the effect of such proposed memorandum of understanding on the defense industrial base of the United States; and

"(2) regularly solicit and consider information or recommendations from the Secretary of Commerce with respect to the effect on the United States industrial base of such memorandum of understanding.".

Mr. BINGAMAN. That is where we stood last summer. Congress had given pretty clear direction to the Reagan administration. While the Defense authorization bill did not ultimately become law until September 29, it was clear by late June that these provisions would be included in any bill that did emerge after the President's initial veto of the bill.

But my strong sense is that the Reagan administration did not take these matters to heart. The Commerce Department was not involved in the FSX negotiation or given a copy of the proposed MOU and side letters until after it was signed last November.

Thus early this year I was not satisfied with the FSX agreement from the point of view of both the substance of the agreement and the process by which it was reached. The production workshare language was, in my view, totally deficient. The technology flowback provisions had significant holes in them. And General Dynamics appeared ready to transfer technologies beyond any that I had previously envisioned.

I expressed my concerns personally to General Scowcroft at the end of January prior to the Prime Minister Takeshita's visit. I joined Senator HELMS in authoring a letter which nine other Senators cosigned expressing our reservations about the agreement and asking President Bush to order a comprehensive and deliberative interagency review of the FSX agreement.

I commend President Bush for ordering the review we requested. I commend Secretary of Commerce Mosbacher and the other civilian agency officials for the responsible approach they followed once brought into the process. I think the interagency debate leading up to the President's mid-March decision to seek clarifications from the Japanese on key points of the MOU was very constructive. It uncovered the problem areas in the Reagan administration agreement and came up with potential solutions to those problems if the Japanese wanted the agreement to work.

I was in Japan at the end of March with the House majority leader, Congressman FOLEY, and other House Members. It was not at all clear, at that time whether the Japanese would accept these clarifications. They regarded them as onerous. I told them that the President could not sell the agreement in the Congress without them.

Ultimately, the President did announce an agreement on April 28, and all of the points of concern I had raised with the Reagan agreement were addressed.

We now have an approximately 40 percent production work share, worth at least $2 billion and probably much more. This is in addition to the $480 million development work share previously negotiated. At a hearing last week in the Armed Services Committee, Mr. William Clark of the State Department said that 35 or 37 percent would not be approximately 40 percent in the U.S. view. He said 40 percent is essentially a floor for the U.S. production work share. This is an enormous improvement over the still classified production work share language negotiated earlier.

Second, many significant technologies included in the licensing and technical assistance agreement between General Dynamics and Mitsubishi Heavy Industries will be scrubbed from that agreement. Others have already cited that list.

I ask unanimous consent that a point paper on this be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

FSX TECHNOLOGY TRANSFER

OBJECTIVE

To restrict the release of sensitive military and commercial technology in the FSX program.

RESTRICTIONS

Items not to be released because Japanese are developing their own unique systems:

AN/APG-68V Fire Control Radar;

Electronic Warfare Suite;

LN-39 Inertial Navigation System;

General Avionics Computer Hardware.

Items not released due to military sensitivity:

AMRAAM—Advanced Medium Range Air-to-Air Missile;

LANTIRN—Low Altitude Navigation and Targeting Infrared for Night Systems;

Nuclear Capability;

Software for the above items purged or deleted from released Operational Flight Programs.

Items not released due to commercial sensitivity:

All designer notes and comments purged from released software source code;

Digital Flight Control Software Source code;

Parametric experimental methods;

Airfoil and Wing Design methods;

Advanced CAD/CAM technology;

Carbon/Carbon Technology;

High Temperature materials technology;

VHSIC microcircuit design or manufacturing technology;

Engine Hot Section and Electronic Fuel Control technology (in development phase, engines will be sold as end items only).

CONCLUSIONS

FSX technology release has been thoroughly reviewed and is consistent with USG release policy and prior program precedence.

Restrictions were imposed to protect both national security and national competitive advantages.

Sensitive US technology is adequately protected in the FSX program.

Mr. BINGAMAN. Finally, the technology flowback provisions have been greatly clarified. The Japanese Ambassador has listed only four items as nonderived technology—the radar, electronic countermeasures, inertial reference system, and mission computer hardware. We will have full access to all other technologies free of charge. The four nonderived technologies will also be available if we can reach agreement with Japan on the terms.

I know there has been a great deal of discussion over the past few days about whether we will really get any technology flowbacks from Japan.

I accept the GAO criticism of the co-cured composite wing technology and the phased array radar modules. These are very high risks areas on which we should not count for flowback. But it is inconceivable to me that Japan has no technology in which we would be interested.

Japan spends 2.9 percent of its GNP on research and development. Almost all of that research, over 2.8 percent of GNP, goes to civilian and commercial purposes. In contrast we spend only 1.9 percent of GNP on civilian research, and another 0.8 percent on defense research. Their comparative advantage is in dual use technology and in manufacturing excellence as we all

know from our experience as American consumers.

Last week the Defense Department released a report comparing the United States with NATO and Japan in the 22 technologies they deemed most important to our long-term security. In five of those technologies Japan was deemed to be significantly ahead at least in some niches: Microelectronic circuits and fabrication, machine intelligence and robotics, integrated optics, superconductivity, and biotechnology. In gallium arsenide, fiber optics, and composite materials, they are judged to be capable of making major contributions. In phased array radars they were not.

There should be little doubt that Japan is the other technological superpower. We can and must learn from them. This agreement will give us the opportunity to do so.

Mr. President, I believe the agreement is now acceptable. It is not a technological giveaway with nothing in return. It meets America's economic and defense interests as well as it possibly can in a negotiated environment.

The key will be implementation. The Commerce Department must play a major role in implementation of the FSX agreement and my understanding is that they will serve on the technical steering committee that will oversee implementation.

I also support legislation introduced by Senator DANFORTH to further strengthen Commerce's role in the negotiation and implementation of MOU's so that we don't repeat the disarray of the FSX case in the future.

Finally, we have a check on implementation of this MOU. A production MOU will be needed in 1993 or 1994 before the plane can be produced. American engines will be needed. Many of us intend to ask GAO to monitor this agreement over the next 4 years and provide us with regular reports. If the development MOU is not properly implemented, I think the next administration will have a very difficult time selling any production MOU to the Congress.

In conclusion, let me ask what is the real alternative before the Senate today.

It is not Japan buying F-16's off the shelf. That is no longer an option. If that were ever to happen, it would need to have happened in 1986 or 1987.

The real alternative is Japanese indigenous production, probably with European assistance. Compared to that alternative the deal before us provides us with 2.5 to 3 billion dollars' worth of exports and the potential technological benefits of cooperating with the other great technological superpower.

We need to learn how to cooperate and how to compete with Japan. This agreement could be a good start on cooperation if it is properly implemented.

The PRESIDING OFFICER (Mr. ROBB). The Chair recognizes the Senator from Illinois [Mr. DIXON].

Mr. DIXON. Mr. President, I yield 10 minutes of my side to the distinguished Senator from Alabama, a principal cosponsor of this resolution and a man who has made a very significant contribution to this good resolution.

The PRESIDING OFFICER. The Chair recognizes the Senator from Alabama.

Mr. SHELBY. Mr. President, I rise today to express my unqualified support for Senate Joint Resolution 113, the resolution of disapproval of the United States-Japanese agreement on the FSX.

I wish to take this opportunity to thank my good friend and fellow member of the Armed Services Committee, Senator ALAN DIXON for his leadership in this effort.

I first wish to discuss a number of questions that I have formulated in my consideration of this agreement. These questions are:

What are the technology transfer implications of this deal as it relates to the recent Japanese record in dealing with our adversaries?

What, if any, new technologies will we be receiving from Japan as a result of the FSX Program?

Why are the Japanese willing to spend so much more money on this deal than seems necessary? Could it be that the driving factor behind this agreement is its commercial applications? What will be the ultimate effect of this arrangement on American industry?

And finally, is this an issue of national security or is it really a trade issue?

Mr. President, a subquestion to the first question posed must be explored and satisfactorily answered before any deal with Japan should be consumated.

Should we be dealing with a company that has been accused of aiding Libya in its production of poison gas?

This question must be asked because it is essential to our security and that of the free world.

I direct my colleagues attention to a recent article by John E. Peterson that appeared in the Detroit News. I believe that my good friend from Illinois has already entered this article in the RECORD. I would, however, like to read from it. The article states, and I quote, "Japan's leading aerospace firm has installed equipment that enables Libya to make poison gas bombs at a chemical complex in the desert south of Tripoli. * * *" The firm that is being referred to is Mitsubishi Heavy Industries, our partner in the FSX agreement.

That article also mentions a couple of old friends, C. Itoh of Japan and Toshiba, and implies that these two Japanese companies may be involved in the manufacture of this poison gas which could be used in terrorists acts against Americans.

We all remember C. Itoh and its role as middle man with the Soviet Union in arranging the sale of sophisticated submarine technology from Toshiba to that nation. In addition, it appears that C. Itoh may have acted in a similar capacity with Mr. Qadhafi.

I am sure that my friend from Illinois remembers this fine organization, for he introduced legislation in the 100th Congress calling for sanctions against organizations like C. Itoh that arrange these types of deals. The second old friend is Toshiba again. This time another subsidiary, the Toshiba Electric Co. has admitted to supplying electrical equipment to the Libyan plant.

What we have here is a clear pattern of disregard by Japanese firms of the security interests of the free world. The Almighty dollar, or in these cases, the yen, takes precedence over all else. Therefore, I ask my colleagues again, can we trust Mitsubishi not to sell technology derived from this partnership, and I use this word loosely, to the Soviet Union?

One must remember that while Toshiba was telling us that the propeller sale was an isolated incident, they were dirty dealing with Libya and possibly other United States enemies.

Much has been made of the wonderful new composite wing and radar technologies that the United States will receive as a result of this deal. We now know that this is not true. A number of us asked the General Accounting Office to review this agreement. GAO has now told us that it is the United States, not Japan, that has superior composite technology and appears to be ahead in radar.

On the other hand, many are saying that the Japanese are receiving old 1970's F-16 technology. Again, this is simply not true. The agreement calls for the United States to send F-16C technology developed in the 1980's. The Japanese are also insisting upon receipt of the source codes that control F-16 computers, as has been debated here.

Now, proponents of this arrangement are singing the praises of Japanese manufacturing techniques. Are they trying to say that the American people do not produce a good product? All one has to do is look at the F-16, the best production fighter aircraft in the world.

In addition, I do not see any great manufacturing techniques that we can learn from the production of a fighter that the Japanese could be buying for a total of $3 billion. Instead, they are going to spend at least $9 billion to develop the FSX. In other words, it ap-

pears as if they are going to spend $30 million more per aircraft than they would have if they had bought the F-16 off the shelf.

This leads me to wonder what exactly is going on here? The Japanese are smart people. They are not dumb. Yet the numbers do not appear to justify this deal. Thus, there must be another reason for Japanese interest. Could it be that the Japanese have a longer-range goal? Could it be that the Japanese would like to develop their own commercial aircraft industry with the much needed assistance of the United States? Could that be the reason why they are willing to pay the higher unit cost to codevelop the FSX? You bet it is. You know it is.

It is common knowledge that the next long-term goal of Japan is to excel in the aerospace industry. As far back as 1980, the Japanese Ministry of International Trade and Industry [MITI], reported in JPE Aviation Report Weekly:

> Although cost and performance requirements for commercial and military aircraft are different, development and production techniques are closely related. Therefore, research and development of commercial and military aircraft should be carried out in tandem.

We all know why they want this deal. The FSX effort will be of invaluable assistance in achieving this goal. It will also be of great value to the Japanese in developing other types of advanced transportation systems, including space transportation systems.

Mr. President, I submit that the United States and Japan assign different meanings to the term national security. To the United States national security means guns and missiles and alliances with our allies; to the Japanese national security is defined in terms of industrial competitiveness. In this case, we bent to the Japanese definition of national security. The United States will not gain any military advantage from the FSX deal, but, the Japanese will be even more competitive, or as some would say, more superior on an industrial level.

The Japanese see this agreement as a means to an end. They are a very patient, goal-oriented people. They focus on the long-term. Their interests are centered on learning methods of developing and integrating sophisticated military systems into the Japanese system. We, in the United States view things differently. We look at the short-term advantages. And the short-term advantage of this deal can be summed up in the "half a loaf is better than none" theory, or in this case 40 percent of a loaf. However, I argued that in exchange for 40 percent of a loaf, we are giving up the oven.

Proponents of the agreement state that if we do not agree to this deal, we will get nothing. The Japanese will turn around and build their own airplane or go to Europe and make a deal with the French or British. Thus, this is the best we could do—we can get forty percent of this deal—so let's sign up to it. Something is certainly better than nothing. But, we do have something—we have the best fighter plane in the world.

Sometimes it is better to have it or nothing. There are times in which we have to stand on principle. In this case the principle is trade. We pour billions of dollars of United States taxpayer money into the defense of Japan. At the same time, Japan is racking up, year after year, a huge trade surplus with our Nation.

In 1988, the United States trade deficit with Japan was around $55 billion. Buying F-16's off the shelf from the United States would show Japanese intent to work toward the goal of lowering this deficit. They would also get the best fighter aircraft in the world.

Let us draw the line here. Let us tell the Japanese that this is your opportunity to act in good faith. We have been paying for your defense for 4 years. The least you could do is buy our planes.

Mr. President, this is a bad deal. We are risking the real possibility of high technology finding its way into the hands of our adversaries. We are risking the virtual sacrifice of our lead in aerospace technology. We are risking the long-term future of our commercial aviation industry. We are risking even greater trade deficits. What do we get for the risks we are taking? I submit, nothing.

Alternatively, we can send our own signal to the White House and Japan: We are not willing to give up our aerospace future for 40 percent of one loaf. We can send this signal by voting for Senate Journal Resolution 113. I urge my colleagues to support the resolution sponsored by the senior Senator from Illinois.

The PRESIDING OFFICER. Who yields time?

Mr. LUGAR. Mr. President, I yield 15 minutes to the distinguished Senator from Missouri [Mr. DANFORTH].

The PRESIDING OFFICER. The Chair recognizes the Senator from Missouri [Mr. DANFORTH].

Mr. DANFORTH. Mr. President, let me explain to the Senate what I think the issue is and what I think the issue is not, as we approach our vote on whether or not to disapprove the FSX agreement.

I believe that the most fundamental issue before the Senate does not have very much to do with whether or not Japan is going to build a new fighter aircraft. That Japan will build a new fighter aircraft is, I think, an accomplished fact.

Japan has said quite clearly that it intends to develop its own aircraft industry. Japan has stated as a matter of Government policy that it has focused on aerospace as a core technology of the 21st century.

Therefore, in the minds of Japanese officials, the model that has occurred with respect to automobiles, televisions, semiconductors, and other products—a pattern of massive subsidies and import protection—is to be repeated in aerospace. Japan intends to develop an aerospace industry, and it intends to compete with the United States and the rest of the world in this field.

Now, we might lament that fact—and I do lament that fact—but to complain about the targeting of aerospace by Japan is not to do anything to stop the targeting of aerospace by Japan. They have made that decision.

Many of us have said that we wish the Japanese would buy F-16's or F-18's off the shelf from the United States. In July 1987, Senator BYRD offered an amendment to the trade bill that was adopted by a vote of 96 to zero urging our administration to press Japan to buy American fighter aircraft off the shelf. That is what we would prefer. That would give some meaning to the concept of comparative advantage, because if there is one thing we can do in this country, it is build aircraft, particularly fighter aircraft. We gave Japan the opportunity to buy this product off the shelf, and they said no. And that is lamentable.

This was an opportunity for Japan to redress some of the persistent trade tensions that we continue to experience, to turn back at least somewhat the surging trade imbalance that we now experience. It was an opportunity for Japan to exercise a leadership role, to exercise statesmanship with respect to international trade. And Japan said no. I lament that, but that is their decision.

With or without the FSX agreement, Japan is going to get into the aerospace business. With or without the FSX agreement, Japan is going to build fighter aircraft. Some believe that the speed and level of Japan's technology development will be accelerated if we do not proceed with the FSX agreement because then they will be thrown on their own devices. Others believe this agreement will give them the necessary leg up to eventually become competitive. The point is that one way or another, Japan is going to get into the aerospace business.

So I do not think that that is the issue before the Senate now. I think that there is another issue, which involves the trade policy and the policy-making process of the new administration. What is going to be the approach of the Bush administration in dealing with other countries in international trade? Is there going to be a change of tactics between the Reagan administration and the Bush administration?

That is the issue, I think, that is before us.

The original FSX agreement was negotiated during the Reagan administration, and it was negotiated without any input whatever from any department or agency of the Federal Government that concerns itself with the economic and commercial interests of the United States. The original FSX agreement was negotiated by the Department of Defense. The Commerce Department played no role at all; the U.S. Trade Representative played no role at all in negotiating that agreement. It was viewed as a purely defense oriented transaction. Whether the United States was giving away technology and contributing to the erosion of our own competitive position was a matter of little or no concern to the Department of Defense during the Reagan administration.

Then, Mr. President, we had a change in administrations. In comes President Bush and his new team, and the heartening thing that happened with the advent of the Bush administration was that the new U.S. Trade Representative and the new Secretary of Commerce became very much involved in the FSX issue. They went to the President, and they asked the President to revisit the FSX deal before signing off on it, and the President agreed.

Secretary Mosbacher and Ambassador Hills became deeply involved in the details of the agreement, and they were able to clarify certain aspects of the relationship between Japan and the United States with respect to the FSX.

Some people think that these new understandings are of great moment. Other people tend to downplay them and say they are not of much significance. I am not going to debate that one way or another. As a person with zero scientific and engineering skills, I do not feel that I have the expertise to debate whether or not these modifications are of great technical importance.

But the fact is that a new administration had taken office, and it showed a new concern, a new sensitivity to the commercial interests of the United States. It was able to revisit the agreement. And I believe that that is right. I believe that that was the correct approach to take. I compliment Secretary Mosbacher, and I compliment Ambassador Hills for their forcefulness, their aggressiveness in reopening this transaction.

Now the question is, Where do we go from here? Was this exercise a momentary lapse on the part of the new administration, a momentary, casual, fleeting concern for the future of a major American industry? Or does the reopening of the FSX deal indicate that this administration is going to be much more solicitous about American commercial interests than was its predecessor?

We do not know the answer to that question. But I think, Mr. President, that it would be a serious mistake to pull the rug out from under the new administration immediately after it concludes the new negotiations on the FSX deal. Therefore, I believe that voting for the Dixon resolution would constitute a disavowal of the new administration at the very time when it is at least giving some indication of an important change in tactics and a change in policy.

So I oppose the Dixon resolution, but I strongly support the substitute that has been offered by Senator BYRD. The key to the Byrd substitute is that it provides for a key role for the Commerce Department in both the implementation of the current agreement and the negotiation and implementation of the followon memorandum of understanding relating to the production of the FSX.

The amendment offered by Senator BYRD contains language that is very similar to S. 578, a bill which Senator BYRD and I introduced in March. That legislation provides that, as a general rule—not only in connection with the FSX but as a general rule—the Commerce Department is to play a key role in negotiating and implementing memoranda of understanding involving defense-related equipment.

Mr. President, I believe that it is important for the Congress to clarify the role of the Commerce Department because I believe that if we do not, we will very soon slide back to the old days where the State Department and the Department of Defense are our exclusive negotiators in matters involving international relations, even when these matters affect the commercial interests of our country.

I noticed with some dismay an article in today's New York Times. The first couple of paragraphs of this article read,

> As the Bush administration approaches its first major decision on trade policy, the American Embassy in Tokyo is urging Washington to refrain from tough action to retaliate against Japan for its trade barriers.
>
> In confidential cables to the State Department, the Embassy has warned that there could be "an emotional outburst" in Japan if the country is listed under a new Federal law as one of the worst violators of free trade principles.

Mr. President, it seems to this Senator, having watched the players for some 12 years, that the general position of the State Department and the general position of the Department of Defense is that American commercial interests always take a backseat to other considerations, and they are the first things to be given up at the negotiating table. That is exactly what happened when the FSX agreement was initially negotiated. It is my hope that this new administration has truly given us a change in direction, but that remains to be seen.

I hope, therefore, that we can adopt the Byrd substitute so as to codify the new active role of the Commerce Department. If we do not codify that status, I believe that the Defense Department will be back in the controlling position with respect to the FSX deal and with respect to the future of subsequent related memoranda of understanding.

My own position, Mr. President, is that I intend to vote against the Dixon resolution. If we have a chance to vote for the Byrd substitute, I intend to vote for the Byrd substitute.

If that fails, then I reserve the right to reopen my own consideration as to the appropriateness of the Dixon resolution. We will have another opportunity to vote on it. And we will very possibly be voting on the question of whether to sustain or override a Presidential veto on this matter.

Again, I would say that the principal issue before us today is not an airplane. The principal issue is not a Defense Department deal. The principal issue is whether the Government of the United States is going to take a tougher and stronger stance in defending the commercial interests of the United States of America or whether, once again, we are going to let the future of basic industries slide because we care more about some defense arrangement or other foreign policy arrangement with another country.

Mr. President, if I have any time remaining, I yield it back.

The PRESIDING OFFICER. The Senator's time has expired.

Who yields time?

The Senator from Illinois.

Mr. DIXON. Mr. President, I yield 10 minutes from my time to the distinguished senior Senator from Pennsylvania [Senator HEINZ].

The PRESIDING OFFICER. The Chair recognizes the Senator from Pennsylvania [Mr. HEINZ] for 10 minutes.

Mr. HEINZ. Mr. President, this agreement presents a difficult decision for many of us. It is tempting to support the resolution of disapproval for the wrong reasons—reasons that color our view of Japan generally rather than reasons that relate directly to the proposed FSX agreement.

One such reason is my longstanding concern over the dangers of handing over critical technology to trading partners who will have little hesitation in using it to compete against us later on. In a perfect world, technology would flow freely in both directions, but, Mr. President, we do not live in such a world, and the Japanese clearly do not live in such a world. If we are to preserve our competitive edge, we must preserve critical technologies. It is as simple as that, and much of my

analysis of this proposed agreement has focused on determining what technologies, if any, are at risk.

It is also tempting to vote out of the frustration that many in this body share over the continuing unsatisfactory state of our economic relations with Japan—persistent trade deficits that are unresponsive to macroeconomic changes like an effective 100 percent reevaluation of the yen, penetration of our market through unfair and predatory tactics, lengthy but inconclusive market access negotiations, and sectoral agreements broken time and time again.

Until recently, most Americans welcomed Japan's unsurpassed prosperity. But in the last decade, the perception has steadily grown that Japan's success is achieved at the expense of others, especially the United States. The United States deficit with Japan went down only 7 percent in 1988 at the same time our deficit with the European Community went down by half and that with the LDC's was reduced by 20 percent. Most current projections indicate that it will increase once again this year. And this after a 50-percent appreciation of the yen. Last year, Japan accounted for only 15 percent of our trade but over 40 percent of our trade deficit. There is no doubt in the American mind that these numbers demonstrate an unbalanced relationship highly resistant to even very large macroeconomic policy changes.

So, it would be satisfying to cast a vote as a reaction to what has been a one-sided relationship where we are clearly getting the short end of the stick.

At the same time, I am tempted to vote against the FSX deal as an expression of my dissatisfaction with the way our country makes decisions about technology—technology development, technology investment, and technology diversion. There is no permanent, interagency system in place for our Government to make thoughtful decisions about threatened or needed technology, nor about ways to protect or develop it. The absence of an interagency process where trade considerations, as a matter of routine procedure, can be taken into account is one of the reasons the FSX deal is in such trouble right now.

Conversely, Japan handles the range of technology issues exceedingly well. In a sense, our greatest weakness as a government confronted the greatest strength of the Japanese Government in the original negotiations over this fighter. Inevitably, the Japanese got what they wanted in the areas of defense, technology access, and commercial applications. And our side got what it was bargaining for in defense, and in defense only, because that is all our negotiators cared about. We ended up stuck with a bad deal, a real lemon.

When President Bush reopened negotiations, he did the right thing. And the revised agreement he sought reflects his recognition of the much broader scope of issues this sale represents.

Mr. President, you cannot make a silk purse out of a sow's ear, and the FSX agreement is in my judgment, still flawed, despite significant improvement. And it is over the contents of the agreement that the debate must be held and our votes cast.

When I wrote on this subject in the Washington Post on March 30, I detailed three major deficiencies that needed to be repaired to make this an acceptable deal:

First, the absence of any guarantee of the U.S. workshare in the production phase of the project;

Second, the lack of technology transfer safeguards to ensure that FSX technologies were not diverted either domestically to the commercial aviation or other advanced sectors or externally to our adversaries; and

Third, the lack of safeguards against Japanese demands for followon technologies in the future.

As a result of these missing pieces, I called this a bad business deal with the signs of a fire sale written all over it.

Unfortunately, what has happened since March 30 is insufficient to put out the fire.

We now have a figure for the U.S. share of the production process—40 percent. But the word "approximately" appears in front of that number rather than "at least," and I have also learned through our difficult experience with the semiconductor agreement not to trust anything that appears in a side letter instead of a contract.

There is some reassurance on the technology transfer issue. The items of the greatest relevance and usefulness—the source codes—will either be transmitted in sanitized form or not transferred at all, but my concern about putting the technology they will be getting to commercial use continues. The agreement does not prevent that; indeed, it is probably impossible to prevent it short of blocking the agreement entirely.

Followon technology transfer claims will apparently be adequately limited by provisions in the agreement between General Dynamics and Mitsubishi.

Mr. President, these improvements, and there are others besides these, including some changes in the process by which these agreements will be negotiated, simply are not enough to make this deal acceptable.

What these deficiencies mean is that we are entering into an agreement with too few protections and too many dangers.

We are not adequately protected against being cut out of the production phase of this deal. That would mean the transfer of some 7 billion dollars worth of technology in current dollars for roughly $500 million.

There is no protection at all against the commercial exploitation of the technology we are transferring, either for commercial aircraft or aerospace, and we are fools if we believe that possibility has escaped Japanese notice.

There is always the risk of technology diversion to Eastern bloc nations. Procedures have been improved in the wake of the Toshiba case, but they are not foolproof.

Taken together, these add up to considerable downside risk—risk we cannot afford in our current competitive situation.

Mr. President, I think there are also some general lessons we might learn from this episode that I hope will help us handle the next such arrangement more effectively.

First, the role of the Congress has been made more clear. Congress has serious reservations with the agreement, has made those reservations known in a number of fora, and to the credit of the Bush administration, has had some of them addressed. The constitutional responsibility of the Senate to advise and consent is operating in a meaningful way.

Second, the role of economic security interests has properly gained in importance. The FSX deal confronts us with the broadening context of national security beyond what is directly related to military matters. We have entered an era in which economic security interests that touch upon the health of our industrial base must be given as much weight as purely military concerns. If one single lesson emerges from this issue it is the precedent it sets for making sure Defense Department decisions about critical technologies are not made in a vacuum. The views of Commerce and USTR need to be heard, and Congress needs to be confident that interagency procedures are in place to ensure that happens.

We also need to legislate once again to strengthen our export control and technology transfer system. I am convinced now more than ever that our system is fundamentally flawed, and that it is incapable of making thoughtful and serious judgments about technology transfer cases. Obviously, simply voting against this agreement will not improve the system. Early next month, however, I will have more to say about my own proposals in this area.

Third, the need for a well-thought-out trade policy has become more clear. In my view, the previous administration had its priorities backward. It first struck a deal with Japan, and

then asked for an assessment of its probable effect on the vitality of the American aerospace industry. As I said before, fire sales are for people going out of business, not for countries wanting to stay competitive.

Fourth, we have learned the desirability of public debate. Secrecy can only go so far. This deal was secret from the beginning, and the results are clear. One cannot fault a country for being reluctant to reopen the negotiations once the two governments signed the agreement. I am sure that Japan would have loved to keep the MOU secret because, as we discovered during the hearings, there were no hard numbers included for the production phase. The Bush administration is to be commended for responding to the public outcry and reopening the negotiations.

Mr. President, up to this point if these comments reflect mixed feelings about this agreement, then they are being accurately interpreted. It is not as bad as it initially was. But it is still a long way from being in our interest. There remains in addition, however, a directly related issue, and that is what we intend to do when other nations target our critical industries for their exploitation with their governments' help.

Mr. President, in other words, we need to come to a conclusion about whether and how we will confront other nations' industrial policy initiatives. It is clear that Japan sees the FSX as a means to bootstrap itself into aerospace industry leadership. And the Japanese Government sees the FSX deal with a United States aerospace leader as the means to learn what it needs to become a world-class competitor in yet another critical industry. The question, therefore, becomes whether we wish not just to acquiesce, but also to become an accomplice to helping Japan into yet another international market, where we have a clear lead, while they continue to keep their markets closed. This Senator does not believe that American Government and shortsighted businessmen should be such accomplices. Therefore, I cannot support this agreement.

The PRESIDING OFFICER. Who yields time?

Mr. LUGAR. Mr. President, I yield 8 minutes to the distinguished Senator from Colorado [Mr. WIRTH].

The PRESIDING OFFICER. The Senator from Colorado [Mr. WIRTH], is recognized for 8 minutes.

Mr. WIRTH. I thank the Senator from Indiana for his kindness, and I thank the Chair.

Mr. President, I intend to vote against the resolution of disapproval offered by my good friend, the Senator from Illinois. This was not an easy decision, and I will in a moment outline my reasons for deciding to support the administration's agreement with Japan on FSX. But first, I would like to discuss the broader context in which this issue is being debated.

Mr. President, we are now in the midst of an incredible transition from the post-war era to a new political, military, and economic order which will define the early decades of the 21st century. Much has changed since the end of the Second World War, and the cumulative effect of this change is manifest daily. New leadership in the Soviet Union has challenged the fundamental assumptions of postwar security arrangements. The emergence of Japan and her East Asia neighbors as world economic players has caused sometimes painful dislocation here at home. In Europe, the pending integration of the EEC by 1992 has redoubled political coordination within Europe, and this coincides with the emergence of a new generation in Germany which, unhampered by direct involvement in the Second World War, is more insistent on asserting German interests.

These events have influenced American power—economic, political, military—as has been chronicled and analyzed by many, including Paul Kennedy in his work "The Rise and Fall of Great Powers." The message I take from Dr. Kennedy's book is not that we are in a kind of superpower freefall, but rather that the world has grown up around us. The greatest threat we face is the temptation to deny that basic fact, to act as if the world has not changed.

The debate on FSX, Mr. President, contains within it many threads of this much more fundamental debate about America's position in the world. In my view, we cannot stem the rise of other nations, but must instead redouble our own efforts to be competitive and innovative in world markets, to be visionary and astute in guiding political developments in our own interests, to be prudent and thoughtful in providing for the common security.

Several issues have arisen in the FSX controversy. The most fundamental is the argument that Japan should, in order to redress both the trade imbalance and the burden sharing issue, procedure all 130 aircraft off the shelf from the United States. Without doubt, this would help with the trade balance and would represent the most efficient expenditure of Japan's limited defense budget. The problem with this option is that the Japanese simply will not do it, although then-Secretary of Defense Carlucci tried to convince them otherwise. In fact, there is strong Japanese interest in a purely indigenous all-Japanese fighter—an option pushed hard by Japanese industry. Between an all-United States option and an all-Japanese option is the option of cooperative development and production effort. The Senate Armed Services Committee Report accompanying the fiscal year 1989 Defense authorization bill noted that "the Committee regarded codevelopment and coproduction as the next best alternative (to off-the-shelf-purchase)."

An additional concern is that Japan Inc. is determined to challenge America's domination of the world civilian aviation market in the 21st century—and that the FSX represents the laboratory to help them compete with Boeing and McDonnell Douglas. Mr. President, if Japan wants to develop an aviation industry, we cannot stop that development. The issue is how to position the United States in the face of this challenge. Some argue that we should reject cooperation on FSX and force Japan to go it alone—thereby costing them more to develop the aircraft, but also denying ourselves a window on their efforts. The other option is to pursue a cooperative effort in which Japan advances, but we share in the work, jobs, and technology along the way.

Technology sharing is a major concern in terms of what we and the Japanese stand to gain from this arrangement. Some proponents are downplaying the amount of technology the Japanese are to receive—especially pointing to the fact that the source codes—the computer software—will be protected—and assert that there will be significant technology flow-back, especially in composite materials and radar. Proponents also point to the fact that the Japanese will gain experience in integrating the production of aircraft, but that they will not gain the critical design integration experience necessary to become an aircraft manufacturer. Opponents claim that we won't learn much from the Japanese and that we will give up far too much.

A technology transfer risk assessment was completed by the Air Force in March of this year, and that study concluded that the FSX codevelopment agreement would hold the transfer of critical technologies to an absolute minimum and that the agreement did not pose a major risk to the American defense industrial base. I believe that the advantages in this arrangement outweigh the risks—especially when compared to a situation in which Japan develops an FSX alone or with European help.

Following the government-to-government memorandum of understanding signed last November, an industry-to-industry agreement between Mitsubishi and General Dynamics was signed in January outlining the work share of the codevelopment project. The primary concern raised earlier this year focused on the extent to which we would be giving sensitive American technology to Mitsubishi in this ar-

rangement. This concern was exacerbated by the fact that Commerce and the special trade representative had no role in the decision by the State Department and Defense Department to proceed. A letter was sent to President Bush in February urging an interagency review of the FSX agreement—and I joined with many of my colleagues in signing that letter.

In response to this expression of congressional concern, the Bush administration initiated a thorough review of the entire FSX issue—with the active participation of Secretary Mosbacher at the Commerce Department. As a result of this review, the administration renegotiated elements of the original memorandum of understanding with the Japanese and submitted the revised agreement to the Senate.

Regarding the potential threat to U.S. civil aviation industry posed by the FSX agreement, I would like to quote the testimony provided by the Commerce Department to the Senate Armed Services Committee on May 9 by Deputy Under Secretary of Commerce Joan McEntee:

> One of the key questions for the Department of Commerce thus became whether the knowledge transferred to Japan under the FSX project would be sufficient to allow it to narrow the gap with the United States in commercial aerospace production. . . . I can assure you that the agreement in its current form—including the limitations on technology transfer which the interagency review produced—effectively limits the competitive threat to our industry in the future. It leaves the key decisions regarding technology transfer in U.S. hands. Equally important, by making us partners with highly skilled Japanese contractors, it positions the United States to benefit from the technological advances which would be generated in the process.

I believe we have achieved an important and valuable victory in the FSX saga at the level of process: no longer will we allow diplomats and generals alone to make decisions on behalf of the United States which involve critical commercial and technology issues. As a result of the FSX issue, the role of the Commerce Department in the review of all future defense equipment transactions is assured. And the implementation of the FSX agreement will undoubtedly be very carefully monitored to assure that U.S. interests are protected.

The question of substance remains: Is this deal on balance in the interests of the United States? If one accepts the premise that Japan will develop and produce an FSX regardless of whether the United States is involved, logic dictates that a joint program in which the United States has control over the flow of technology to Japan, access to some of the technology being developed in the program, and $2.5 billion in United States contracts is on balance in our interest.

I accept that premise and believe that the Senate should reject the pending resolution of disapproval.

I intend to vote against the resolution offered by the Senator from Illinois, and I hope that my colleagues will join me in doing so.

I thank the Chair.

The PRESIDING OFFICER. The Chair recognizes the Senator from Illinois, Mr. DIXON.

Mr. DIXON. Mr. President, I yield from my time 15 minutes to the distinguished senior Senator from New Mexico [Mr. DOMENICI].

The PRESIDING OFFICER. The Chair recognizes the Senator from New Mexico [Mr. DOMENICI] for 15 minutes.

Mr. DOMENICI. I thank the Chair. Mr. President, I thank my friend from Illinois.

Mr. President and fellow Senators, obviously the new administration has made a bad agreement better. The distinguished junior Senator from Colorado has just said in his closing remarks that this is a close call. He comes down on the side of supporting the agreement renegotiated to some extent by President Bush.

I am not so sure it is a close call, but if it is I regret to say that I come down the other way, and I would like to explain why I am going to support the Dixon amendment.

First of all, I have been told by many people whom I respect that the principal reason for voting for this agreement is that if it is turned down, what we are apt to get is something worse because the Japanese may indeed go it alone with perhaps some European allies.

Mr. President, that probably is a good argument for some. As far as this Senator from New Mexico is concerned, that is not good enough. I really do not believe that will happen. I honestly believe that if this agreement were turned down, it would be a very strong message that this is not the way for Japan to treat—I am going to say this because I believe it—the very best friend they have ever, ever had in their entire history.

The people of the United States of America, albeit some might say selfishly, and not altruistically, nonetheless have provided an environment in this world that permitted this new democratic capitalistic country that borrowed our ideas, encapsulated them in their constitution, all of which should make us proud, to flourish beyond anything they could have ever expected.

While they are giants now on the economic front, they owe a substantial portion of that success to the United States of America. So that no one will think that the Senator from New Mexico thinks that the Japanese are totally responsible for our inability to compete in a world market, let me say right up front I am not one of those because I honestly believe we have many things to do at home with our economy, with our people, with our labor, with our industrial leaders, with our own analysis of where we spend and waste our resources, and that is an American problem. But, Mr. President, when the United States of America has an ally and a friend, and they claim to be—and they are, and we claim to be their friend and we are—when we have provided them with the kind of safe haven for the development and evolution of that democratic capitalistic country to the extent that they are, I venture to say without our defense they would not be where they are.

Without our economy, which is like a sponge, buying up billions and billions of dollars of their products, and I do not quibble with their competitiveness, and the quality of their product, and the genius of American consumers when they buy the best—I submit to you we have to fix our own up.

But I do not believe it is the action of an ally, a friend, a partner, when along comes an opportunity for them to buy an American product which we could tailormake for them, an industry which they know and we know we are superior in, and we are told the best you can get is a half-baked deal, they are going to buy something from us, they are going to develop with us, but instead they tell us they are going to build their own. And we are told if you do not do it this way, they are going to do it another way.

Well, Mr. President, and fellow Senators, it seems to me that the simple message that I want to give is when they are ahead in technology, we buy their product. Are they prepared today, since they are ahead in high definition television, to say, we will share it with you? Of course not.

We are almost frantic about the situation, and I do not blame them for being ahead of us. I merely ask the question. We are unequivocally the world's leader in aerospace, in aviation, engineering technology, and manufacturing. It is a very simple proposition. We are.

Why is it that when we are ahead and could supply what they need that we are told, this is the best deal you can get, take it or leave it?

I submit that is not the way a true partner, one that understands what we have done for them, would treat this situation. The idea that they might tailor-make a fighter here in America to meet their needs was discounted instantly according to what we hear. And there are some who would say the Senator from New Mexico is even wrong on the balance of trade. We may get more out of this than the other way. Well, we may and we may not.

So I submit that this is an opportunity to send a signal, lodge a bit of a protest, and in a very real sense if the agreement fails, to start over.

I want to take my closing minutes to say two things. I support the idea and concepts encapsulated in the Byrd amendment. I believe we ought to do that. I am not trying to add any insult to injury, but I truly believe there is great risk over the next 8 or 9 years that we will end up getting what we think we were supposed to get. I believe this is not totally a defense issue. I think this is a defense and a commerce issue. I truly believe there is commerce involved, and getting into a major market on the civilian side that is part and parcel of the Japanese plan here.

So I will support that if I get a chance, and I hope I do. But my last remarks have to do with anybody reading or listening to my remarks getting a conclusion or drawing a conclusion that the Senator from New Mexico expects the Japanese to refurbish the American economy. I do not. I have just said, and I repeat, that one of the real transition problems for our people, our business, our labor, and our education is to come to the realization that we are living in a brand new world.

We are living in a world that produces goods for the marketplace the same way America did for decades; and we have to do ours better and compete with them; increase our productivity. And I do not vote for the Dixon amendment and against the agreement based upon wanting anything for free from the Japanese. But essentially it appears to this Senator that there is a much different attitude about the relationship between the two countries and the notions that are ours versus the ideas and sensitivities that are theirs. I truly do not believe they understand at all a $55 billion trade deficit even if it is the result exclusively of competitiveness. I am not sure it is all of that; most of it, but even if it is clearly the United States has done very little to thwart that other than to encourage our own industries, our own labor, and our own manufacturing skills to get better.

For a country that has said to the Japanese, we want you to be free, we want you to be independent, we will not exert any influence over you, in fact we want to help you by defending you, it seems to me that when along comes a proposal, an idea on the defense side when they do not say, "Let us go with our ally where they are strong, where they do it the best, and let us buy from them," it seems to me to be a failure to understand the significance of the relationship and the significance of our striving year by year to get better here at home in an open world market and compete.

So I repeat, in an area where we are superior, do they not want to get into that area and become equal? Some would say no. I believe yes. In areas where they are superior, do they want to share with us under some development agreement? I think the answer is "No." One might say it is very different, because one if defense and one is not. I submit this is only part defense, this agreement and this proposal. It is part something else.

It clearly is the beginning of and the evolution of an aerospace and aircraft industry in Japan, and I am not saying they should not have one. I am merely saying that it is not quite the way one would have expected a friend to treat a friend, especially where we spend $285 to $290 billion on defense, part of which goes to the eastern Pacific and keeping peace in the world. And I am not referring to burden sharing. I think I am just asking that we be treated as fairly as we have treated them, especially in a situation like this one, where it clearly could have been done differently, in observation of that fairness, and our sensitivity toward their development, their freedom, and their growth.

I thank the Senator for yielding.

The PRESIDING OFFICER. The time of the Senator from New Mexico has expired.

Mr. DOMENICI. I yield the floor.

Mr. LUGAR addressed the Chair.

The PRESIDING OFFICER (Mr. KERREY). The Senator from Indiana.

Mr. LUGAR. I yield to the Senator from Virginia for 5 minutes.

Mr. ROBB addressed the Chair.

The PRESIDING OFFICER. The Senator from Virginia has 5 minutes yielded to him.

Mr. ROBB. Mr. President, I thank the Senator from Indiana, and I thank my colleague from Illinois who was prepared to take the Chair to allow this Senator to speak in opposition to his amendment. That is a degree of collegiality that may not always be fully understood or appreciated elsewhere, but I want to specifically thank the Senator from Illinois for that courtesy.

Mr. President, today I am going to vote against the resolution of disapproval, as I did in committee and, hence, in favor of the administration's FSX codevelopment agreement reached with Japan. I understand that this issue has aroused some very strong passions among my distinguished colleagues, and I certainly share many of their concerns. There is no question in my mind that they are on the right side, politically.

Indeed, it seems to me that the Japanese Government should take this debate in Congress as a strong signal that United States-Japanese economic and commercial relationships can substantially affect our political and security relationships.

However, after careful review, weighing the broad foreign policy implications of this agreement along with the security and commercial interests, I believe, that it is in the best interests of the United States to proceed with the agreement.

It is important that the American people not labor under the popular misconception that there were easy alternatives.

There was never any real prospect that the Japanese would purchase the American F-16 off the shelf.

They would otherwise adopt a go-it-alone strategy, either developing the plane all by themselves, which is still favored by many Japanese business and political leaders or with European assistance.

Moreover, if after the protracted negotiations, in the last several weeks, the United States were to disapprove this agreement, in light of Japan's internal domestic situation, the Japanese could well end up on the slippery slope toward pursuing increasingly independent economic, financial and security policies.

I would submit that that result would not be in our best interests.

Furthermore, it would send the wrong signal at the wrong time to the Japanese, as well as to our other allies, about our reliability in keeping our commitments.

Mr. President, there are larger dimensions to this debate.

Though Japan may be an economic competitor, it remains an overarching fact that Japan is also one of our strongest and most important political and military allies.

Our treaty agreements with Japan are at the foundation of our strategic and political relations throughout the Pacific.

Our deployment of forces is the key to our forward defense strategy in the region, both as a hedge against Soviet aggression and other contingencies.

Mr. President, America remains the leader of the free world.

One task of such leadership, however, is preserving and managing alliances, especially as they undergo change and stress.

This agreement, in my judgment, will enhance Japan's defense capability, allow Japan to assume a larger share of the common defense burden, and strengthen the overall alliance, in addition to whatever economic benefit it may bring to Japan.

It is this larger consideration that persuades me to support the FSX agreement.

Concerning a few specifics of the agreement:

I am generally satisfied by the administration's assurance that sensitive American technologies will be protected.

It is important, that the administration and the Congress closely monitor the technology sharing arrangements and ensure that they are faithfully implemented.

I am also persuaded by the fact that the United States, did not originally enter into this agreement with the intention of seeking technology from Japan.

Under the clarified terms, however, a framework has been established that will enable the United States to receive technology flowback from the Japanese that results from this project.

This is access that otherwise would have been unavailable.

The Japanese must transfer derived technologies to United States companies, without charge, and they must allow the United States the opportunity to buy any non-derived technologies.

Thus, a new cooperative arrangement has been set in motion that brings benefits to the United States.

Nor should we underestimate the fact that U.S. industry will get 40 percent of the work in the development phase, and approximately 40 percent during production. And fully 40 percent if the Byrd amendment is agreed to.

This means roughly $2 billion for American industry in a program that will be completely funded by the Government of Japan.

I trust this agreement, the first military codevelopment project between the world's two most technologically advanced countries, sets a precedent for what we should do with similar arrangements with our allies in the future.

We must do a better job of tying together our economic and security policies.

And we must exercise the kind of leadership that preserves American and Western security interests while sustaining our alliances wherever possible.

Thank you, Mr. President.

I yield.

Mr. DIXON addressed the Chair.

The PRESIDING OFFICER. The Senator from Illinois.

Mr. DIXON. Mr. President, I yield 5 minutes to the distinguished senior Senator from South Dakota [Mr. PRESSLER].

Mr. PRESSLER. This is somewhat of a painful moment for me, because I love President Bush and support him. I love our Republican leaders in this Senate and usually support them. I must part company today however, because I also love the American farmers and workers, whom I am convinced will be hurt by this agreement. I shall vote for the Dixon amendment, and I shall oppose this FSX deal.

I have the declassified GAO report here today, which says that in fact the technology that Japan is giving us is out of date, and the technology we are giving them is our best technology, the best aeronautics technology in the world.

This is a General Accounting Office report. It is an extremely important report. Every Member of the Senate should read it, and so should our fellow countrymen.

Today's Washington Post has a major ariticle entitled, "GAO Criticizes FSX Fighter Jet Deal With Japan." I intend to insert that article in the RECORD.

Also, Mr. President, I feel strongly that this agreement should be linked to farm exports. I come from a farm State. The fact of the matter is that Japan has broken agricultural agreements with us. Japan refuses to take our beef in. It says it will take our beef, but it inspects and reinspects the beef. Japan refuses to trade on an equal playing field. Our farmers are suffering because of that.

At the same time, the Japanese are coming here to buy up farm land. The New York Times had a major article Sunday in the business section on the agricultural activities of the Japanese in the United States, particularly in California.

This is totally unfair in comparison with what our companies can do there.

Mr. President, I have talked to several businessmen and others who tried to do business in Japan. Their products inspected and reinspected. There are holdups. It is not an equal playing field.

I believe very strongly in the United States keeping its competitive edge.

I am the ranking member on the Science Subcommittee and just today we had a hearing on high-definition TV. The same thing is happening in that area, and I asked today why U.S. companies cannot compete in high-definition TV.

Let us remember that the only VCR's for sale in the United States are those made abroad. There are none made in the United States anymore. All VCR's are made abroad.

That is a dramatic statement. I told my staff to check that because it sounded unbelievable.

We cannot compete in these areas because the Japanese use government subsidies, monopoly practices, unfair pricing practices, cutting the floor out from the small businessmen and women, using trade practices that our own people cannot use, and getting credit in excess of what our own people can get in this country.

I think it is time we send a signal to the Japanese, a clear signal, that the Senate of the United States is tired of this. We want equality.

Our people can compete, if they have an equal playing field, if things are fair.

Mr. President, I wish to submit the New York Times article on Japanese agricultural practices for the RECORD.

I wish to say in closing that we live in a global world. We cannot close things off, but we also cannot give away the aeronautics technology that we have, the one area in which we have a lead. We cannot give away to a foreign power the jobs of American small businessmen, of American workers, or of American farmers. What is happening today in the Senate has a much broader impact than the FSX agreement.

There should be linkage of the FSX agreement to agricultural treaties and to the behavior of the Japanese in other trade areas. We need linkage of some of these treaties, just as we use linkage in arms control agreements.

So, Mr. President, I shall vote enthusiastically for the Dixon amendment, and I shall enthusiastically oppose this FSX deal.

The PRESIDING OFFICER. Does the Senator ask unanimous consent to print some additional material in the RECORD.

Mr. PRESSLER. Yes.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

[From the Washington Post, May 16, 1989]

GAO CRITICIZES FSX JET FIGHTER DEAL WITH JAPAN

(By Stuart Auerbach)

The General Accounting Office yesterday directly challenged assertions by the Bush administration that the United States will gain access to superior Japanese technology by joint development of a new generation fighter plane, the FSX.

The GAO, in a declassified report released on the eve of a Senate vote on the FSX deal, said the United States is "superior to Japan" in the composites technology needed to produce a light but strong wing made of plastics and is probably ahead in radar technology. These are the two areas in which administration officials said the United States could gain technology from Japan.

Critics have denounced the deal as a giveaway of U.S. aeronautics technology that will enable the Japanese to develop their own civilian aircraft industry. But Defense Secretary Richard B. Cheney insists that U.S. manufacturers will gain access to superior Japanese technology through the joint development of the proposed advanced fighter.

"Suggestions that the Japanese have nothing in which we would be interested underestimates Japanese technological capabilities . . . and denies our defense industry the synergistic benefit of technological cooperation," Cheney said in recent congressional testimony.

But the GAO report, which has floated around Capitol Hill in a classified form during the past two weeks, disputes that conclusion.

"Our preliminary observations are that, overall, the United States has superior composites technology and appears to be ahead in radar development," Assistant Comptroller General Frank C. Conahan wrote Sen. Alan J. Dixon (D-Ill.), a leader of the bipartisan congressional effort to derail the agreement.

To defeat the FSX agreement, the Senate and House each must pass resolutions of disapproval and be prepared to muster the two-thirds majorities needed to override an almost-certain presidential veto. The Senate is due to vote this afternoon; the House will not vote on the FSX unless the Senate defeats the agreement, which is considered unlikely.

In its report, the GAO called the Japanese design for an FSX wing made of composites a "high risk" strategy that was rejected by the United States after tests in the 1970s "because of costs and risks." Even if Japan succeeds, the GAO continued, the design presents "potential problems" that could overcome the advantage of reduced weight.

Furthermore, the GAO said American manufacturers possess an expertise in advanced composites for aircraft that is "excellent and superior to Japan" with "a demonstrated and proven capability" in production.

"Should the Japanese prove successful in making an economically competitive wing box [of composites], the U.S. requirement for this technology may be modest," the GAO concluded.

The GAO was less definitive on the question of phased array radar, the other area in which the administration said the United States could learn from Japanese technology. The GAO report cited a paper prepared in March by the Air Force's Wright Research and Development Center that said Japan needs to develop radar for the FSX to catch up with U.S. technology.

"The report stated that Japan appeared to have less radar experience than the United States and lacked vital knowledge in terms of defining module performance. The report stated it was unlikely that any significant technology flow from Japan would result from the FSX agreement," the GAO stated.

It added that U.S. knowledge of Japanese radar technology is limited "because Japanese officals have refused to release detailed test and evaluation data," which "has been identified as proprietary and classified."

---

[From the New York Times, May 14, 1989]

JAPAN'S NEW FARM BELT

(By Andrew Pollack)

SAN FRANCISCO.—In California's agricultural belt, a meat-packing plant that has been closed for years reopened recently with new financial backing—Japanese. In the same city, Fresno, a Japanese textile company, is building what will be the first cotton mill west of the Mississippi River.

In the Napa Valley, California's famous wineries will soon be joined by a sake factory built by a Japanese brewing company, complete with the obligatory tasting room for tourists.

From the California wine country to the Florida citrus groves and Montana ranches, a wave of Japanese investment is sweeping through American agriculture and food processing.

Much of the investment has been spurred by trade agreements signed last year that opened Japan's market to increased imports of beef, citrus products and other foods. Production costs here are far lower than in Japan, the land of the $25 melon and the $20-a-pound sirloin. To compete against cheap imports, Japanese companies are establishing their own sources of inexpensive food in the United States.

"It's very economical to produce here and export to Japan," said Taizo Sano, a representative here of the Kagome Company, Japan's largest ketchup and fruit drink factory in Los Banos, Calif.

The Japanese investment is generally welcomed, for it is helping revitalize depressed American farm areas and is providing a new market for American agricultural products. In fact, California officials recently completed a trip to Japan specifically to court food companies.

But the trend is also stirring some uneasiness. After similar waves of investment in factories, banks and real estate, even the American cowboy now seems to be falling under Japanese sway. And some feel frustrated that after the United States finally pried open Japan's food market to American food exports, it is the Japanese companies that are positioning themselves to benefit, possibly blocking American competitors.

Some cattlemen, although not many, have raised concern, said Thomas M. Cook, director of industry affairs for the National Cattlemen's Association in Washington, which at its last convention resolved to monitor the situation. "They want to sell them the beef, not the operations," he said.

But Japanese companies argue that they need food production facilities to tailor the products to Japanese tastes. For example, Japanese consumers prefer a fatty, highly marbled beef, they say.

"Our American consumer now is geared to the lean type of beef. They can't really go out on the open market and buy the cattle they want," said Gene Davis, president of Mount Shasta Beef, in Cottonwood, Calif., which is partly Japanese owned.

To be sure, Japanese investment is still in its infancy, and might prove to be as inconsequential as the feared Arab invasion in the 1970's, which led Congress to require disclosure of foreign purchases of farm land.

Altogether, foreigners own only 12.5 million acres, or just under 1 percent of the 1.3 billion acres of privately owned American farmland and timberland, according to the Department of Agriculture, and Japanese own only 218,000 acres, less than 2 percent of that held by foreigners.

Still, after holding steady for many years, the amount of Japanese-owned farmland jumped more than 40 percent in 1988. Japanese made 42 purchases totaling 65,000 acres in 1988, a steep rise from the 15 acquisitions totaling less than 5,000 acres in 1987.

The major purchases in 1988 included the $3.5 million purchase of a 31,000-acre ranch in Colorado by Otaka International and a $54 million stake in the huge 25,000-acre Fellsmere citrus grove in Florida by the Sumitomo Corporation. The Zenchiku Company, a major meat wholesaler, bought Montana's 28,000-acre Selkirk Ranch, but too late to be included in the Agriculture Department's 1988 tally.

Tetsusaburo Hayashi, director of agriculture for the Japan External Trade Organization, a trade promotion agency affiliated with the Japanese Government, said that at least 40 Japanese food companies had some factory or other facilities in the United States, with about half of those in California. But he expects the number to grow rapidly.

"Every restaurant chain and supermarket is forced to think about the possibility in order to compete with other companies or with imported food," said Mr. Hayashi, who is based in Los Angeles. "It's still low key, but below the water many companies are doing research or feasibility studies."

Under a trade agreement reached last June, Japan's import quotas on beef and oranges will be raised each year until they disappear in April 1991. Orange juice quotas will end in April 1992. Quotas on other products, including tomato sauce, apple juice and ice cream will end at various times during the next three years under a separate agreement signed about a month later.

Even with the quotas, Japan has become the largest export market for American farm products, surpassing all the Western European nations combined. But with the quotas being lifted, some analysis say the market for American products, particularly beef and fruit juices, could easily double or triple.

Japanese companies are attracted to the United States in part by the comparatively low prices—raw food products like tomatoes are one-fifth their cost in Japan, where land is limited. But other factors are also important, including the weakness of the dollar against the yen and the lower cost of American packaging materials, like aluminum cans. Those factors make it economical for companies like Kagome to produce and package ketchup and fruit drinks in California, rather than Japan.

So far, much of the action appears to be in beef. Japanese beef consumption is only one-fifth the American level per capita at present, so Japan could become a big market for American beef producers, who are facing a decline in domestic consumption.

Earlier this month, a Japanese company named Stamina Foods and the Marubeni Corporation, a Japanese trading company, announced that they would build a beef-processing plant in Fremont, Neb., to produce special cuts of meat for export to Japan. Japanese companies have also bought the Washington Beef Company, a processor in Yakima, Wash., and half of Colonial Beef in Philadelphia.

In California, Masaaki Tanabe, an exporter, has put together a network of joint ventures with Americans, including a ranch to breed cattle, feeding lots to fatten them and packing houses to slaughter and butcher them into Japanese-style cuts. Mount Shasta Beef, as well as Southfield Beef Packing Inc., which took over the deserted meat-packing plant in Fresno, are two of these ventures. Americans run them and are part owners.

The meat from this vertically integrated network will then be exported by Mr. Tanabe's South Pasadena company, Mercury Overseas, which is partly owned by the Hannan Corporation, a major meat wholesaler in Osaka.

Other food areas are also seeing Japanese investments. At least five California wineries have been bought in the last few years by Japanese brewers and pharmaceutical companies, eager to learn about wine in general and to supply the growing Japanese market, where California wine is starting to make inroads.

Several American bottling companies are already bottling fruit and soft drinks for Japanese companies.

Even rice, the product Japan has given the most protection, is seeing some action. While rice cannot be imported easily, some products made from rice can. A Japanese-owned company called American Sunny Foods, based in Stockton, Calif., began exporting rice flour to Japan last year, mixing it with sugar to skirt the import barriers. The sugar is removed and sold in Japan, and the flour is used to make rice pastries known as mochi, a spokesman said.

The American production of sake, a rice wine, goes mainly to supply Japanese restaurants in this country, but California officials expect exports to begin eventually. The Napa sake factory, which will be the fourth in California, is being built by Kohnan Inc., which is owned by Satsuma Shuzo, a Japanese brewing company. Kohnan also bought a Napa winery, which it has renamed the Silverado Hills Cellars, according to Kojiro (Mike) Iwasaki, its president.

One long-term threat to American food and agriculture companies is that the Japanese will use their United States facilities not only for exports but also to penetrate the American market. Indeed, the Fresno cotton mill—being built by a Japanese textile producer, Nisshinbo Industries, along with Kanematsu Gosho Ltd., a trading company—is aimed at selling to the American market where there are barriers to imported textiles.

Mr. Sano of Kagome said the company was also thinking eventually of expanding its California facility to move into the United States ketchup market, first by producing for American companies. The factory in Los Banos will only use one-quarter of the land the company bought. "We have room to grow," he said.

The PRESIDING OFFICER. The Senator from Illinois.

Mr. DIXON. Mr. President, I am delighted to yield 7 minutes to the distinguished Senator from Ohio, Senator METZENBAUM.

Mr. METZENBAUM. I thank the Senator from Illinois.

The PRESIDING OFFICER. The Senator from Ohio.

Mr. METZENBAUM. I thank the Chair.

Mr. President, I wish to speak not in substance as to whether this is a good deal or a bad deal. I have concluded in my own mind that I do not like the deal and I am going to vote to support the Dixon proposal.

But, I wish to speak for a few minutes about the obsession with secrecy that has surrounded and enclosed this FSX deal.

It is amazing that this deal has become a very secretive kind of matter. Most of the facts on this deal are being kept hidden from the public. Why? I cannot understand why anything has to be secret. Nobody is asking to know the specifics of how you build the plane, or the engines, or the wings. The question is why are the terms of the deal not being made available to the American people? They are entitled to know. A Senator can go look at the document which is about that thick but a member of his or her staff cannot look at it. And the American people do not know what the deal is all about except what they read in the paper or hear on the nightly news.

The memorandum of intent between the United States and Japan, which lays out the terms of the deal, is secret. Nobody can know. Why?

There are secret side agreements between our Secretary of State and Ambassador Matsunaga, according to information this Senator has.

I understand there are secret oral agreements. What are they? To what point do they address themselves?

Is there something there that the American people cannot know?

I have tremendous respect for our President and for our Secretary of State. But I believe that government ought to be conducted in public as much as possible and that the people have a right to know.

Who is insisting on all this secrecy? We do not even know that.

Is it our side? And if it is our side why are we insisting upon it? Is it the Japanese Government? And if it is the Japanese Government why are they insisting upon all this secrecy?

Rumor has it—and I do not know that this is a fact, but I cannot find out the fact—that our Department of Defense has insisted on the secrecy because the Japanese want it.

And you have to say why is our Department of Defense insistent upon protecting the Japanese because they want secrecy? This is a big deal. This is an important deal. I can understand secrecy with respect to classified material. I can understand secrecy with respect to certain intelligence information. But I do not understand secrecy with respect to the matter of building an airplane, and nobody is asking what the details of that construction are. All we want to know is what are all the terms.

If this is such a fair deal, why do the Japanese believe it is in their interest to keep the details hidden from public view?

If it is such a great deal, why is our own side so insistent that it not be made public? Even more important, why is the Bush administration complying with the Japanese request about secrecy?

How does the administration expect to raise public support for a deal, the very details of which are being kept hidden from the American people?

The American people put $7 billion into the F-16. They paid for it. They have a right to know the facts.

It makes me very suspicious. More and more, in recent years, the cloak of secrecy is being used to hide what is either a bad deal, a major cost overrun, or a poorly managed weapons program.

You name it. If it is a bad deal, then we should not be making it. Is that the reason it is blacked out? I do not know.

Secrecy is not an appropriate way for two close allies to operate on a project that requires close cooperation every step of the way.

Secret agreements are impossible to verify, and difficult to implement down the road.

We should have the facts on the table now, before we help Japan gain an edge in yet another high technology industry.

Mr. President, I stand before you and I say that I have concluded to vote against this agreement because I do not think it is right, but if there were no other reason to vote against it, I would be prepared to vote against it because the facts are being kept from the American people.

Mr. President, I yield back the remainder of my time.

Mr. DIXON. I thank the distinguished Senator from Ohio.

Mr. President, I understand from my colleague, the manager on the other side, that the distinguished minority leader will be here momentarily to state the position of the administration as the leader on their side.

So I suggest the absence of a quorum until such time as the minority leader gets to the floor, Mr. President.

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legisltive clerk proceeded to call the roll.

Mr. DIXON. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. LUGAR. Mr. President, I yield 10 minutes to the distinguished Republican leader, Senator DOLE.

The PRESIDING OFFICER. The Republican leader is recognized.

Mr. DOLE. Mr. President, I want to thank my colleague, the distinguished Senator from Indiana, for his efforts on behalf of the administration, and I think efforts in the right direction, to defeat the disapproval resolution.

I certainly know the frustrations. I listened to my friend from New Mexico, Senator DOMENICI, say we ought to renegotiate. Well, a lot of us think we ought to renegotiate the budget agreements, too. Nothing is perfect around here. But I assume some of us will vote for the budget conference report even though we do not think it is quite the way it should be.

I assume that all of us can find fault with the Japanese when it comes to trade, but I think we all know that we are friends and we are allies. Many of our problems are ours and many may have been caused by unfair competition.

We are all upset when we read about the noncompliance with the semiconductor agreement in 1986 that is going to cost the United States a great deal of money, some say as much as $5 billion in sales. And we are upset when we find the Japanese exclude us from the $12½ billion Japanese supercomputer market. We are upset when we cannot get some of our farm products into the Japanese market—cannot get citrus or beef. They do buy a lot of

grain, and of course they pay when they buy.

This Senator was one of the first Members of the Congress to urge our trade representatives to cite the Japanese for failure to abide by the Moss telecommunications agreement. Those violations may have cost U.S. manufacturers a couple billion dollars in sales.

But all those things are trade practices. And that is not before us today. We are going to have a chance when we get into the Super 301 violators and all those things to do a lot of talking about what we should do to make certain we have a level playing field with the Japanese on trade.

Ambassador Carla Hills has indicated she will use every weapon at her disposal to take on unfair trade barriers. Competition is one thing; unfair trade barriers are something else.

What we are considering today and what has been debated on the floor is an agreement—an agreement developed by the administration and signed and sealed by the President of the United States. It has been reviewed time and time again by experts in the Pentagon, the White House, private industry, Commerce, the State Department, and the Halls of Congress. The consensus of those experts is that this is a good deal for the United States.

Mr. President, 2 years ago Japan decided to develop and produce its own fighter jet aircraft. Perhaps we could have convinced them to purchase the F-16. The Byrd-Dole-Danforth sense-of-the-Senate amendment in July 1987 encouraged just such an off-the-shelf purchase. However, that would have been an unprecedented achievement because no other major industrial nation buys advanced fighters abroad.

In any event, that time has passed. So today we can either accept a 40-percent share of the estimated $6 billion in development and production revenues from this deal, which translates into approximately a $2.5 billion reduction in our trade deficit, or we can simply walk away. And several of our allies, I might add, are hoping we take the walk, because they are eager to take our place and make the deal with the Japanese.

Opponents of the FSX agreement argues that the deal will facilitate Japan's entry into the commercial aviation industry. No one denies Japan would like to be competitive with the United States in commercial aviation. If it succeeds and if the FSX agreement is implemented, many will point to this agreement as the reason for Japan's success. Yet many of my colleagues should be aware the Japanese Government has already entered into coproduction agreements with our major commercial aircraft manufacturers.

Moreover, the F-16 technology which Japan will receive under this agreement has only very marginal relevance to civil aircraft. In addition, the use of any technologies which are potentially sensitive, such as fire control or computer source codes, is restricted to the FSX Program. And, again, that was underscored and underlined by the Secretary of Commerce, Secretary Mosbacher, in a meeting with a number of us just about a week ago.

They cannot be transferred to commercial endeavors. That is why all major U.S. commercial aviation manufacturers support this initiative.

Finally, the administration's agreement specifies that Japan cannot enter into FSX production without negotiating a separate memorandum of understanding with the United States. So we are going to have another opportunity. We are going to have a chance to review this all again and review its final terms before production begins.

Under the existing FSX agreement, for example, the United States will supply all engines used during the development phase. When the production phase is negotiated, Congress will be able to ensure that U.S. engines are again included.

Mr. President, the FSX agreement now before the Congress is in the national interest of the United States for sound military and economic reasons.

So it seems to me for all the reasons stated by those who support the FSX—and some are experts in this matter. And I do not profess to be an expert, but I do believe that there is something to be said, as the President told many of us this morning. This agreement was made last November. It is an agreement. It was made by President Reagan. Some people complained about the agreement. It was tightened up by President Bush, but it is still an agreement with the Government of Japan and that agreement ought to be honored unless there is some compelling reason not to do so.

But the Secretary of Defense, the Secretary of Commerce, the U.S. Air Force and others have testified that this agreement will not give Japan what it takes to become an aerospace competitor. Therefore, I see many reasons to support this agreement and none, given the realities before us, to oppose it.

Mr. President, I ask unanimous consent that letters from the Secretary of Commerce, Mr. Mosbacher; the Secretary of Defense, the President's Security Adviser, and the Secretary of State be printed in the RECORD, all of which support the FSX package.

There being no objection, the letters were ordered to be printed in the RECORD, as follows:

SECRETARY OF COMMERCE,
*Washington, DC.*

Hon. ROBERT J. DOLE,
*Republican Leader, U.S. Senate, Washington, DC.*

DEAR SENATOR DOLE: I have thoroughly reviewed the FSX co-development project with Japan and have determined that proceeding with this agreement is in the best interests of the United States. I urge you to support this project for the following reasons:

The U.S. workshare will be approximately 40 percent for both the development and production phases.

Based on an estimated development budget of $1.2 billion, the U.S. development workshare will be approximately $480 million.

Based on an estimated production budget of $5 billion, U.S. production workshare will be about $2 billion.

The entire cost of the program will be funded by Japan.

The United States will receive from Japan free of charge any technology that is derived from U.S. F-16 technical data.

The United States is guaranteed the right to purchase any FSX technology developed solely by Japan.

The FSX Agreement is now structured to carefully control the flow of sensitive U.S. technologies, including flight and fire control computer software, engine and other sensitive technologies.

To assure oversight of the agreement, a bilateral Technical Steering Committee, chaired by a U.S. and Japanese General Officer, will be established to implement the provisions of the Memorandum of Understanding and to monitor workshare and technology flow issues. A Commerce representative will participate on the Committee.

As a result of the clarifications received from the Government of Japan, my initial concerns regarding this project have been satisfied, and I am confident that co-development of the FSX fighter with Japan is in the economic and security interests of the United States.

Sincerely,

ROBERT A. MOSBACHER.

---

SECRETARY OF DEFENSE,
*Washington, DC, May 16, 1989.*

Hon. ROBERT DOLE,
*U.S. Senate, Washington, DC.*

DEAR SENATOR DOLE: The FSX agreement with Japan has received considerable attention in recent weeks. Unfortunately, in addressing the concerns about the potential impact on U.S. industrial competitiveness, the fact that the FSX is meant to significantly enhance the mutual security of Japan and the United States in the Northwest Pacific seems to have been lost in the debate.

The FSX agreement will provide Japan with a modern support fighter to allow the Japanese Self Defense Forces to better meet their mission of defense of Japan—including the 43,000 U.S. military men and women residing there—and the sea lanes out to 1,000 nautical miles. It will do this by delivering an aircraft with longer range and more effective weapons capability for the envisioned mission than the baseline F-16 aircraft from which it was developed.

The FSX agreement, as clarified by President Bush, builds on and maintains our complementary defense policy with Japan. Failure of this agreement would encourage those in Japan who would like to see a more independent security policy vis-a-vis the

United States, and would vindicate those who advocated development of an indigenous fighter because they felt the U.S. was not a reliable security partner.

Under the leadership of President Bush, economic factors have taken a higher priority in our overall strategic thinking. I assure you that Secretary Mosbacher and I fully understand the desire in the Congress that we consider fully the economic impacts in all future negotiations of this type. We are pledged, under the guidance of President Bush, to make sure that this process reflects the proper concerns of you and your colleagues. It is my firm belief that the present FSX agreement strikes the proper balance between concerns about the future economic competitiveness of our aerospace industry and the need of the U.S.-Japan alliance for a modern fighter aircraft to meet mutual security requirements in the Northwest Pacific.

I would ask that, as you enter the final deliberations on the FSX issue, you keep in mind this balance. Clearly there is a trade imbalance with Japan. This agreement helps correct that imbalance by insuring that American firms will share in over $2 billion in the development and production of the FSX. This agreement is good for the United States, from the standpoint of national security and our economic interests.

Sincerely,

DICK CHENEY.

---

THE WHITE HOUSE,
*Washington, May 15, 1989.*

Hon. ROBERT BYRD,
*Minority Leader, U.S. Senate, Washington, DC.*

DEAR SENATOR DOLE: From my vantage point as National Security Advisor, the most important points in the FS-X debate are: how the FS-X will contribute to the mutual defense in the Northwest Pacific; implications of the FS-X for the American economy; and the precedent set by the FS-X review for negotiating similar agreements in the future.

At U.S. urging in 1981 Japan agreed to take responsibility for defending critical sealanes 1,000 miles outward from Japan. Under the FS-X program Japan will supply 130 advanced fighters for this mission. The FS-X will have performance characteristics not found in current F-16s, including a significantly larger combat radius which will result from extensive use of co-cured composites, an improved engine, larger fuel tanks, and a larger wing. Increased range, combined with improved air-to-surface missile capability, will allow Japan to patrol the sealanes in ways that would not have been possible with current F-16s. Japanese R&D funds, amounting to $1.2 billion, will be used to develop a plane to provide extended sealane defense without recourse to aircraft carriers. When this capability is in place, Japan's contribution to the burden of mutual defense in the Northwest Pacific will have been significantly increased.

The FS-X will contribute significantly to the American economy by providing 22,700 man-years of employment as well as $2.5 billion in relief for our bilateral trade imbalance with Japan. U.S. companies will receive a $480 million (40%) share of the development work and approximately $2 billion (40%) in production work. Sensitive U.S. technology is fully protected and Japan will not receive direct access to the state-of-the-art technology of our latest F-16s. Japan will pay R&D recoupment charges on the baseline F-16, thereby compensating the U.S. taxpayer for part of the original sunk costs of the F-16 program. Japan will also pay a royalty for every FS-X produced.

The FS-X negotiation, thorough interagency review, and subsequent clarifications with Japan have established a precedent by putting U.S. economic interests into the national security equation more explicitly than ever before. This broader concept of national security will be a hallmark of the Bush Administration.

Much of what has been written about the FS-X agreement has been either misleading or erroneous, but after careful review of all of the arguments and the resulting improvements in the terms of the deal, I believe the current agreement clearly represents the best interests of the United States. I urge you and your colleagues to support the President and vote against S.J. Res. 113.

Sincerely,

BRENT SCOWCROFT.

---

THE SECRETARY OF STATE,
*Washington, May 16, 1989.*

Hon. ROBERT DOLE,
*U.S. Senate.*

DEAR BOB: I am writing to seek your support for the FSX agreement and to voice my strong opposition to Senate Joint Resolution 113.

FSX represents not only an agreement between the United States and Japan but a serious effort by the Administration to respond to concerns expressed by the Congress. When the President entered office, he ordered an interagency review of FSX, with particular attention to its economic and technological implications for the United States. That review was undertaken with great care; there was no rush to judgment.

Under the FSX agreement, benefits to American workers and industry are substantial. We will receive 40% of the development work and approximately 40% of production—some 22,000 man-years of jobs and $2.5 billion for US industry over the course of the project, approximately the same return as if Japan had bought F-16's "off-the-shelf." In addition, we have full access to all Japanese technologies in the project, and we have ensured that US technologies which might have application to the civil aerospace industry are not transferred to Japan.

In examining FSX, we also kept in mind the larger dimensions of our security ties and our overall relationship with Japan. The US-Japan Treaty of Mutual Cooperation and Security is the foundation for our political and strategic relations throughout the Pacific. FSX will bolster Japan's defense capability, strengthen our alliance and help Japan assume a larger share of the common defense burden. As the first military co-development project between the world's two most technologically advanced countries, FSX sets an important precedent for future US-Japan cooperative defense efforts.

Having considered all of these factors, the President, Secretary Mosbacher, Secretary Cheney and I concluded that the FSX agreement clearly serves our national interests. I am hopeful that you will agree, and that we will be able to count on your support for the agreement and your opposition to Senate Joint Resolution 113.

Sincerely yours,

JAMES A. BAKER III.

Mr. DOLE. Mr. President, I yield back any time I may have remaining.

Mr. LUGAR. Mr. President, I yield 5 minutes to the distinguished Senator from South Carolina.

Mr. THURMOND. Mr. President, I rise in opposition to the resolution of disapproval. I want to state, however, that I do so with some trepidation. My esteemed colleagues who oppose the agreement to codevelop the FSX are sincere in their disagreement and have presented some very convincing arguments.

Mr. President, many of my constituents and considerable public opinion are against the proposal. In my heart, I understand their concerns. In South Carolina, the textile industry is a prime example of what foreign competition can do to an industry. I am against giving away technology. As my colleagues will remember, I cosponsored legislation to prevent the sale of certain military technology to China. I will continue to oppose any giveaway of technology that has the potential of being used against our country.

I believe, Mr. President, that the concerns of the American public are not only about giving away technology. My constituents and the public are especially concerned about the trade imbalance between the United States and Japan. I am also concerned over this trade imbalance. The President and the Congress have to do better in breaking down the Japanese trade barriers and ensuring fair and open trade between the United States and Japan.

Mr. President, I support the FSX agreement because it is not just a matter of technology, but also a matter of foreign affairs, economics, and defense.

I would like to quote Mr. Brent Scowcroft, national security advisor to the President, regarding the FSX program. I believe it gives the best description of this vital program:

At United States urging, in 1981 Japan agreed to take responsibility for defending critical sealanes 1,000 miles outward from Japan. Under the FSX program, Japan will supply 130 advanced fighters for this mission. The FSX will have performance characteristics not found in current F-16's, including a significantly larger combat radius which will result from extensive use of co-cured composites, and improved engine, larger fuel tanks, and a larger wing. Increased range, combined with improved air-to-surface missile capability, will allow Japan to patrol the sealanes in ways that would not have been possible with current F-16s. Japanese R&D funds, amounting to $1.2 billion, will be used to develop a plane to provide extended sealane defense without recourse to aircraft carriers. When this capability is in place, Japan's contribution to the burden of mutual defense in the Northwest Pacific will have been significantly increased.

The FSX will contribute significantly to the American economy by providing 22,700 man-years of employment as well as $2.5 billion in relief for our bilteral trade imbalance with Japan. United States companies will receive a $480 million—40 percent—in pro-

duction work. Sensitive United States technology is fully protected and Japan will not receive direct access to the State-of-the-art technology of our latest F-16's. Japan will pay R&D recoupment charges on the baseline F-16, thereby compensating the United States taxpayer for part of the original sunk costs of the F-16 program. Japan will also pay a royalty for every FSX produced.

The FSX negotiation, through interagency review, and subsequent clarifications with Japan have established a precedent by putting United States economic interests into the national security equation more explicitly than ever before. This broader concept of national security will be a hallmark of the Bush administration.

Much of what has been written about the FSX agreement has been either misleading or erroneous, but after careful review of all the arguments and the resulting improvements in the terms of the deal, I believe the current agreement clearly represents the interests of the United States.

Mr. President, This is not the best agreement. I would have preferred our F-16's over the skies of Japan. This agreement, however, is in the best interest of our Nation and the good relations between the United States and Japan. I recommend that this distinguished body support the agreement.

I wish to express my appreciation to the leaders.

The PRESIDING OFFICER. The Senator from Illinois.

Mr. DIXON. Mr. President, after consultation with the distinguished manager on the other side, I ask unanimous consent that the distinguished President pro tempore be recognized for a period not in excess of 30 minutes, essentially to close for this side, reserving to the two managers 3 minutes apiece for whatever final remarks may be necessary before the vote transpires.

The PRESIDING OFFICER. Is there objection? Without objection, it is so ordered.

Mr. DIXON. I yield to the President pro tempore.

The PRESIDING OFFICER. The President pro tempore is recognized.

Mr. BYRD. Mr. President, I thank the very distinguished Senator from Illinois [Mr. DIXON].

First, I compliment him on the excellent leadership that he has demonstrated throughout the debate. And I also congratulate Mr. LUGAR, on the excellent leadership that he has shown in support of the agreement.

There are others to be congratulated on both sides.

Mr. President, the basic problem here is systemic. Many others have already talked about it. The fact is that we do not understand our adversary in this instance. We do not understand that Japan is a people who are conservative, they are traditional, they are homogeneous and the emphasis is on the group rather than on the individual.

In the United States of America, the customer is king. In Japan, the customer comes last. In Japan, the emphasis is on what is best for the group, what is best for the nation. And the Japanese associate economic strength with national security.

We have not learned that lesson, apparently. The Japanese are a great deal like our early settlers. They stick together, they work together, they raise the barns together, they fix the wagon wheel together and they circle the wagons and take on all comers, and they win.

We put the emphasis on who has the most missiles, the most aircraft carriers, the most guns, and or economic strength is something separate and aside.

We have not yet come to realize that our economic strength is our national security and that trade is a major pillar of our economic well-being.

I will not go into the litany of the areas in the American industrial landscape over which the Japanese have become supreme. Others have done that. Others have talked at length about it. But we have seen how they have taken over industry after industry after industry: radios, black and white television sets, color television sets, computers, fiber optic cables, steel, shipbuilding.

I was a welder in the last war. I will not have to weld in the next one. We will not be building any ships. They have taken over the financial institutions. They are the leading financier in the world today. Our United States Treasury turns to Japan with knees trembling when we go out to sell our bonds. Will they buy? What are the Japanese going to do?

I do not say this to bash the Japanese. I say it to salute them; to salute them. I say it to bash ourselves; bash ourselves.

So we come, now, to the matter before the Senate. The FSX project troubles me from a variety of standpoints, most fundamentally from the perspective of how we define our national security. If we cannot compete in the world markets, how, then, can we defend ourselves on the battlefield? It is an ironic situation in which the world's largest creditor is defended by the world's largest debtor, and the debtor borrows from the creditor and pays interest on the moneys borrowed. The cart is before the horse. The Omnibus Trade Bill of 1988 made it clear that international military and economic security are two sides of the same coin. That is what we Senators said when we wrote that bill. Yet, as the FSX agreement clearly demonstrated, it is still business as usual for the Departments of Defense and State. Business as usual means deals like the FSX rise or fall on their military merits only, military merits as perceived by negotiators who are not charged with looking after the industrial and commercial interests of the United States.

Despite the congressional attempts to involve the Department of Commerce in issues of technology transfer, the Department of Commerce was not even consulted until after the memorandum of understanding had been completed, and then the horses were out of the barn.

The United States can no longer afford to conduct business in this manner. We must consider military and economic security as one and inseparable. The FSX debate is important not simply because the arrangement arrived at by our negotiators represents what appears to be an unbalanced flow of technology from the United States to Japan. It is the fundamental nature of the United States-Japan relationship itself which is at issue here today.

The debate is healthy because it is surfacing some attitudes and opinions and frustrations on both sides of the Pacific that need to be aired for the relationship to be put back onto a healthy track.

As Mr. James Fallows points out in his current article in the May issue of the Atlantic magazine, an article to which has been alluded many times here, many people think the Japanese-American relationship is so fragile that it is dangerous to talk frankly in public. It appears to me that frank talk has not only not occurred in public, it may not have occurred in our private conversations with the Japanese either. The United States-Japan relationship would be unnecessarily damaged if we continue to tiptoe around our trade problems.

There are fundamental misperceptions on what is expected from each partner in this broad-ranging alliance. We on our side do not believe every arrangement, particularly in the security arena, should be approached as a commercial contest between negotiating teams. Mutual give and take are essential for any alliance to work. From our side, we should not expect the Japanese to give up commercial advantages that are unwarranted, but we do have a right to expect the Japanese to agree to arrangements that further the mutual interests of our security relationship and further to recognize that a strong American economy enhances the strength of our mutual security, and our security is their security.

It is very important and very unfortunate that the Japanese refuse to take the opportunity of the FSX deal to take action which could have been highly beneficial for the broad reach of our relationship and instead chose to use it as one more negotiating forum to get the best deal it could to further its own commercial interests.

As Mr. Fallows points out in his article, in dealing with each other, certain of the Japanese approach this project from essentially a commercial point of view. Had they approached the arrangement as a military problem, there is no question but that they would have purchased F-16's off the shelf.

Everyone agrees. F-16's would be much cheaper than the FSX. Everyone agrees that F-16's would be available to counter the Soviet threat much quicker. Everyone agrees that a straight buy of F-16's would do more to enhance the interoperability of Japanese and American forces, and everyone agrees that purchasing F-16's would be a much more efficient use of scarce Japanese defense resources than spending billions on developing the FSX.

The Japanese also did not enter this arrangement because of a desire to improve relations with the United States. If that were their concern, then once again the logical route would have been to purchase the F-16's. The United States is the acknowledged world leader in the aerospace industry, and we have an obvious comparative advantage. We make the best, lowest cost fighter in the world and purchasing that fighter, the F-16, would have shown a real commitment from the Japanese to reduce the $55 billion bilateral trade deficit which is the source of so much of the tension between our two nations.

Neither military nor diplomatic concerns were the primary impetus for the FSX program from the Japanese point of view. I have to conclude that the primary motivation on the part of the Japanese was commercial. They are determined to build an aerospace industry. That is no surprise. It is no secret. It is the stated goal of the Japanese Government. They want an aerospace industry to enhance their industrial base. They want it to provide an internal market for their computer and electronic industries. Most importantly, they want an aerospace industry that will eventually be competitive in the world market, competitive with U.S. companies who in this field are the best in the world. I am not suggesting that we blame the Japanese for wanting to do these things. I am not suggesting that at all, but we ought to have recognized the reality of what they are doing. At least we ought to do that.

We entered this deal for military and diplomatic reasons. The Department of Defense handled the negotiations, and the very last concern was to get some real piece of the action for American industry. The Reagan administration managed to get the Japanese to compromise and to agree to a codevelopment project. It would not be as expensive nor as time-consuming as an indigenously developed Japanese fighter, and it would provide part of the work for American companies.

So it served the Defense Department's requirements, but the Japanese were negotiating a commercial deal. They kept their eyes on the ball. They know that the strongest economic system is the strongest base for a strong national security. Their perspective was fundamentally different from our own. We should have been talking from a different perspective, a commercial perspective, an economic perspective, as well as from the perspective of balancing the burdensharing in defense. Those considerations should have part of the basis for negotiation.

The Japanese depend on the United States for their defense. The United States has kept the peace now for many decades. The United States has protected the Japanese all through these postwar years. Not only that, but the United States has helped them to build and rebuild their war-torn industries. They spend only 1 percent of their GNP on their military. They rely on the United States' nuclear deterrent to protect them from the Soviet Union. They rely on the United States Navy to keep the oil flowing from the Middle East.

People tend to overlook Japan's economic dependence on the United States. We buy their products. One-third of all Japanese exports come to the United States. There has been talk about how the Japanese have financed our Federal budget deficit and, if they stop investing in the United States, our interest rates would go up.

If the United States stopped buying Japanese products, what would be the impact on the Japanese economy? Do they want to kill the goose that lays the golden egg? The United States has plenty of leverage to use in any negotiation but we tippy toe, tippy toe, tippy toe when it comes to Japan. We tippy toe even after years of experience with getting the short end of the trade deals. We tippy toe after years of having our toes stepped on by a Japanese Government that always puts the Japanese economy first and does not fret so much about the fragile United States-Japan relationship. So we do it. We keep on butting our heads against the wall.

I am reminded of the individual who kept butting his head against the wall and he was asked why. He said because it felt so good when he stopped butting his head against the wall. But we do not want to stop it. We want to keep butting our heads against the wall. When are we going to stop it so we will know how good it feels?

Instead of negotiating from our strength, we approach the talks from the perspective that given the Japanese threat to develop the aircraft alone, a somewhat dubious proposition given the state of their aerospace industry, we should be glad to get a codevelopment program of some kind. So on the basis of that assumption, the negotiators got the best they could, or best they thought they could get. They played defense when what is needed with Japan is a good tough offense.

Mr. President, our negotiators and representatives overseas have to be tough, like the Japanese are tough—what is wrong with that—in promoting United States interests. And so it had to be disturbing—I have heard others say it—to see reports as in today's New York Times where cables have been sent by our diplomatic representatives in Tokyo advocating the Super 301 provisions of the trade bill be in essence gutted. These cables advocate that Japan not be listed by our trade representative as engaging in unfair, market-closing trade practices.

The story is entitled "Embassy Asks Trade Caution Cables From Tokyo Oppose Retaliation."

WASHINGTON, May 15.—As the Bush administration approaches its first major decision on trade policy, the American Embassy in Tokyo is urging Washington to refrain from tough action to retaliate against Japan for its trade barriers.

In other words, if you walk out on the street and some guy starts cuffing you around, do not hit him back because you might make him mad.

In confidential cables to the State Department, the Embassy has warned that there could be "an emotional outburst in Japan" if the country is listed under a new Federal law as one of the worst violators of free trade principles.

That is what is wrong, our wimpy diplomats are saying to the world, "Disregard the laws that are passed by the United States Congress."

The cables from the United States Embassy provide insights into Japanese politics, Japanese-American relations and the Embassy's tendency to protect the local country—

Now get this—

from the full force of congressional displeasure over trading practices. Such consideration for the host country is not unusual among American embassies.

Japan is not the only country that would resent designation as an unfair trading partner. On Friday, Donald P. Gregg, the Ambassador-designate to South Korea, said there would be "demonstrations in the streets" of Seoul if Korea was named.

In one cable, the American Embassy in Tokyo quoted an official at the Japanese Foreign Ministry as saying that designation of Japan as an unfair trading nation, combined with recent disagreements over joint production of the FSX fighter plane, "would poison the atmosphere" for the future economic cooperation between Tokyo and Washington.

Mr. President, we cannot be driven by fear. We cannot be driven by threats of retaliation.

Our diplomatic representatives fear an emotional reaction in Tokyo. That

29-059 O-90-24 (Pt. 7)

is spineless. That is what is wrong. We have wimpy, spineless, diplomats when it comes to standing up for the best interests of the United States of America.

We are not saying that we want to force our way into Japanese markets. We want the Japanese to have a choice. Let us be fair. They are supposed to be an ally. Let them act like an ally.

This New York Times article is a report which reaffirms my view that we need a more offensive team, not a team that walks off the playing field because the other team might get emotional. The other team might get emotional.

The FSX proposal is not by itself a horrible deal, although it was badly negotiated because key aspects were not nailed down specifically in advance of production, but it is an important symbol of the problems in our relationship with Japan. Now we must decide whether the FSX proposal should go forward. I think that the United States would be far better off in the long run if we reject the FSX package because that rejection sends the message that we believe the time has come to adjust this relationship.

The United States and the Japanese peoples are friends but friends respect each other's needs. Friends can speak frankly without walking off the field, without rupturing the friendship. The time has come for frank talk and mutual respect before the seeds of resentment that have already been sown take root.

Mr. President, I have referred to wimpy diplomats. We have a lot of brave diplomats. We have a lot of diplomats who work daily and nightly to uphold the interests of the United States, but what we read stories like the one which has already been put into the RECORD, how can we help but feel we have some diplomat's abroad who are looking out after the interests of the host country and who are suggesting that if the law is implemented that the Congress has passed it will cause demonstrations in the streets and we ought to not do it—do not list them, out of fear and trepidation. Mr. President, those are the wimpy diplomats.

The FSX debate is at bottom an inquiry over the state of our alliance with Japan and whether we can act as allies when our national security is at stake with appropriate give and take. I do not suggest that if the agreement were to be withdrawn by the United States, the Japanese would buy our F-16's. I do not suggest that.

I am suggesting that it is time we take a new look at this relationship. Some say, "Well, if we reject it, they'll build it themselves." So what?

It may take some years to build it—years and years and years. I say we should not be bent upon contributing to their becoming a world-class aerospace manufacturer.

They will become that much faster with this agreement than they will if it is rejected. Some say, well, they will go to the French or they will go to the British. Well, let them go to the French and British. Let the French and British protect Japan. Let them look to the French and the British for the protection that they get from the United States. They spend 1 percent. There is a big argument over whether .90 or .95 or .99 of Japan's GNP will be spent on defense. We spend 6 to 7 percent. If we spend 1 percent, we would not have any budget deficits. We would have plenty of money to pass around for the other needs of America.

There is also an inquiry over whether our negotiators of trade and security agreements will do what is necessary to protect and enhance U.S. vital interests because clearly our national security incorporates industrial health as a key element. Rejecting the FSX will be the right medicine to cure misperceptions by Japan over the proper behavior of an ally and refocus our negotiations' attention on what is important for United States economic health.

At some point we have to call a halt. When are we going to do it? If we keep on and keep on, it is almost too late now. Above all, we cannot be stampeded into validating bad agreements through fear of retaliation or rejection. We have to do what is right and let the chips fall as they may.

Mr. President, how much time do I have left?

The PRESIDING OFFICER. Two minutes.

Mr. BYRD. Mr. President, I ask unanimous consent for 3 additional minutes.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. BYRD. Mr. President, go out and ask those who have lost their jobs in optic fiber, cameras, computers, radios, black and white television sets, color television sets, shipbuilding, steel. Ask them how they would vote today. You will get an answer, and it will not be a wimpy answer.

Mr. President, the point here is this: We have to send a message to Japan that we are not going to take it lying down any more. And we have to send a message to our own wimpy diplomats and to our own negotiators that we are not going to take it lying down any more.

We have to send a message to the Japanese that if we are going to be allies, we need to work together, they need to be concerned about the budget deficits, and we need to clean up our own house. And I think we are beginning to get that underway. We have a President who has indicated a willingness to work with the Congress in working out budget agreements that will reduce that. So we have our own house to put in order. Again, if there is any bashing that I have done it has been intended for a bashing of our own way of doing things, and our own failure to face up to reality.

Mr. President, I think this is the place to start, here and now. This is a bad deal. And I am not going to vote for a bad deal.

Mr. President—

When you get all you want
In your struggle for pelf,
And the world makes you king for a day,
Then go to a mirror and look at yourself,
And see what that guy has to say.

It isn't your father, mother or wife
Who judgment upon you must pass.
The fellow whose verdict means most in your life
Is the man looking back from the glass.

He's the fellow to please, never mind all the rest,
For he is with you clear down to the end,
And you have passed your most difficult, most dangerous test
If the man in the glass is your friend.

You may be a Jack Horner and chisel a plum,
And think, "Boy, you are a wonderful guy,"
But the man in the glass will just say you're a bum
If you can't look him straight in the eye.

You may fool the whole world down the pathway of years,
And get pats on the back as you pass;
But your final reward will be heartaches and tears
If you cheated the man in the glass.

It is about time we stopped cheating the man in the glass, and now is a good time to start it.

I hope the Senate will support the amendment by Mr. DIXON. I intend to vote for it, and I hope it carries. I urge the Senate to vote for it.

The PRESIDING OFFICER. The managers of each side have 3 minutes to close.

Mr. BRADLEY addressed the Chair.

The PRESIDING OFFICER. The Senator from New Jersey.

Mr. BRADLEY. I ask unanimous consent that I be granted 8 minutes to speak before the managers close.

The PRESIDING OFFICER. Is there objection?

Mr. RIEGLE. Mr. President, reserving the right to object, and I will not object, I am wondering how many additional comments are going to come in here because I have not spoken. I strongly agree with the Senator from West Virginia, and if we are going to continue to debate, I have things to say as well. Is there any understanding at this point as to how much farther we are going to go here?

Mr. DIXON. May I respond to that, Mr. President? The distinguished manager on the other side and I have, frankly, been accommodating to one another during this rather passionate debate. Our relationship has been quite amicable. The fact is, all the

time has been used. There is unanimous consent for each manager to have 3 minutes. That is already an imposition upon the agreement by 9 minutes.

I have no objection to granting additional time to my friend from New Jersey. I have a request from my friend from North Dakota and my friend from Arkansas, each for a minute or two. I see the Senator from Michigan, and there are others here as well. I would like to accommodate everybody for brief moments.

I just want to state what the situation is. I think we could easily conclude it in 15 or 20 minutes in any event. But I would want to indicate to the manager on the other side, the distinguished minority leader, that while I know my friend from New Jersey is speaking against my interest, I have no objection to his speaking.

Mr. RIEGLE. Mr. President, I wonder if we are going to make an agreement, if we ought not make the agreement so we understand how much time is going to be left, and how it is going to be divided up.

Mr. LUGAR. Mr. President, may I respond?

The PRESIDING OFFICER. The Senator from Indiana.

Mr. LUGAR. The agreement is that the distinguished manager, Senator DIXON, and I would both have 3 minutes each. The request is by Senator BRADLEY for 8 minutes. I think that needs to be examined on its merits. I would object to any further extension of time. I think debate has come to a conclusion at that point.

The PRESIDING OFFICER. I have a request for time, and I ask for objection. Does anybody object to the Senator from New Jersey requesting additional time?

Mr. DIXON. May I say, as a manager on this side, I have no problem with his 8 minutes. I recognize the meritorious position of my friends from Michigan, North Dakota, and Arkansas, who would like to take a couple of minutes each. If we are going to accommodate the Senator from New Jersey, I think that their requests should also be heard. I want to make it clear, I do not object to the request of the Senator from New Jersey.

Mr. RIEGLE. Reserving the right to object, and it is not my intention to object, because I want the Senator from New Jersey to be heard, but if we are going to add 8 minutes to the debate on one side of the issue, I want some additional time added to the other side of the debate, and I wanted to be listed as one of the people on the other side of the debate. I am not looking for a lot of time. I would settle for 3 minutes. If we are only going to have one unanimous consent request agreed to and others not, that unbalances the debate, then I am not prepared to accede to that. What I am looking for is some equal measure of time here.

I want the Senator from New Jersey to be heard, but in that case, I want at least 3 minutes myself to express my view.

Mr. PRYOR. Mr. President, the distinguised Senator from Illinois has mentioned that the Senator from Arkansas is requesting time. I am not actually requesting time. I will save the Senate's time. I have just submitted my statement for the record. I thank the Chair.

The PRESIDING OFFICER. I have a request for 8 minutes to the Senator from New Jersey. Is there objection?

Mr. DIXON. Reserving the right to object, and I do not object at this time. I thank the Senator from Arkansas for his usual accommodation of everyone. That has been the history of this great Senator. The manager on the other side said we might give 8 minutes equally divided to the distinguished Senators from Michigan and North Dakota to accommodate this point of view by 8 minutes to the Senator from New Jersey. That would be accommodating from this manager's standpoint.

The PRESIDING OFFICER. Is there objection? Without objection, it is so ordered.

The Senator from New Jersey.

Mr. BRADLEY. Mr. President, I offer my apologies to the manager of the bill for coming in at this time with a request, but I had no alternative, and I thank them for their courtesy.

Mr. President, I wish to make a few points about this issue. We have heard that what the Japanese should do is to buy an F-16—that is the answer—and that there are American jobs at stake. Well, the fact of the matter is that if the Japanese bought an F-16, they would not be purchasing an F-16 until 1995 or 1996, because the purpose of the new plane is to meet the fourth generation Soviet aircraft and to protect the sealanes out 1,000 miles from Japan.

So the argument that you should buy an F-16 will produce no jobs in the United States in 1989, in 1990, 1991 or 1992 or 1993 or 1994. That is point No. 1. If you go the F-16 route, no jobs are created in the United States until 1995, 1996 or maybe 1997. So let us put that issue aside.

The choice is between, really, codevelopment of the FSX or the Japanese development of it by themselves. That is the only choice. When the Japanese looked at their needs for the late 1990's, the early 21st century, they saw they needed an aircraft that had a shorter takeoff, greater missile loading and longer-range capability than the F-16. They decided that the F-16 was not a sufficiently capable plane, and that they should develop their own plane not only to meet their own needs but also to meet common needs, identified by the United States, for them to defend their sealanes out to 1,000 miles. So they decided to build their own plane. We then came in and said, "Do not build your own plane. Let us codevelop it with you." The decision was taken to go ahead with codevelopment. That means development in this country and more jobs in this country. To decide no, as the resolution of disapproval, would mean no more jobs. So, Mr. President, let us face the question of jobs up front.

Next, there is a fear expressed that if we go through with this deal, it will mean greater development of the Japanese aerospace industry. Mr. President, I submit that if the Japanese have to go their own way, have to develop all their research and development capabilities themselves, have to go down all those blind alleys that we have gone down from time to time and find out all those things that you find out only when you design a fighter aircraft entirely on your own, that 10 years from now the Japanese aerospace industry would be further ahead than if we codevelop it with them.

So, Mr. President, I argue that the Japanese aerospace industry, 10 years from now, will be further ahead if they develop the FSX themselves that if we codevelop it with them.

The next point: Who in Japan would like to see them develop the airplane alone? I know one company that would, Mitsubishi. In the political debate in Japan they were vociferous in saying that "We want to develop the plane ourselves; we do not want codevelopment with the United States." So here in the U.S. Senate, if the disapproval resolution is approved, we say, "Mitsubishi, you have won, you will be the prime contractor; you develop it yourself. We are out of the ball game." We are not in the room learning; we are not in the room sharing. We are out.

So, Mr. President, the next point: We have heard on this floor throughout this debate that this is a trade issue. Mr. President, the problem is a trade imbalance. The way out of that imbalance is not cutting back imports, but expanding exports. We have a provision in the trade bill, Super 301, that allows us to expand exports to Japan, to get across to the Japanese market. That is the place where we should address the trade issue, not on an agreement that was signed in 1987, delivered in 1988 by one President, reviewed and renegotiated by another President. His Commerce Department, State Department, and Defense Department all signed on the line. We should not reject the President.

Mr. President, one other point: A question has been made about the ability of Japan to protect any technology. Let me submit that post-Toshiba, the Japanese put in an export con-

trol system that is superior to the Germans or the French.

The next point: You have to consider the Japanese political situation. The entire cabinet has resigned; they are in a state of flux, different from any time since the late 1950's. This kind of disapproval on an issue of such high visibility in Japan at this critical time in their political process will have unpredictable results. I am not saying it will be a disaster or there will be a dramatic swing to nationalism. And I am not saying that the die will be cast for the Japan-United States relationship for the next decade. But it will have an unpredictable result, possibly damaging.

Mr. President, the last point I would like to make is this: We have heard a lot of talk about the Soviet Union, about how the Soviet Union might be changing. Well, I think it was Franklin Roosevelt who said that the world was divided between human freedom and human slavery.

Ever since that time we have known which side we were on. We were against Imperial Japan, the Nazis, Communist China, and the Communist Soviet Union.

But, Mr. President, what if things really are changing? What if the threat from the Soviet Union is decreasing? Then we can no longer define ourselves by saying what we are not. We have to begin to say what we are, and I know there are a lot of people in the political process in this country who will find that very disquieting. They will be reaching for an enemy somewhere. I hope that they will not be looking at Japan.

Mr. President, the fact of the matter is, this world will not have as much prosperity, will not have as much democracy, and will have more poverty if the United States and Japan do not develop a workable relationship for the next decade and beyond.

So, Mr. President, I submit that this is a vote about more than jobs, although on jobs the disapproval resolution fails. This is a vote about more than the development of an aerospace industry, although the disapproval resolution would accelerate the longer-term development of the aerospace industry in Japan. This is a vote about more than simply trade, although this resolution of disapproval would clearly exacerbate the environment for opening Japanese markets.

Mr. President, this is a vote about the future of the relationship and the prospect for prosperity and democracy in our world.

The PRESIDING OFFICER. The Senator's time has expired.

Mr. BRADLEY. I thank the Chair.

The PRESIDING OFFICER. The Senator from South Dakota has 4 minutes.

Mr. CONRAD. Mr. President, I want to associate myself with the remarks of Senator BYRD. I believe he hit the nail on the head. I believe America needs to wake up.

One question goes through my mind over and over, and that question simply is what if the situation were reversed? What if we told the Japanese that we will not buy your cars, we will not buy your computers, we will not buy your consumer electronics, but we will allow you to share those technologies with us, and by the way, we will give you 40 percent of the action?

Would our friends in Japan sign on to an agreement like that? I doubt it.

Mr. President, free trade is two-way trade. Free trade requires each partner to purchase from the other when it enjoys a comparative advantage.

Mr. President, I believe it is time to send that message to our friends in Japan.

I yield the floor.

The PRESIDING OFFICER. The Senator from Michigan.

Mr. RIEGLE. Mr. President, much has been said in this debate, and I think many of the sentiments expressed by Senator BYRD of West Virginia are both accurate and they express the sentiments of this Senator.

The idea that we are going to solve our economic problems with this agreement I think is a very, very serious mistake and to have as a recent speaker just did here the argument put forward that because this was negotiated by the last President, who according to a column in the New York Times is about to go over and receive, if the Safire column is right, a $2 million fee for spending a week over in Japan giving speeches around that country, to feel that somehow we are obligated by a deal made by that administration or that President, I think is just wrong thinking.

Japan is taking out of this country right now every month somewhere between $4 and $5 billion net. That is the net balance in their favor out of the trade deficit, and it is running month after month after month, year after year after year, and there is no serious turn in that situation.

They are still the largest country in terms of a trade surplus with the United States, and the predatory trading practices are there in every direction.

It turns out that one of the few areas where we have a trade surplus in our balance of payments is in the sale of aircraft around the world. The people working in MITI over in Japan have seen that. They want that for themselves.

I can understand that. I can understand that kind of an economic impulse.

What I cannot understand is why this country would surrender to it and that is precisely what is being advocated here if this deal is accepted. We are surrendering in that area. And the trade deficit over time will continue to go higher.

Nicholas Brady, the Treasury Secretary, the other day said that in his view the main cause for the stock market crash of 2 years ago was when the Japanese stepped back from buying our Government securities, drove the interest rates up and helped precipitate the market crash. Others have a different view. That is his view, and I think it is a view worth considering.

The fact of the matter is we put ourselves in that position by this enormous trade deficit, and this airplane deal makes that problem worse.

It is time for the United States to stand up against trade cheating that has been going on principally by Japan but being copied by Taiwan and Korea and many others in the months since.

We just had the new Treasury Under Secretary candidate before the Senate Banking Committee. He admitted in public testimony that he has been told he cannot even show up in Korea to discuss this issue because of the fact that the United States is finding itself more and more pressured by our so-called allies who are not allies in the area of the kind of trading practices that we see.

So this country ought to say "No" to this deal and we ought to say "Yes" to developing the economic strength of this country.

There is an enormous amount at stake here in terms of jobs and in terms of just our ability to continue to exercise control over our own economic destiny.

If we continue to bend over backward in these kinds of deals and tiptoe around and give away the strategic strength of this country, we will reach a point of no return, and we are very close to that today.

The New York Federal Reserve Board estimates that as a nation we are going to owe the rest of the world a trillion dollars by 1992, and it is precisely based on deals like this, of caving in to foreign pressure. There is always a reason—political crisis in Japan, deal negotiated by the last administration; we really cannot do anything about it.

We can do something about it. The people of this country expect us to do something about it, and that is why we ought to pass the resolution of disapproval by the Senator from Illinois.

The PRESIDING OFFICER (Mr. CONRAD). The Senator's time has now expired.

Mr. DIXON. Mr. President, would it accommodate my colleague if I went first?

Mr. LUGAR. Fine.

The PRESIDING OFFICER. The Senator from Illinois.

Mr. DIXON. Mr. President, this has been at times a passionate and vitriolic debate.

My colleague on the other side, the distinguished senior Senator from Indiana, throughout the debate in his usual fine sense has been a perfect gentleman. I thank him for the kindness he has extended to this Senator and the many courtesies over the years that I have been here on the Senate floor and dealt with him are brought, I think, into fruition in this debate. He is in every sense a fine Senator, and I thank him for his courtesies.

Mr. President, this deal was a secret deal negotiated mostly in the dark. The debate on it that has dissected the deal shows that it is a bad deal for America. Last year, we had a $54 billion present trade deficit with the Japanese but in the one thing where we have a surplus, a $19 billion surplus, in commercial aviation and aerospace, we want to give it to them on a silver platter.

I say "buy the F-16" and for those who come here and say that horse is out of the barn, for those who come here who say the deal is done, I say if they will not buy the F-16 we will not buy their cars, their cameras, their color TV's, and their telephones, and the other things that are part of an honorable exchange in commerce between two great nations.

This, Mr. President, is a tragically flawed deal for America, and the Lexington Herald Leader of Thursday, May 11, 1989, is right when it says "The 'S' in FSX stands for sucker."

Mr. President, vote for this resolution and send a message to the world that Uncle Sam is tired of being the sucker.

The PRESIDING OFFICER. The Senator from Indiana is recognized.

Mr. LUGAR. Mr. President, I thank the Chair. I thank the distinguished Senator from Illinois for his courtesies and for his strong leadership in this debate.

Mr. President, many of the speeches today understandably have been filled with emotion. The distinguished Senator from Illinois, the manager of this bill, the Senate President pro tempore, Senator BYRD, the distinguished Senator from Michigan, who we just heard, have said let us send messages, send messages to the Japanese we are not going to take this lying down anymore, send messages we are not going to cave in, send messages this is a bad deal made in secret.

In understand the sense of their frustration and their emotion.

Let me, Mr. President, at least as calmly as I can, assess the fact that we have a very serious vote ahead for our country in the next few minutes.

The distinguished Senator from West Virginia [Mr. BYRD] put the issue of the relationship with Japan very well. It was his view, as I heard him, that we are at a crucial point with the Japanese, that this is the time and this is the vote where we make a significant break with our allies.

The distinguished Senator said that in the event we break off on this deal and the Japanese strike a deal with the British or the French, that they should tell the British and the French to defend them. If we break off the deal and they go alone, the distinguished Senator said, let them go alone. Other Senators have suggested that it would take them a long time to go it alone and that it would cost them more money to go it alone. There would be penalties for them down the trail, that we would teach them, we would give them a lesson, we would not cave in again and, in this decisive vote, we will tell them literally where to go; namely, go by yourselves and produce a plane on your own.

Mr. President, this is not the time to reorder the entire relationship with Japan. That is a serious job for the President of the United States, working with the Congress. It is a job that must be done. This particular deal is for an aircraft. It is our opportunity to shape that aircraft deal, to shape that aircraft industry, to stay with Japan, to stay with our ally, and to obtain $2.5 billion of business and the jobs that are attendant to it. Otherwise we get no jobs. We need to continue to impart some confidence in the countries of the Far East that we know what we are about, that we have a sense of responsibility and a sense of mission.

It is a serious vote, Mr. President, about our relationship with Japan. And I, for one, believe the relationship should continue. I think peace in the Far East depends on that relationship continuing. So Senators have an important vote. They can send messages and they can break the relationship and they can tell the Japanese where to go and throw them into the arms of others or to tell them to rely on their own resources. But that, I believe, Mr. President, will be historically a very bad mistake and very shortsighted at a time when Senators want to vent their emotions, as opposed to depending on their intelligence and their sense of statesmanship.

Mr. President, I ask that the Senate reject the motion of disapproval and support the agreement that our President has negotiated.

The PRESIDING OFFICER. The Senator's time has expired.

Mr. DIXON. Mr. President, I ask for the yeas and nays.

The PRESIDING OFFICER. Is there a sufficent second? There is a sufficient second.

The yeas and nays were ordered.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Illinois [Mr. DIXON]. The yeas and nays have been ordered, and the clerk will call the roll.

The legislative clerk called the roll.

Mr. CRANSTON. I announce that the Senator from New York [Mr. MOYNIHAN] is necessarily absent.

The PRESIDING OFFICER. Are there any other Senators in the Chamber who desire to vote?

The result was announced; yeas 47, nays 52, as follows:

[Rollcall Vote No. 66 Leg.]

YEAS—47

| | | |
|---|---|---|
| Adams | Ford | Metzenbaum |
| Baucus | Glenn | Mikulski |
| Biden | Graham | Mitchell |
| Boren | Grassley | Nunn |
| Breaux | Harkin | Pressler |
| Bryan | Heflin | Pryor |
| Bumpers | Heinz | Reid |
| Burdick | Helms | Riegle |
| Byrd | Kasten | Rudman |
| Coats | Kerrey | Sanford |
| Conrad | Kerry | Sarbanes |
| D'Amato | Kohl | Sasser |
| Dixon | Leahy | Shelby |
| Dodd | Levin | Simon |
| Domenici | Lieberman | Wilson |
| Exon | McConnell | |

NAYS—52

| | | |
|---|---|---|
| Armstrong | Gore | McClure |
| Bentsen | Gorton | Murkowski |
| Bingaman | Gramm | Nickles |
| Bond | Hatch | Packwood |
| Boschwitz | Hatfield | Pell |
| Bradley | Hollings | Robb |
| Burns | Humphrey | Rockefeller |
| Chafee | Inouye | Roth |
| Cochran | Jeffords | Simpson |
| Cohen | Johnston | Specter |
| Cranston | Kassebaum | Stevens |
| Danforth | Kennedy | Symms |
| Daschle | Lautenberg | Thurmond |
| DeConcini | Lott | Wallop |
| Dole | Lugar | Warner |
| Durenberger | Mack | Wirth |
| Fowler | Matsunaga | |
| Garn | McCain | |

NOT VOTING—1

Moynihan

So, the amendment (No. 102) was rejected.

Mr. LUGAR. Mr. President, I move to reconsider the vote by which the amendment was rejected.

Mr. DOLE. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

The PRESIDING OFFICER. Under the previous order of the Senate, the Byrd amendment is now before us. There is 1 hour equally divided under the control of the Senator from Indiana and the President pro tempore.

The Senator from West Virginia.

Mr. BYRD. Mr. President, I thank the Chair. Let me say again, I congratulate both managers. I congratulate Mr. DIXON and I congratulate Mr. LUGAR on the excellent leadership that both gave on the matter in connection with which we have just voted.

I listened to my distinguished friend from Illinois as he closed the debate. Let the RECORD show that this Senator does not propose severing the relationship with our ally. This Senator has

not proposed severing our friendship, but this Senator is saying there is a lot of anger out there in the hills and valleys and plains and plateaus and mountains of America, and the sooner the Japanese recognize it and the sooner our own negotiators recognize it, and start talking frankly and understandingly with one another then the better off our mutual relationship will be.

Mr. President, the amendment I have offered is intended to enhance the protection of vital American technology in connection with the FSX deal to closely monitor the codevelopment project as it proceeds to establish key congressional areas of interest in how the coproduction arrangement is later developed and finally to establish a better system of looking out for American industrial, commercial, and competitive interests when we negotiate and implement transfers of technology for military purposes.

This amendment is intended to be a constructive contribution to the FSX project to strengthen the benefits, hopefully. It is not intended to kill the project, that is for sure. The Senate has already voted on that proposition. It does not require the renegotiation of the memorandum of understanding. It is not intended as harassment of either the administration or of the Japanese. It will not delay the implementation of the project. So it is not a killer amendment. It does not impose any limiting conditions on the parties that have not already been clearly understood.

The debate on the FSX has pointed out not only that it was negotiated without due consideration for U.S. industrial base and competitive concerns in mind, but also that the imprecision and vagueness on key aspects of the deal could potentially lead to future misunderstandings and rancor between Japan and the United States.

There are areas of uncertainty that might well be cleared up now, and it is my hope that this amendment will help to give our negotiators additional leverage with their Japanese counterparts when the crucial details of the future memorandum of understanding is negotiated several years from now.

There is a second MOU that has to be negotiated. That is what we are looking at. I was gratified to see reported on this past Saturday, May the 13th, that our Special Trade Representative, Mrs. Hills, has publicly indicated that the provisions in the omnibus trade bill, particularly the Super 301 provision, have had the salutory effect of giving the administration additional leverage with our trading partners to begin correcting the market distorting mechanisms that are inhibiting American access to their markets, and that is constructive leverage. In the same vein, I hope and intend that this provision on the FSX project will provide constructive leverage for our negotiators.

There should be no illusions about the long and tough negotiations that lie ahead for U.S. negotiators on this matter with the Japanese. That unfortunately is the history of our relationship with Japan on all matters dealing with high technology, whether they are for our mutual security interests and benefit or not.

First, the amendment prohibits in the context of the production memorandum of understanding, the transfer of vital jet engine technologies to the Japanese. We all can sympathize with the American members of the codevelopment team. In such a situation, there begins to develop a team spirit and the members of the team would naturally want the project to succeed. However, in desiring it to succeed, there can be a temptation to transfer technologies to the other side that were not contemplated in establishing the parameters of the deal.

There have been indications that such behavior has occurred in connection with coproduction deals with the Japanese in the military area before. This engine technology prohibition is designed to make it clear that such transfers, which the administration has told us will not be allowed, just will not occur under any circumstances.

In addition, there is a provision in the amendment which would not permit the Japanese to sell or transfer the FSX aircraft or technology to third parties. No one expects the Japanese to turn this system into an export item, and this provision simply makes it impermissible for the Japanese to use the specific systems they are getting from us to enter the international market.

Those two items are mandatory. In addition, there is a provision which makes it the sense of the Congress that, in the MOU for production, no less than 40 percent of the workshare of the aircraft, including the value of the lifetime costs of the aircraft, be allocated to the American manufacturers. Since the development costs are allocated specifically to give 40 percent to the U.S. manufacturers, it seems logical for the production allocation to be the same. Indeed, the United States has long pressed the Japanese to be specific on this point and not to leave the allocation up for future negotiation after the United States has transferred the vital technologies in connection with the aircraft's development to the Japanese. Indeed, Secretary Baker tried to get the Japanese to agree to a 40 percent share in his trip to Tokyo this year, but he was turned down. Even in the so-called clarification of the FSX project in Ambassador Matsunaga's letter, the best we could get is approximately 40 percent of the production work to go to the United States.

What does "approximately" mean? What do the Japanese think it means? They and we do not agree on the definition of the word "open," so perhaps we do not agree on the word "approximately."

This simply invites further negotiation with tenacious and unyielding Japanese negotiations, spelling, in boxcar letters, trouble ahead. I think the Japanese ought to know that the Congress wants a 40-percent floor, and wants a fair allocation of this type to be extended to the whole weapons system, including the highly valuable future market in spare parts. Spare parts have not been addressed specifically in this deal so far, and I think this leaves an important area without needed specificity and certainty.

Mr. President, I am hopeful that congressional involvement in this situation can enhance U.S. leverage in this deal as it is implemented and in connection with negotiating the MOU for production. Therefore, I have included a requirement for periodic GAO reports on the progress of the development project. This is particularly important considering the unique nature of this arrangement. The United States has engaged in numerous coproduction projects over the years with various allies, including coproduction of the F-15 with Japan, but this is the first time we have codeveloped a major weapons system. Codevelopment means significantly closer cooperation and sharing of technological expertise. Monitoring the progress of this arrangement will be extremely important. GAO has already been actively involved and is knowledgeable on the parameters of the arrangement. It has already been reporting to Congress on it, and I would require that it continue to do so.

Last, Mr. President, we have included in the negotiations of these valuable transfers of U.S. technology an institutional way to protect our industrial base. Japanese motives in negotiating the FSX have been discussed at length in this debate. I will not belabor them here, except to say that it would be foolhardy not to be vigilant in protecting our aircraft industry and the vital technologies associated with it. Therefore, I have joined with Mr. DANFORTH in constructing a provision which gets the Commerce Department into the loop on these arrangements. This provision in my amendment is designed to be related specifically to the FSX deal, but I would hope it will be extended, during the debate on the DOD authorization bill this year, to all such weapons transfers. In some cases, the commercial considerations of such arrangements can have such a deleterious effect on our competitive base that it would be foolish to go for-

ward. Many Senators believe this to be the case with the FSX, partly because the deal was negotiated without the participation and knowledge of officials in the Commerce Department who could have raised early red flags on what was contemplated to be transferred. So, as the deal is implemented, this provision gets Commerce into the act.

Mr. President, we have to start asking ourselves some basic questions about our relationship with Japan. How much longer can we continue to subjugate United States interests to Japanese economic hegemony? How much longer can we tolerate these huge trade imbalances? How much longer can we continue to afford to defend Japan or anyone else if we allow our economy and our industrial base to wither? How much longer will the American people tolerate watching American jobs leave our shores? In my view, Congress must continue to take an interest in any agreement which affects U.S. competitiveness and jobs. My amendment intends to contribute to the viability of this deal and future agreements of this kind. This Nation needs to get our economic relationship with Japan on a saner and sounder track. We have to start considering the interests of the United States of America first. We have to go to the negotiating table with a full deck to make sure that the hand we deal ourselves is a balanced one. The amendment I have offered is a step in that direction.

The PRESIDING OFFICER. Who yields time?

Mr. LUGAR addressed the Chair.

The PRESIDING OFFICER. The Senator from Indiana is recognized.

Mr. LUGAR. Mr. President, I appreciate the reasoning of the distinguished Senator from West Virginia as he has presented an important amendment. Certainly the work that he has performed in the drafting of this amendment, the collaboration with the distinguished Senator from Missouri, Mr. DANFORTH, is evident, as are the considerations of the participation of the Department of Commerce. It presents a general overview of what we ought to do in negotiating these agreements. These are points that should come forward in the debate, and they have been well presented.

Let me just say, Mr. President, I will oppose the amendment offered by the distinguished Senator from West Virginia because I believe this amendment and the refinements of these agreements are an unfortunate intrusion upon the negotiating powers of the President of the United States.

I make this point not to be contentious with regard to the specifics of participation by the Department of Commerce in discussion of trade agreements, but simply to point out that the Secretary of Commerce is appointed to his position by the President of the United States. He is a part of the President's Cabinet.

It is the intent of the amendment, as I read it—and I quote—

> * * * the Secretary of Commerce may request a review of the agreement. If, as a result of the review, the Secretary of Commerce determines that the strategic commercial interests of the United States are not being served, the Secretary of Commerce shall recommend to the President any modification to the agreement he deems necessary to ensure an appropriate balance of interests.

Then it goes on to say:

> The President shall consider the recommendations of the Secretary of Commerce concerning—
>
> (A) the commercial implications of any such memorandum of understanding or related agreement, and
>
> (B) the potential impact on the international competitive position of United States industry,
>
> in determining whether such memorandum of understanding or related agreement shall be implemented or agreed upon.

Mr. President, this may be a subtle criticism of the current administration. Maybe it is general judgment on how Government works. There may be a suggestion that the Secretary of Commerce is so remote from the President of the United States who appointed him that by law the Congress of the United States must mandate that the Secretary have the opportunity to request a review and even stipulate the reasoning of the President in taking a look at the product of that review.

I submit that in a normal executive line chain of command the President of the United States obviously would call upon those who are important in any understanding. He would ask them for their points of view and he would think carefully about what they have to say.

But ultimately, the President of the United States negotiates on behalf of our country. He has done so in the case of the FSX deal with Japan. Two Presidents have negotiated—President Reagan and then President Bush, and we have been debating President Bush's product today.

I submit that the logic of the situation is that after that negotiation is completed, the President of the United States gives formal notification to the Congress. In this case, the President of the United States has suggested that the Congress of the United States ought to consider the product of his negotiation, and that in a 30-day period we have an opportunity as Members of the Senate and the House, if we act upon a resolution of disapproval, to indicate our disapproval. He has furthermore the ability to veto that resolution of disapproval, and thus commit the United States to the negotiations that he commenced, and therefore will complete.

This afternoon we have faced that issue in a very important vote. By a vote of 52 to 47 the Senate of the United States voted down the resolution of disapproval. It approved the product of President Bush's administration. In this case the President was not a distant person with regard to all of this—a third party who did not know about the agreement. The President of the United States actively has asked Members of the Senate to support him in his agreement.

The Vice President of the United States in fact on this very day just down the hallway asked Senators, and when they refused to respond affirmatively to him, in fact argued with them the merits of this. This is hands-on Government with President George Bush and Vice President DAN QUAYLE actively involved in negotiating an agreement.

Furthermore, we know from testimony before the Foreign Relations Committee that Secretary Mosbacker, the Secretary of Commerce; the deputy Secretary of State, Mr. Eagleburger; the Secretary of Defense, Mr. Cheney—all testified that they had not only been involved but they enthusiastically support this agreement that the Senate affirmed this afternoon by a vote of 52 to 47. This is very hands on. In fact, all three sat together in front of the committee at one time. They heard each other's testimony. Members of the committee who were present heard that testimony directly.

Mr. President, there is no doubt that this administration wants this agreement. In fact all of the major Cabinet officials have been consulted, and all have argued and all have affirmed that they want this agreement. And the Senate has voted to support the President's negotiations.

Now we come to an amendment which suggests that somehow or other, additional conditions ought to be applied, or stipulates that the Secretary of Commerce, for one, ought to be involved. And, Mr. President, I suggest this is redundant, and could in fact impinge upon the powers of the President of the United States. The drafting of the amendment uses words such as "sense of the Senate" on occasion so that perhaps one could consider this an editorial comment after the fact, a memorandum for the future but this is serious business, Mr. President.

I suggest that there is no good purpose served by adopting an amendment which comes after the fact of the Senate's action which affirms the agreement the President of the United States, the Vice President, and relevant Cabinet members have all testified they want and have asked personally the Senate to affirm, as we have today. For these reasons, Mr. Presi-

dent, I ask tht the Byrd amendment be defeated. I am hopeful that the slate will be clear as we end the day, that support for the President and his agreement will be absolutely clear, not only to him, the American people, but to all abroad who looked to this body for leadership.

Mr. DIXON addressed the Chair.

The PRESIDING OFFICER. Who yields time?

Mr. DIXON. Mr. President, will my friend from West Virginia yield time to this Senator?

Mr. BYRD. How much time does the Senator wish? Ten minutes it is.

The PRESIDING OFFICER [Mr. SIMON]. The Senator from Illinois is recognized for 10 minutes.

Mr. DIXON. Mr. President, I rise in support of the amendment by my distinguished friend, the senior Senator from West Virginia. This amendment to the Dixon resolution will change the resolution of disapproval to a resolution of approval with very tight constraints.

What this resolution of approval says is that all of the things that were said against this memorandum of understanding are essentially correct. This amendment that would amend the memorandum of understanding guarantees that the United States of America will get 40 percent of the value of all work, not just in the development of the first six airplanes, but all work in the coproduction process that will go on for years and years. That is a very good amendment.

This amendment says that every year the General Accounting Office will report to the Congress on the implementation of the FSX agreement signed on November 29, 1988, and further says that the Secretary of Commerce, who was denied his part in all the negotiations process up until this year, will be part of the process in the future.

I might say to my friend from West Virginia, and to my friend from Missouri who I see on the other side of the aisle and others, that I cannot think of anything more fundamentally important in the future in what we do dealing with the Japanese than seeing to it that the Secretary of Commerce is an integral part of the process at all times.

I will offer shortly when this time has expired an amendment to the amendment of my friend from West Virginia, and I think he is amenable to, that would simply say when the reports are filed on an annual basis with the Speaker of the House for the committees of the House, that in addition to the filing with the Foreign Relations Committee in the Senate, the report should be filed with the Armed Services Committee, the Commerce Committee, and the Banking, Housing, and Urban Affairs Committee which has jurisdiction over the Export-Import Administration Act.

I think that will make this a very strong resolution of approval concerning this memorandum of understanding, and all of the letters of clarification that took place.

Permit me to say this, Mr. President: The administration may in the end, I say, be more compromised by what we do in this resolution of approval with tight constraints that it would have been in the adoption of the resolution of disapproval that received 47 votes because I think it is entirely possible—I congratulate my friend from West Virginia when I say this—that we can receive sufficient support in the U.S. Senate and later in the whole Congress, certainly in the House, to have the necessary two-thirds vote to override an expected veto by the President of the United States. By passing this legislation, the Congress will send the strongest possible message about the fact that this entire memorandum of understanding and the exchange letters, done in the dark, mostly flawed, was against the best interests of the United States of America.

I just want to say this in conclusion: In my support of this amendment, I think we have sent a very strong message. No one would have believed that this Senator's resolution of disapproval would receive 47 votes. I think it is a powerful message to the country and a powerful message to the world, and a powerful message to Japan, that we feel that this is a terribly flawed agreement that our Nation has entered into with the Japanese. I think that when this resolution is adopted with the Byrd amendment—and I believe it will be—that when it goes to the House, it will be strengthened even more, to protect the interests of this country in connection with an outrageous, bad deal, poorly done from the beginning, and against the best interests of our country.

I am delighted to support this amendment. I thank the Senator from West Virginia for his valuable input. I think in the 9 years that I have been here, his speech today was the most magnificent speech that I have heard in this place, a barnburner, by anybody's standards; and I think his contribution on this amendment is an important contribution, to bring about the kind of message here in the Congress that may very well be the kind of message that this administration and our friends in Japan cannot ignore. I am delighted to support the amendment and to offer, at the conclusion of the major debate on this amendment, a perfecting amendment by this Senator that will bring all the jurisdictional committees in the U.S. Senate into the approval process, along with the Foreign Relations Committee.

I yield back whatever time remains.

The PRESIDING OFFICER. Who yields time?

Mr. DANFORTH. Will the Senator from West Virginia yield 3 minutes?

Mr. BYRD. I yield 3 minutes.

Mr. DANFORTH. Mr. President, I strongly support the amendment offered by the Senator from West Virginia. I think that this is very, very important to the trade policy of the United States.

I want to make it clear to Senators on our side, who, when they see the name of the Senator from West Virginia on legislation, say, "Oh, this must be some sort of plot by the other side of the aisle." The core of the amendment that has been offered by Senator BYRD is legislation that I introduced with his cosponsorship some months ago about the whole process of entering into memoranda of understanding.

Mr. President, the question before us is whether the Commerce Department, which should be the guardian of America's commercial and industrial interests, has a place at the bargaining table when we enter into high-tech, very important deals with other countries. The basic problem with the FSX negotiations from the beginning was that this was something that was brought about by the Department of Defense, with zero input from the Commerce Department and zero input from the U.S. Trade Representative—none. It was not until the beginning of the Bush administration that they had any role to play at all.

Now the question is, will they have a continued role to play? Repeatedly, the administration has been asked whether they will agree in a written statement to a continuing role by the Commerce Department with respect to the memorandum of understanding for production. Repeatedly, the answer has been, no, to a formal assurance. Therefore, it is absolutely essential for the Congress of the United States to speak.

The FSX deal is going to go forward; there is no doubt about it. But, Mr. President, we cannot, as a country, continue forever to make significant deals with Japan and other countries, with no one sitting at the table who has any interest in the industrial and commercial future of the United States of America. That is why the Byrd amendment is essential.

The PRESIDING OFFICER. Who yields time?

Mr. ROCKEFELLER. Will my distinguished senior colleague yield me 4 mintues?

Mr. BYRD. Yes.

I thank the distinguished Senator from Missouri, and I also appreciate his cosponsorship and the leadership he has consistently shown.

How much time does my colleague wish?

Mr. ROCKEFELLER. Four minutes.

Mr. BYRD. I yield 4 minutes to the Senator from West Virginia.

Mr. ROCKEFELLER. I ask to be added as a cosponsor of this resolution.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. ROCKEFELLER. I voted against the resolution of disapproval, as I stated earlier in the debate, because I believe that going forward with the FSX arrangement is a positive and a good idea. It is also in the best interest of the United States that we obtain every possible advantage and clarification that we can. Japan must understand—and surely they will after this debate—that the Senate of the United States is apprehensive about the concept of reciprocity and fairness with respect to trade.

This resolution includes the sense of the Senate that the MOU for coproduction of the FSX should specify that the U.S. share shall be not less than 40 percent. In other words, not approximately, but at least 40 percent. That is a very important improvement.

Secondly, the resolution calls for that minimum 40-percent figure to apply not only to the initial production of the FSX, but also to spare parts and other support items over the life of the entire system. The exchange of letters, on the other hand, between Secretary Baker and Japanese Ambassador Matsunaga, applies only to the production phase. Postproduction procurement will vastly surpass the value of initial production.

We should do everything possible to assure that we secure the maximum sales possible throughout the second phase.

Mr. President, this resolution tasks GAO with periodic reporting on FSX implementation. We are really saying that we will be watching. The Congress of the United States will closely watch the implementation of this memorandum of understanding.

Finally, this resolution speaks to provide a firmer institutional role for the Secretary of Commerce when we negotiate and implement this type of agreement. This is truly critical to our national interest.

I have been appalled by our Government's lack of understanding about the negotiating process with Japan. Reaching a signed agreement, in the American way, is equivalent to completion of the deal; with the Japanese, it is only a first part, a first step. The implementation phase is extraordinarily important. We do not have negotiators that stay year in and year out; ours change. Administrations come and go. The Japanese negotiators, on the other hand, stay year in and year out, and they build up tremendous expertise. We must commit resources of people, attention, and commitment to the implementation phase of this agreement.

Our Government must begin to learn how to deal with Japan. I think the discussion in this body today will help. The adminstration should learn the concerns we in the Senate have, and it should also be useful to the Japanese understanding. They must understand that bilateral trade is an extraordinarily important item on the agenda of the United States Congress.

I commend my senior colleague for his initiative and encourage all my colleagues to join him and join me in supporting this resolution.

Mr. BIDEN addressed the Chair.

The PRESIDING OFFICER. Who yields time?

Mr. BIDEN. Will the Senator yield me 30 seconds for a unanimous consent request?

Mr. BYRD. I will be glad to.

Mr. BIDEN. Mr. President, the FSX deal that we have been asked to support by the administration is fundamentally flawed, and has been from the very start.

It is fundamentally flawed because is is based on a faulty premise: That if we don't agree to the FSX deal, Japan will go off and develop a fighter on its own, possibly with the assistance of the Europeans.

Starting from that premise, I suggest to my colleagues, placed us in a losing position from which we could not recover. Any leverage we might have had went out the window, and the advantage in the negotiations shifted to Japan.

This is a bad deal, both from an economic and military standpoint. And it raises fundamental questions about the United States-Japan alliance which I believe are worth examining.

AN OFF-THE-SHELF DEAL—WAS IT POSSIBLE?

The Bush administration contends that this deal is much improved from the original FSX agreement signed by the Reagan administration. That may be so. But even if it is, the question remains, why are we doing this in the first place?

When this issue first arose, the United States attempted to sell American fighters off-the-shelf to Japan, which required a successor to its F-1.

Indeed, it was logical for us to do so, since we make the best fighters in the world at the cheapest price. In fact, we are the world's leader in the aerospace industry, which last year had a $17.8 billion surplus.

But Japan rejected this approach, and insisted on domestic development of its own aircraft. In doing so, Japan sent a very strong signal to the United States: Our market is not open to your finest products.

The administration now contends that an off-the-shelf purchase was never a likely option in the first place, arguing that most industralized nations develop their own fighter aircraft, and thus it was not realistic to expect Japan to buy ours.

But most nations, to be sure, do not have a enormous trade imbalance with the United States. And most nations spend more than 1 percent of GNP on defense.

In rejecting an off-the-shelf purchase from the United States, Japan sent another important signal—they're not interested in helping to bring down the United States trade deficit.

Last year our trade deficit with Japan was $55 billion, over 40 percent of our overall deficit. Deficits of that size are not just unsustainable, they are intolerable.

Of course, some blame for our trade problems lies here at home:

In our failure to address the budget deficit;

In the declining competitiveness of American companies; and

In the failure of many United States companies to try to penetrate the Japanese market.

But let's be honest—Japan must shoulder some of the blame as well. Their trading practices in various sectors are unquestionably unfair.

When pressed to buy American products, the Japanese often say that our goods are inferior, and that the Japanese people don't have confidence in American workmanship.

That excuse doesn't wash with our fighters. Had they bought our planes as we asked them, Japan would have purchased not only terrific fighters, but also an enormous amount of goodwill in this country on the trade question.

The argument has also been made that the FSX will have a unique mission, and that none of the U.S. planes could have fulfilled that mission.

But this argument cleverly obscures the fact that Defense Department officials went to Tokyo early on and told Japan that any of three American planes—the F-16, the F-15, and the F-18—could fulfill Japan's mission.

And the "unique mission" argument is just a smokescreen, and for the Japanese, a familiar one. In fact, they have been using the uniqueness argument for a long time to keep out our commercial goods.

The mud in Kansai Bay is unique, so American construction firms can't build Kansai airport. Japanese rice is unique, so they can't import United States rice. Japanese intestines are unique, so they can't eat United States beef. And so on.

The truth is that any one of several United States fighters, with only minor modifications, can fly the so-called special Japanese mission.

IS IT SOUND MILITARILY?

Let's assume for a moment that the FSX is a good deal.

A fundamental question then ought to be, is it sound for our mutual de-

fense? And it's here that I come up with a lot of question marks.

First, one can argue that Japan needs new fighters now, not 8 or 10 years from now when the FSX will be deployed.

The FSX replaces Japan's F-1, a domestically developed plane which hasn't been terribly successful. Indeed, in the early 1980's, the Japan Defense Agency was worried that the F-1 avionics were already obsolete, and that the airframe was suffering from metal fatigue.

Given the substantial Soviet buildup in the Far East, it makes sense that Japan should have bought United States planes to fill this gap.

Proponents of FSX dismiss this notion, arguing that because of a backlog of orders at General Dynamics, the F-16's wouldn't have been deployed until 4 or 5 years from now.

But that argument cleverly ignores the fact that Japan began considering a replacement for the F-1 in the mid eighties. Thus, if they had bought our planes then as they should have, the new fighters would be in operation today.

A second question mark militarily is the interoperability of the FSX with other U.S. assets in the region.

Interoperability is a key procurement strategy—the ability to use similar parts on different assets.

The administration has argued that because the FSX will be based on the F-16, it will thus be interoperable with U.S. assets in the Far East.

Last week Secretary Cheney testified before the Foreign Relations Committee that "Fueling and some ground support will be compatible, as will certain maintenance functions."

But what he didn't say is that the FSX will carry different weapons. And I am not reassured by his qualifying remarks about ground support and maintenance.

The final question mark about the FSX's military efficacy is that it will drain scarce resources from the mutual defense.

As everyone knows, Japan limits its defense spending to 1 percent of GNP. I support this policy. I am not eager to see Japan become a military power.

But the FSX will cost Japan two to three times as much as buying American. Maybe more, because the cost estimates for the FSX are just that—estimates—and the final costs could be much higher.

Japan has every right to spend this money. But because of Japan's ceiling on defense spending, they will then have less funds to devote to mutual defense projects.

What does that say about Japan's commitment to our mutual defense?

WHAT DOES THE UNITED STATES GET IN RETURN?

The next question that we should raise in examining this agreement is what the United States will obtain in return. For it seems only logical that the United States must not enter agreements unless they are mutually beneficial.

What will we get in return? The proponents of FSX argue that Japan has developed technology which will be applicable to our next generation fighter.

Specifically, these two technologies are in composites and phased-array radars. However, it is not clear that the United States will reap significant benefits from these technologies. Because the simple truth is that the United States has been involved in these fields for years, and is ahead of Japan in both of them.

An official from Hercules Aerospace in my own State of Delaware told a House Committee: "The United States is the indisputable world leader in the field of carbon fiber composites."

A preliminary study by the General Accounting Office reached the same conclusion: "The United States is superior to Japan in composites technology and appears to be ahead in radar development."

The argument by FSX proponents has now been refined. It's not that Japan is ahead in these technologies, the argument goes, it's that their manufacturing processes may be better than ours.

But this too is a smokescreen. The fact is we are really not sure what the Japanese have, but we are dying to find out.

And why not? I don't doubt that the United States would gain by seeing what Japan has accomplished in these fields.

But do we need the FSX deal to do it? We already have an agreement with Japan, reached 6 years ago, to share military technology.

Unfortunately, it has not worked very well. But perhaps we have not tried hard enough to make it work.

FSX proponents say that the agreement will ensure that new technology will flow back to the United States.

But if little technology has flowed back under the 1983 agreement, how can we be sure that it will under this one?

WHAT WILL JAPAN GAIN?

It is important to keep in mind what Japan hopes to gain from the FSX deal.

Japan has targeted aerospace as a key technology for the 21st century. They have made no secret of this.

The fact that Japan is willing to spend billions on a grossly inefficient production run—just 130 planes—should tell you that their primary goal in the FSX deal is not improved military capability, but increased potential as an aerospace manufacturer.

And while it is not clear that this military technology will be applicable to commercial aviation, one thing is clear: Even if we protect all of our key technologies, the FSX will allow Japan to advance on the learning curve in aerospace.

A whole generation of Japanese engineers will gain vital experience in building a state-of-the-art fighter, from drawing board to assembly line. In addition, Japan will build up its production base in aviation.

There is no reason why they should not. There is also no reason why we should help them.

My point is simply this: the United States holds the lead in aerospace technology. It is our number one manufacturing export. Why should we make an agreement that potentially threatens that lead?

PREVIOUS AGREEMENTS WITH JAPAN—A LESSON FOR FSX

When considering the FSX deal, it is instructive to look back at previous coproduction agreements with Japan.

In 1978, the United States and Japan agreed to coproduce the F-15. The agreement listed those technologies which would not be releasable for national security reasons.

According to a 1982 report by the General Accounting Office, however, Japan has repeatedly requested and successfully negotiated release of much of this technology.

I do not necessarily blame Japan for this. When Japan requested this technology, we should have said no, plain and simple.

Unfortunately, U.S. officials were apparently too concerned about continuing the momentum of the program to call a halt to the technology flow.

Who is to say it will not happen again? For example, the administration contends that the FSX agreement limits Japan's access to the source codes for the flight computer. That may reassure some in this body, but it does not satisfy this Senator.

In fact, I am a little nervous about the agreement on this point. Indeed, the oral exchange which accompanied the side letters between Secretary Baker and the Japanese Ambassador is imprecise on this issue.

Let me quote from the oral exchange, which Secretary Mosbacher told us is similar to a colloquy on the floor:

In the section titled "Technology Transfer" it reads:

> Japan wishes to confirm that software will be made accessible to Japan as much as possible in order to make the FSX * * * substantively effective.

It seems to me that Japan could drive a truck through this provision, and use it demand access to the source codes for the flight computer.

The precedent I cited in the case of the F-15 agreement is not comforting. If the United States could not say no then, how can we be sure that we will this time?

Secretary Mosbacher assured us last week that "we have the leverage to make sure the agreement is followed."

With all due respect to Secretary Mosbacher, we had the leverage in the F-15 coproduction agreement, and it did not amount to much.

JAPAN'S REACTION

The proponents of the FSX agreement have argued that congressional objections to the FSX are puzzling to Japan, and will do great harm to the alliance.

In my view, this argument insults the intelligence of the Japanese and underestimates their ability to understand our system of government.

The Japanese were fully aware that Congress would play a role in reviewing this measure. And they knew all along that many in Congress were unhappy with the FSX deal.

IS OUR COMMITMENT TO THE PACIFIC THREATENED?

The argument has also been made that the FSX deal will cement our military relationship with Japan, and that if we cancel it, our commitment to the alliance and the security of the Pacific will be questioned.

This too is absurd.

The United States has over 50,000 troops in Japan, over 40,000 in South Korea, and two major bases in the Philippines.

In addition, the new multilateral aid initiative for the Philippines should ease anyone's fears that we are going to leave the region anytime soon.

So let us put aside any notion that we're not committed to the defense of the Pacific.

THE UNITED STATES-JAPAN ALLIANCE

The FSX question is symbolic of a much larger issue—a bilateral relationship that is severely imbalanced and dangerously frayed.

In my view, the scales have been tipped in Japan's favor for too long. While we have maintaned free and open markets, Japan has worked to protect many of its domestic industries.

And Japan has undercut many of our key industries, industries upon which we rely for our national security. For example, Japan has become a dominant player in semiconductors—an industry that is crucial to modern warfare—to the point where we are increasingly reliant on Japan.

In my view, Japan's actions in decimating our semiconductor industry calls into question their commitment to the defense alliance. For if Japan is so willing to undercut a key defense industry in this country, how can they expect us to continue to provide for her defense?

I am not suggesting that we pack up and go home. I am suggesting that Japan needs to be more sensitive to our defense needs.

As Ambassador Mike Mansfield has pointed out, our relationship with Japan is one of our most important. As two of the world's leading economic powers, close ties between the United States and Japan are crucial to world stability.

I am deeply concerned about the continuing tensions in the alliance, which have been exacerbated in recent years by our mounting trade imbalance. These concerns, however, do not require me to support a deal that I believe is not in the interests of the United States.

IN SUM: A BAD DEAL NOT WORTH THE PRICE

In the final analysis, we must keep in mind one fact: Japan intends to beome a competitor in the aerospace industry, and the FSX deal will serve as a stepping stone toward that goal.

There is no doubt that Japan believes that the FSX will help Japan compete in this field. In fact, cooperation with the West in military ventures is a key part of their competitiveness strategy.

Let me quote from a report issued last summer by the Ministry for International Trade and Industry called Japan's choices:

> In order not to lag behind the West in international competitiveness in the future, it is undoubtedly necessary to participate * * * in the military sector through close contact with top rank Western firms.

We should be honest about what Japan wants out of this deal. They want to increase their ability to compete in the aerospace field.

Why should we help them move toward this goal?

It seems to me the burden of proof in the case of the FSX should be on the proponents. And they have failed to make the case.

In my view, there are too many uncertainties and too many risks involved to go forward with this agreement.

I strongly oppose the FSX deal, and I urge my colleagues to join me in voting against it.

Mr. WALLOP. Mr. President, I would like to begin by briefly recapping the history of this agreement. It seems to me, as I look back over the course of events, that at every stage this process has been characterized by the unwillingness of the opponents of the FSX arrangement to take "yes" for an answer:

Initially, the Japanese wanted to domestically produce the FSX. The Reagan administration and Members of Congress strongly objected to this approach and the Japanese agreed to enter into a cooperative venture with the United States.

Last year, as part of its report on the fiscal year 1989 budget, this committee included language specifying conditions that should be included in an FSX MOU. The MOU signed in November 1988 embodied those recommendations.

In January of this year, a number of Senators wrote to President Bush urging him to conduct an interagency review of the FSX agreement, to include the Commerce Department and the U.S. Trade Representative. The President agreed to conduct such a review.

In March, under continued pressure from critics, President Bush announced his intent to proceed with the FSX agreement pending Japanese acceptance of certain clarifications. In April the Japanese agreed to these changes, but some are still not satisfied.

In my opinion, the administration is to be commended for negotiating an excellent agreement which balances both the economic and national security interests of the United States. From an economic point of view, this agreement guarantees the United States a 40-percent work share during both the development and production phase of the FSX project. This 40-percent share translates into at least $2.5 billion in business and 22,700 man years of work for U.S. industry. In addition, the United States will benefit from the flowback of any advanced Japanese technology developed during the course of the FSX project.

From a national security point of view, this deal will do the most to improve Japanese air self-defense capabilities—thereby reducing the burden on the United States—by providing the Japanese with an aircraft superior to both current United States fighters and any possible indigenous Japanese aircraft. Despite the fact that we now find ourselves in an era of glasnost, Soviet military capabilities in the Pacific continue to grow and the threat that the FSX is designed to counter is a real one.

We seem to be losing sight of the fact that Japan is our closest ally in the Pacific. The United States is committed by treaty to the security and defense of Japan. Therefore, it is in the interest of the United States for Japan to have a modern, well-equipped military force. This agreement contributes to that goal.

Despite the criticisms we have heard about Japanese defense efforts, we should keep in mind that the Japanese are currently the third largest defense spender in the world, with a record of increasing their defense budget in real terms by approximately 5 percent each year over the past decade. In addition, the Japanese contribute over $2 billion a year to support United States forces stationed in Japan. The argument made by some that Japan is not concerned with its own defense just does not stand up under scrutiny.

I think it is also important for us to consider what the alternative would be to the current agreement. An off-the-shelf purchase of F-16's is not an

option. The Japanese have never seriously entertained that possibility, and in my opinion it is hard to fault them for taking such a position. This is a trend that is seen worldwide as nations increasingly refuse off-the-shelf purchases of foreign defense equipment and insist instead on performing a portion of the work at home. We have seen this happen with our NATO allies, a number of whom are coproducing the F-16. We are not immune from this trend here in the United States.

The only viable alternatives to the current FSX agreement are Domestic Japanese production of a fighter; or—more likely—Japanese codevelopment and coproduction with Europeans. With this latter option, European companies will not only get the $2 to $3 billion in business that would have otherwise gone to the United States, the Europeans will also receive the advances in Japanese technology that result from the project as well as make deep inroads into the Japanese military market from which to obtain possible future defense contracts with Japan.

It is important to keep in mind that by rejecting this agreement at this late date and after the President has gone the extra mile to clarify important aspects of the agreement, we threaten not only the FSX deal but all future defense sales to Japan. The United States currently enjoys a virtual monopoly on defense trade with Japan—95 percent of all Japanese purchases of foreign defense equipment come from the United States. In 1988, the Japanese purchased over $1.5 billion in defense items from the United States—that is more than the combined purchases of Great Britain, France, and Italy. By contrast, the United States buys very little from Japan—approximately 90 million dollars' worth of components.

We will threaten this entire defense trade relationship, to say nothing of our overall relationship with Japan, if the United States is proven through this FSX process to be an unreliable trading partner.

Opponents of the FSX deal argue that FSX codevelopment will be a catalyst to the emergence of Japan as a major competitor for the United States aerospace industry. Leaving aside the fact that the United States aerospace industry supports this deal—and surely it is in the best position to know if this deal will create a competitor—the best way to ensure Japanese competition is to reject this agreement. If the United States allows the Japanese and the Europeans to marry their resources, with no United States control of the project, it is certain a formidable competitor to the United States will emerge.

By contrast, I am hard-pressed to find any disadvantages for the United States in proceeding with this agreement.

Mr. LUGAR. I yield as much time as the Republican leader may require.

The PRESIDING OFFICER. Senator DOLE, the Republican leader, is recognized.

Mr. DOLE. Mr. President, I would like to commend my colleague from West Virginia on his mastery of the legislative process—this amendment, if adopted, would certainly set a new precedent.

We just had a vote on the disapproval resolution, and the vote was 52 to 47.

This amendment would set forth a whole new way of doing business—in effect it would let the Congress negotiate technology transfer, and maybe that is fine. Maybe that is another way to kill the FSX deal. That is precisely what this amendment is all about. It was offered by one who is opposed to the transfer, and he made a great speech on his opposition.

Without looking at the merits of the new conditions put forth in the Byrd amendment, my question is why weren't these issues raised when the President—seeking a bipartisan consensus—came to us at the beginning of the year seeking our suggestions?

This amendment is the third bite of the apple. We were consulted in the Reagan administration, consulted in the Bush administration, now we want to be consulted once again. So, maybe what this amendment really says is let the Congress negotiate.

But the way this matter has been handled by Congress to date, leads me to believe that even a congressionally negotiated deal couldn't get through here without further congressional conditions.

Now that the Dixon amendment has been dealt with, I ask my colleagues, why are we voting on another amendment relative to FSX?

Mr. President, again as I have noted the Byrd amendment is simply another bite at the apple. What my distinguished colleague from West Virginia proposes will clearly result in further negotiations with the Japanese. I ask you, how many times are we going to require the administration to go back and renegotiate?

The Senate expressed its intent with respect to the FSX MOU in language on the defense authorization bill last year, and the administration complied. Further, this spring, at the request of Members of this body, renegotiations were initiated to address additional Member concerns. A better agreement resulted, and that brings us to today. Now we want to add more conditions to the agreement.

Is there any question in anyone's mind why our allies find us occasionally unreliable? We will have our day in court when a production MOU comes before us. As for now, the Japanese have been notified that critical engine technologies such as those described in this amendment will not be transferred to Japan by the United States under this program. The MOU already prohibits the sale or transfer of the FSX or any of its subcomponents without prior approval of the U.S. Government. Any absolute prohibition, however, would require negotiation.

Mr. President, I think we are plowing new ground with the Byrd amendment and its many conditions on the sale. I oppose it strongly on procedural grounds relative to the Arms Export Control Act—this is clearly a new way of doing business. From a policy standpoint, I made myself clear earlier that, although I would have preferred an outright purchase from the Japanese, we have now negotiated what I consider a supportable agreement and I, for one, don't feel that the codevelopment MOU requires any more conditions.

This is really the third bite at the apple, not the second but the third. We were consulted in the Reagan administration, consulted in the Bush administration. Now we want to be consulted once again. That is what precisely this amendment will do. So what it says in effect, is maybe Congress ought to negotiate; maybe they should. We negotiate nearly everything else now. We keep chipping away at Presidential powers, particularly in foreign policy areas, and now in trade areas.

It seems to me that if we start down this road every time something comes up why not just have a resolution of approval and we will put on all those conditions and maybe they are good conditions depending on your point of view. Why let the executive branch do anything without certain conditions and without Congress renegotiating with the Japanese or anybody else?

I do not know why we are voting on another amendment to the FSX. I thought the amendment was disapproval or approval.

So it seems to me that while I certainly respect my friend from West Virginia, the administration opposes this amendment. There is no doubt about it if this amendment should be adopted, get through the House and signed into law, it is going to require further negotiations with the Japanese.

How many times are we going to go back to the administration and ask them to negotiate?

I would say to those people who voted against the disapproval resolution what you are doing here if you change your vote you are voting now to switch your vote, and I am not certain that is what some would intend to do.

The Senate expressed its intent with respect to the FSX MOU in language

on the defense authorization bill last year and the administration complied.

Further this spring at the request of Members of this body renogtiations were initiated to address additional Member concern and a better agreement resulted and that brings us to today, and now we want to add more conditions to the agreement.

Is there any question in everyone's mind why our allies find us occasionally unreliable?

We will have our day in court when a production MOU comes before us and then we are going to have another chance. Congress is going to have another chance.

As for now, the Japanese have been notified that critical engine technology such as those described in this amendment will not be transferred to Japan by the United States under this program. The MOU already prohibits the sale or transfer of the FSX or any of its subcomponents without prior approval of the U.S. Government. Any absolute prohibition however would require negotiation.

So it just seems to me—and again I always defer to my friend from West Virginia as the expert when it comes to legislative strategy—but it seems to me, we are plowing new ground with the Byrd amendment. This is not just some little, simple resolution. It is a way to kill the FSX deal. There is no doubt about it.

That is why the Senator from Illinois stands up and praises it and says "It is even better than what I was trying to do," in effect.

So I do not think anybody should be deceived by the amendment.

I oppose it strongly on procedural grounds, relative to the Arms Export Control Act. It is clearly a new way of doing business, and if we are going to start a whole new way of doing business then this is one way to do it.

From a policy standpoint I made myself hopefully clear that although we would have preferred an outright purchase from the Japanese we have negotiated what a majority, 52 Senators, feel is a supportable agreement.

It seems to me that codevelopment MOU does not require any more conditions.

Some say it is only a sense of the Congress on the 40 percent. What really is at issue here, as I understand it, is whether or not the Commerce Department is going to have a role to play and they should have a role to play.

And I disagree with those in the administration who deny the Commerce Department a prior role.

This is in my view not just a defense matter, it is also a trade matter. But I would say to my colleagues who just voted against the disapproval resolution, this is in effect the same vote. It is just cleverly disguised. Oh, just a little approval resolution.

If this should become law this deal is dead. If that is what you want, that is one way to view it.

But it would seem to me and I would only quote briefly from the letter from Mr. Eagleburger:

The Administration's objections to these resolutions are based on the fact that they are unnecessary, and they impede the notification process. As you know, a resolution of approval is not procedurally required for notifications submitted pursuant to section 36 of the AECA. In our opinion, support for proceeding with approval of the commercial technical assistance and manufacturing licensing agreement, as notified, is properly expressed by defeating any joint resolution of disapproval.

Additionally, such resolutions of approval or affirmation, which include additional and unnecessary co-development and co-production directives, inhibit rather than facilitate implementation of co-production and co-development programs.

For those and other reasons, as I have indicated, the letter will be made a part of the RECORD, and the administration is opposed to this amendment.

I raised it with the President this morning. He indicated his opposition to it, not the author of the amendment but to the amendment.

The President feels he has negotiated in good faith. He has consulted the Congress. He has made changes. We have had our vote and let us move on with it, and that is precisely the point I would like to make.

Mr. President, I ask unanimous consent to have the letter from Secretary Eagleburger printed in the RECORD.

There being no objection, the letter was ordered to be printed in the RECORD, as follows:

THE DEPUTY SECRETARY OF STATE,
*Washington.*

Hon. ROBERT DOLE,
*United States Senate.*

DEAR SENATOR DOLE: I am writing you to express the Administration's strong opposition to joint resolutions of approval or affirming conditions relating to the export of technology and defense articles and services for co-development of the FS-X weapon system with Japan and with respect to co-production of the system. Such resolutions have been proposed in response to the May 1, 1989 notification that was submitted to Congress pursuant to section 36(d) of the Arms Export Control Act (AECA) concerning the proposed approval by the Department of State of a commercial technical assistance and manufacturing licensing agreement for the FS-X program.

The Administration's objections to these resolutions are based on the fact that they are unnecessary, and they impede the notification process. As you know, a resolution of approval is not procedurally required for notifications submitted pursuant to section 36 of the AECA. In our opinion, support for proceeding with approval of the commercial technical assistance and manufacturing licensing agreement, as notified, is properly expressed by defeating any joint resolution of disapproval.

Additionally, such resolutions of approval or affirmation, which include additional and unnecessary co-development and co-production directives, inhibit rather than facilitate implementation of co-production and co-development programs. The terms of the Memorandum of Understanding that has been concluded with Japan on co-development of the FS-X weapon system, and related understandings reached between the United States and Japan, are consistent with the underlying objectives of these resolutions—protection of U.S. security, economic, and technological strengths and interests. Implementation of additional conditions through a resolution of approval or affirmation, which would require renegotiation in some cases, would not materially advance these objectives.

The Administration strongly urges that the Senate take into account these objections.

Sincerely,

LAWRENCE S. EAGLEBURGER.

---

Mr. DOLE. I thank my colleague for yielding.

The PRESIDING OFFICER. Who yields time? The Senator from Indiana.

Mr. LUGAR. Mr. President, I yield myself as much time as I require.

Mr. President, let me follow up on the argument offered by the distinguished Republican leader and give it at least one more view so that Members of the Senate can come to grips with one of the basic issues of the Byrd amendment.

It suggests, in fact the Byrd amendment states, that the President shall consider the recommendations of the Secretary of Commerce, and then it goes through various things that the President shall do.

The problem with an amendment of this variety in a constitutional sense, Mr. President, is that the Congress is mandating that the President of the United States consider the recommendations of one of the Cabinet Members that he has appointed. The resolution does not give any leeway. It says the President shall consider the recommendations of the Secretary of Commerce.

I would raise the question, Mr. President, for sake of constitutional argument what if the President of the United States did not consider the recommendations of his Secretary of Commerce? What if he told the Secretary of Commerce, whom he has appointed as a part of his administration, that frankly, I don't think your idea is any good. Quite frankly you have an interesting point of view or you are trying to push a deal, but this is the Government of the United States of America. I am the President, and I frankly think that your argument is deficient. I really don't want you fooling around any more in this.

Mr. President, would that mean that here on the floor of the Senate we would hear anguished cries that the President of the United States has defied the Congress, that in fact he is in violation of the law, that the President of the United States by our mandate had to consider those recommen-

dations, that he had to do just what we said he had to do when he ever thought about any of these agreements, in negotiating them and working through his own thought process?

The amendment is mischievious on the fact of it because it delves into the administrative processes of the U.S. Government and the powers of the President.

The authors are well-meaning. They want to make certain that trade aspects of any deal are considered, and indeed they ought to be. Any President ought to consider those and it is a fair criticism that a President has not considered them.

Then the memorandum of understanding or the agreement such as the one we have had today before us ought to be rejected by the Congress as deficient because it did not come in from all sides.

That has not been the argument, Mr. President, about the FSX deal. It is freely admitted that Secretary Mosbacher played a very important role, that he personally came to the Foreign Relations Committee and other committees, confirmed his role and confirmed his support, that he was fully involved. The President of the United States and the Vice President have so affirmed.

But this amendment does not leave that alone. It is attached to the FSX deal. It mandates that the President must do these things, shall do these things. What are the penalties, Mr. President, if he does not?

I would just simply say, before Senators quickly dismiss all of this as simply an afterthought, that there are real problems, constitutional problems, in terms of the relationship with the President and the Congress, involved in this that ought not to be considered lightly.

There are many ways in which the Congress can deal with the President, but clearly the Constitution affords us the opportunity for advice and consent on his nominee for Secretary of Commerce. We have oversight of various activities of that role, of whoever the Secretary is, of the agencies under his control and his activities. There are many ways in which we go back and forth in our checks and balances.

But as an afterthought on the FSX deal, that we have affirmed this afternoon by a vote of 52 to 47, to begin to stipulate and to suggest that in fact a president who does not follow all of the course of thought that we deem for him to follow is in violation of the law seems to me to be a very unfortunate point of view and mischievous with regard to the constitutional process.

I am hopeful, Mr. President, that we will not adopt this amendment, that we will clear the decks, at least on the FSX question, by rejecting the amendment. I would say that failure to do that is to invite difficulty down the trail. That ought to be clearly perceived by all who have heard this debate.

Mr. President, I know of no further speakers on our side. I inquire of the distinguished author of the amendment if he is prepared to speak or to yield back time.

Mr. BYRD. Mr. President, I believe I only have 3 minutes remaining.

The PRESIDING OFFICER. The Senator from West Virginia is recognized.

Mr. BYRD. How much time remains to this side?

The PRESIDING OFFICER. Three minutes and 17 seconds.

Mr. BYRD. Mr. President, I hope that Senators will not be persuaded by these specious arguments concerning the Constitution. This amendment only says the President shall consider the recommendations of the Secretary of Commerce. It does not say the President shall accept the recommendations. If it were to try to command the President to accept the recommendations, then there might be some constitutional problem.

Mr. President, the provision developed with Mr. DANFORTH and the Armed Services Committee conforms to a draft agreement between the Commerce and Defense Departments as to how they should together, working together, better represent U.S. interests across the board in implementing and negotiating agreements with other nations. No further negotiations are required by the amendment for the MOU on development.

I listened to my good friend, the distinguished Republican leader, as he attempted to draw that thin brush across the picture. Mr. President, no further negotiations are required by this amendment. No conditions to the memorandum of understanding are included. None. It is an attempt to enhance the interests of the United States.

The administration has already said that Commerce will have a role and we are just attempting to write that into the record; that the Commerce Department will have a role.

We accept the President's word, but why not write it into the law? It is not just this administration, Mr. President. Administrations previous to this one have erred in their judgment in such arrangements. But this is a protection for all administrations and for the American people under all administrations. Let the administration change, then see how fast the footwork will change. This will protect the American people and their interests, the industrial and commercial interests of this country, under all administrations.

It is not a resolution of approval. If I understood what the distinguished Republican leader was saying, it is not a resolution of approval. As I understood from his reading of the letters from the administration, it is not a resolution of approval.

Mr. President, I hope that the Senate will adopt this amendment. It is offered in good faith. It is not an attempt to torpedo the agreement. This is looking down the road to the next agreement and merely saying to the administration, "You said the Commerce Department will have a role. We want to make sure the Commerce Department has a role." We are asking the President to consider any recommendations that the Secretary of Commerce makes. He will make the judgment on those recommendations.

Mr. President, if I have any time remaining, I yield it back.

The PRESIDING OFFICER. The Senator's time has expired.

The Senator from Indiana controls the remaining time.

Mr. LUGAR. Mr. President, does the Senator require time?

Mr. DIXON. No, thank my colleague. I was going to send my amendment to the amendment of the distinguished Senator from West Virginia to the desk and kind of expedite the procedure.

Mr. LUGAR. Mr. President, I will speak briefly and then yield back the time. I would simply indicate, as the Republican leader pointed out, that the President of the United States opposes the amendment. The administration opposes the amendment strongly.

We believe that it would not be useful, with regard to this agreement and with regard to constitutional misunderstanding, to adopt the amendment. Having said that, Mr. President, I yield back all time on our side.

The PRESIDING OFFICER. All time has been yielded back.

The Senator from Illinois.

AMENDMENT NO. 103 TO AMENDMENT NO. 101

Mr. DIXON. Mr. President, I send an amendment to the desk and ask for its immediate consideration.

The PRESIDING OFFICER. The clerk will report.

The assistant legislative clerk read as follows:

The Senator from Illinois [Mr. DIXON] proposes an amendment 103 to amendment No. 101.

Mr. DIXON. Mr. President, I ask unanimous consent that reading of the amendment be dispensed with.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment is as follows:

On page 3, line 20 of the pending amendment, strike "Committee on Foreign Relations of the Senate" and insert in lieu thereof: "Committees on Foreign Relations, Armed Services, Commerce, Science and Transportation, and Banking, Housing, and Urban Affairs of the Senate".

Mr. DIXON. Mr. President, all this amendment does is, on page 3 of the

amendment by my distinguished friend from West Virginia, his amendment suggests, beginning 6 months after the date of the enactment of this resolution and every 12 months thereafter, the Comptroller General of the United States, after consultation with appropriate officials of our country, will submit to the Speaker of the House of Representatives and the chairman of the Committee on Foreign Relations of the Senate a report describing the progress made in implementing the MOU between the two countries.

Now, I apologize because I have not served in the U.S. House of Representatives and do not know exactly how this is handled over there. But I am told by colleagues here who served there that the submission of this to the Speaker of the House means that it will go to the jurisdictional committees on the subject matter in the House. That is why they do not identify the various committees in the House. All I am doing is broadening my friend's amendment here so that it is not just the Foreign Relations Committee, but it is also Armed Services, Commerce, and Banking, Housing, and Urban Affairs.

Now, clearly those four committees are all jurisdictional on the subject matter for the obvious reasons. In case anybody wonders why Banking, Housing, and Urban Affairs, as my friend from Pennsylvania, who serves on that committee, knows, and he has been very involved in this, the Export Administration Act is always considered in Banking, Housing, and Urban Affairs. So that is a jurisdictional committee.

So all we are trying to do here is have the Senate involved in the process to the same extent that the House is involved.

My friend from West Virginia has no objection to this. I will not belabor the point further if there is no objection to the amendment, which I think is sound and in good order.

The PRESIDING OFFICER. Is there any further discussion?

Who yields time?

Mr. LUGAR. Mr. President, I yield myself as much time as I may require on the opposition side.

I simply will speak not in opposition but to indicate that on our side we are prepared to accept the amendment.

Mr. DIXON. I thank my distinguished colleague on the other side. I have no further comments and ask for a vote on the amendment.

Mr. BYRD. Mr. President, I certainly have no objection to the amendment and support it, likewise.

The PRESIDING OFFICER. Do the Senators yield back their time?

Mr. DIXON. Mr. President, I yield back my time.

Mr. LUGAR. Mr. President, I yield back my time.

The PRESIDING OFFICER. All time having been yielded back, the question is on agreeing to the amendment.

The amendment (No. 103) was agreed to.

Mr. DIXON. Mr. President, I move to reconsider the vote by which the amendment was agreed to.

Mr. HEINZ. Mr. President, I move to lay that motion on the table.

The motion to lay on the table was agreed to.

The PRESIDING OFFICER. The Senator from Pennsylvania.

AMENDMENT NO. 104 TO AMENDMENT NO. 101

Mr. HEINZ. Mr. President, I send an amendment to the desk and ask for its immediate consideration.

The PRESIDING OFFICER. The amendment will be stated.

The assistant legislative clerk read as follows:

The Senator from Pennsylvania [Mr. HEINZ] proposes an amendment numbered 104 to amendment No. 101.

Mr. HEINZ. Mr. President, I ask unanimous consent that reading of the amendment be dispensed with.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment is as follows:

At the end of paragraph (a) of section 3 of the amendment offered by the Senator from West Virginia [Mr. BYRD], add the following:

"Such report shall state—

"(1) whether any technology involved in development of the FS-X weapon system has been transferred to the Japanese space shuttle program or any other part of the Japanese aviation sector or aerospace technology;

"(2) whether any such technology has been diverted to any third party country unauthorized to receive such technology, in violation of the license and technology assistance agreement for the FS-X weapon system; and

"(3) whether any such technology has been made available, legally or illegally, to adversaries who could use such technology to the detriment of the North Atlantic Treaty Organization (NATO), the United States, any other member country of NATO, Japan, Australia, or New Zealand."

Mr. HEINZ. Mr. President, I made my reservations known concerning the lack of adequate safeguards over technology transfer in this agreement and certainly it is true that the Bush administration sought and received certain clarifications to the agreement. I join many Senators who have already said so. I applaud that effort.

But, in my view that effort, although meaningful, just did not go far enough and, therefore, because I am still concerned about the lack of sufficiently stringent technology safeguards in both the government-to-government MOU, and in the General Dynamics-Mitsubishi Heavy Industry Licensing and Technical Assistance Agreement, I am offering a clarification to the Byrd amendment regarding GAO's reporting requirements in section 3.

It is, briefly, my intention to require GAO in the report, the one that it submits pursuant to section 3 of Senator BYRD and Senator DANFORTH's amendment, effectively to tell us and, if possible, to certify that F-16 technology transferred under the LTAA will be properly safeguarded once it arrives in Japan. Specifically, the amendment calls for the GAO, in its report, to state three things:

First, whether any technology involved in development of the FSX weapons system has been transferred to the Japanese space shuttle program or any other part of the Japanese aviation sector or aerospace industry;

Second, whether any such technology has been diverted to any third party country unauthorized to receive such technology in violation of the license and technology assistance agreement for the FSX weapons system;

And, third, whether any such technology has been made available, either legally or illegally, to adversaries who could use such technology to the detriment of the North Atlantic Treaty Organization, NATO—the United States or any other member country of NATO—Japan, Australia, or New Zealand.

In sum and substance, Mr. President, what we want the GAO to do is to track and see how well the representations and requirements that have been agreed to and laid down are, in fact, followed through. It is my hope that at each and every turn, which means each and every report, all of us will be satisfied that the agreements are being adhered to and we will have, as the basis, something other than somebody's word that may or may not be verifiable that that is so.

So, I hope my colleagues will adopt the amendment.

The PRESIDING OFFICER. Who yields time?

Mr. BYRD. Mr. President, do I have control of the time on this amendment?

The PRESIDING OFFICER. The Senator from Illinois controls the time.

Mr. DIXON. I yield my time to the Senator from West Virginia.

Mr. BYRD. It is an amendment to my amendment. Would I not control the time on this side?

Mr. HEINZ. Mr. President, if I have any time, I yield it to the Senator from West Virginia, if I control the time.

Mr. DIXON. So do I.

The PRESIDING OFFICER. The Senators from Pennsylvania and Illinois yield time to the Senator from West Virginia.

Mr. BYRD. I think it is a good amendment. I do not remember how

that agreement was written but I will not argue the point now.

I like the amendment and I support it. I am willing to accept it and yield back the remainder of the time on this side.

The PRESIDING OFFICER. The Senator from Indiana.

Mr. LUGAR. Mr. President, to the best of my knowledge, the control of time is with the distinguished Senator from West Virginia and the Senator from Pennsylvania. But I inquire of the Senator from Pennsylvania if he would yield 2 minutes to the distinguished Senator from Rhode Island who wishes to be heard?

Mr. HEINZ. If I am in control of the time, I will be happy to yield.

Mr. CHAFEE. Mr. President, I wanted to speak on the overall Byrd amendment rather than the various other amendments here.

I would hope——

The PRESIDING OFFICER. Who yields time?

Mr. CHAFEE. I will need just 1 minute.

The PRESIDING OFFICER. The Senator from Indiana.

Mr. LUGAR. Mr. President, just for clarification, as I recall the unanimous-consent agreement, 10 minutes was provided for the Heinz amendment, 5 minutes to a side.

The PRESIDING OFFICER. That is correct.

Mr. LUGAR. So I am not certain which side would yield the 2 minutes to the distinguished Senator from Rhode Island, but I have asked, I have appealed, that one side or the other controlling time do so.

Mr. HEINZ. Mr. President, how much time remains to either side?

The PRESIDING OFFICER. The Senator from Indiana has 1 minute and 4 seconds left; the Senator from Illinois has 4 minutes and 29 seconds left.

The Senator from Illinois.

Mr. DIXON. Mr. President, if I might accommodate my friend from Rhode Island, I would be delighted to yield several minutes to him for his speech if we could first adopt the Heinz amendment, by my friend the distinguished senior Senator from Pennsylvania, to which there is apparently no objection.

Why do we not just adopt that and then let my friend from Rhode Island make his speech?

The PRESIDING OFFICER. The Chair would point out that the time has expired for debate on the Byrd amendment. So that if the Senator from Rhode Island wishes to speak, it is probably wise for someone to yield him 1 or 2 minutes at this point.

Mr. HEINZ. Mr. President, let me make the following unanimous-consent request that might facilitate moving on; that is at the disposition of the Heinz amendment that the Senator from Rhode Island be yielded 2 minutes.

The PRESIDING OFFICER. Is there objection? Without objection, it is so ordered.

There being no further debate, the question is on agreeing to the amendment offered by the Senator from Pennsylvania.

The amendment (No. 104) was agreed to.

Mr. HEINZ. Mr. President, I move to reconsider the vote by which the amendment was agreed to.

Mr. DIXON. Mr. President, I move to lay that motion on the table.

The motion to lay on the table was agreed to.

The PRESIDING OFFICER. The Senator from Rhode Island is recognized for 2 minutes.

Mr. CHAFEE. Mr. President, that only took 3 minutes to get that 2 minutes, and I appreciate it. I just say this, Mr. President, briefly, I think this is an unfortunate amendment. I just do not understand quite why it is being presented. I have heard the discussions on both sides. It seems to levy the most extraordinary requirements in here and says that the Secretary of Commerce, when he has reason to believe that any such memorandum of understanding has an adverse effect, shall recommend to the President any modification he deems necessary.

I mean, if we have ever had a case of micromanagement, this is it. We are determining what the Secretary of Commerce's relationships will be with the President of the United States; a person who he is serving under and subject to.

I just do not understand why this amendment is being brought forward. I would hope it would not prevail. I have heard the arguments of our leader on the Republican side, the view of the administration on this amendment. It is going to make life, certainly, more difficult for them.

And I further understand, am I not correct, and I would ask the distinguished Senator from Indiana, when they get to the production agreement, then do they not have to come up with a further memorandum of understanding and get the approval of that in the Senate of the United States?

Mr. LUGAR. That is correct.

Mr. CHAFEE. In other words, if we do not like what is taking place we get another bite at the apple. So, it seems to me enough is enough. Let us get on with this agreement.

What will happen is, I think, probably the President will veto this if this prevails. It will delay the whole thing, exacerbate our relationships with Japan unnecessarily and the point they are trying to make here will be taken care of subsequently when we get to the approval of the memorandum of understanding on the production agreement.

So, I think it is unfortunate and I hope it would not prevail. I want to thank everybody who gave me this splendid 2 minutes.

The PRESIDING OFFICER. The question before the Senate is agreeing to the amendment offered by the Senator from West Virginia, as amended.

Mr. BYRD. Mr. President, I ask for the yeas and nays.

The PRESIDING OFFICER. There is a request for the yeas and nays. Is there a sufficient second?

There is a sufficient second.

The yeas and nays were ordered.

The PRESIDING OFFICER. There being no further debate, the question is on agreeing to the amendment of the Senator from West Virginia [Mr. BYRD], as amended.

The yeas and nays have been ordered. The clerk will call the roll.

The legislation clerk called the roll.

Mr. CRANSTON. I announce that the Senator from New York [Mr. MOYNIHAN] is necessarily absent.

The PRESIDING OFFICER (Mr. ROCKEFELLER). Are there any other Senators in the Chamber who desire to vote?

The result was announced—yeas 72, nays 27, as follows:

[Rollcall Vote No. 67 Leg.]

YEAS—72

| | | |
|---|---|---|
| Adams | Exon | Lott |
| Baucus | Ford | McConnell |
| Bentsen | Fowler | Metzenbaum |
| Biden | Glenn | Mikulski |
| Bingaman | Gore | Mitchell |
| Boren | Graham | Murkowski |
| Boschwitz | Grassley | Nunn |
| Breaux | Harkin | Pell |
| Bryan | Heflin | Pressler |
| Bumpers | Heinz | Pryor |
| Burdick | Helms | Reid |
| Burns | Hollings | Riegle |
| Byrd | Humphrey | Robb |
| Coats | Inouye | Rockefeller |
| Cohen | Johnston | Rudman |
| Conrad | Kasten | Sanford |
| Cranston | Kennedy | Sarbanes |
| D'Amato | Kerrey | Sasser |
| Danforth | Kerry | Shelby |
| Daschle | Kohl | Simon |
| DeConcini | Lautenberg | Stevens |
| Dixon | Leahy | Warner |
| Dodd | Levin | Wilson |
| Domenici | Lieberman | Wirth |

NAYS—27

| | | |
|---|---|---|
| Armstrong | Gramm | McClure |
| Bond | Hatch | Nickles |
| Bradley | Hatfield | Packwood |
| Chafee | Jeffords | Roth |
| Cochran | Kassebaum | Simpson |
| Dole | Lugar | Specter |
| Durenberger | Mack | Symms |
| Garn | Matsunaga | Thurmond |
| Gorton | McCain | Wallop |

NOT VOTING—1

Moynihan

So the amendment (No. 101), as amended, was agreed to.

Mr. DIXON. I move to reconsider the vote by which the amendment was adopted.

Mr. HEINZ. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. MITCHELL. Mr. President, may we have order.

The PRESIDING OFFICER. Senators will leave the well and cease their conversations so the majority leader can be heard.

Mr. MITCHELL. Mr. President, for the benefit of my colleagues who have asked about the schedule for the remainder of the evening, there remains for disposition the resolution by the distinguished Senator from Alaska. I understand that he does not seek a rollcall vote, nor does any other Senator. I also understand that no Senator is seeking a rollcall vote on final disposition of the pending resolution. This being the case, then, there will be no further rollcall votes tonight.

We will continue until we complete action on those two matters. The Senate will be in session tomorrow afternoon for disposition of the conference report on the minimum wage, and there will be a rollcall vote on that tomorrow afternoon.

Mr. CRANSTON. Mr. President, today I would like to join with several of my colleagues to give my support to the FSX agreement now before the Senate.

There have been three major concerns raised by opponents of this agreement: the trade deficit, the transfer of sensitive technology, and the interests of our civilian aviation industry.

With respect to the trade deficit, while it is clear that the most satisfactory arrangement for the United States would be for the Japanese to purchase our F-16's directly, it is equally clear that this option is not available. The Japanese have steadfastly refused to buy the F-16: They want an aircraft that will meet specific mission requirements that the F-16 is not designed for. It is unreasonable to demand that Japan purchase an aircraft that does not respond to Tokyo's needs. Even if they want the F-16, it would seem unreasonable for us to demand that the Japanese purchase it "off the shelf" when we do not make the same demand of our other allies, few of whom purchase aircraft "off the shelf" from us.

When it became clear that the Japanese would not purchase our F-16's, we began negotiations with them for the coproduction agreement. We argued, rightly, that the Japanese should be purchasing United States goods when possible in order to reduce the trade imbalance. This issue is addressed satisfactorily by the FSX agreement, which stipulates that 40 percent of the production is to be done in the United States—which will translate into 2.5 billion dollars' worth of work for the United States. This agreement also provides for 22,000-man hours of work. And it is 100 percent financed by the Japanese.

On the issue of the transfer of sensitive technology, I believe the initial agreement did not provide adequate safeguards to protect our technology. However, I believe the renegotiated agreement provides sufficient safeguards to ensure that only technology essential to the project is transferred. Moreover, this technology is largely distinct from technology used in the civilian aircraft industry.

I share the concerns expressed by many of my colleagues regarding the need to maintain the competitive edge of our civilian aviation industry. I believe we must ensure that the long-term interests of private industry are not sacrificed. In this case, I believe our civilian aircraft industry is not fundamentally threatened. We will not be giving the Japanese significantly more aircraft technology than they have already obtained through our F-15 coproduction agreement, or could obtain on the open market.

Mr. President, in order to better safeguard America's commercial interests in the future, I recently introduced legislation in the Senate which would give the Commerce Department representation in the National Security Council. This legislation will ensure that future proposals to export sensitive technology are evaluated from an economic perspective as well as defense viewpoint.

I believe that the FSX agreement is far from ideal. But it is one that was entered into at our Government's initiative, and the Bush administration's demands for clarification and safeguards have been largely met.

Mr. President, I am prepared to support this agreement in good measure because I am committed to working with our friends and allies in Japan, not against them. I regret that there are many who are too quick to point a finger at Japan, to blame Japan for all our trade woes. It is my conviction that while Japan, indeed, continues to engage in several unfair trade practices, much of the blame for decreasing American competitiveness rests with ourselves. We need to do a better job of education and training, of analyzing and penetrating foreign markets. We need to lower our voices and pull up our socks. "Japan-bashing" is no prescription for future success in industrial competition. And while the FSX agreement is by no means perfect, it is a deal we should move forward with, with the determination to do a better job in the future both at home, and in our relations with our valued friends in Japan.

WAKE UP, AMERICA

Mr. D'AMATO. Mr. President, I rise today in continued strong opposition to the FSX deal with Japan. FSX is a bad deal for America and should be rejected.

If we sell F-16 technology to Japan as proposed by the FSX memorandum of understanding, we are taking a major step toward undermining our own national security. One of Japan's declared goals is to build a world-class aerospace industry. They will build it at our expense, using our technology as its foundation, just as they built the VCR and television industries.

Unlike televisions and VCR's, our aerospace industry is essential to our national security. In the 21st century, our ability to maintain our independence and sovereignty, to preserve and protect our freedom, will depend upon our military industrial base. The aerospace industry is a very major part of that military industrial base.

We learned about the importance of our military industrial base in World War II by Francis Walton, he wrote:

> In 1944 industry had performed its most significant service: The rescue of the free world from tyranny. Its production alone had made America the dominant power among nations.
>
> The United States in 1944—
>
> Built one plane every five minutes;
>
> Produced 150 tons of steel every sixty seconds;
>
> Turned out 8 aircraft carriers a month, and launched 50 merchant ships each day. * * *

Mr. President, the shipyards that launched those aircraft carriers and merchant ships are largely shuttered and dark. The skilled workers have retired or moved on to other employment. Today's most productive shipyards are located in Japan, Korea, and Taiwan.

The steel mills that smelted the steel that won World War II are also largely gone. They, too, are victims of foreign competition—and our own shortsightedness.

Only the aircraft factories remain. They don't build as many planes now as they did in 1944, but they are still there, as are the talented and dedicated men and women who work in them.

The Department of Commerce, in its 1989 U.S. Industrial Outlook, predicted that the aerospace industry would run a trade surplus of $17.1 billion in 1989. It is, simply stated, one of the strongest manufacturing sectors in U.S. foreign trade.

Yet, here we are trying to sell it for a handful of silver. Yes, it will be nice to have the money—$480 million—from the FSX codevelopment program. The promise of a 40-percent share of the coproduction is attractive.

The program is that we spent $7 billion for this technology, and the promise of coproduction is just that—a promise. And one that, according to Japanese press reports, the Japanese Ambassador has denied.

In World War II, the critical technologies were steel, rubber, ball bearings, and machine tools. American factories and refineries gave us the tools without which our soldiers, sailors, and airmen could not have won.

In the 21st century, what technologies will be critical?

Last year, section 823 of the Defense Authorization Act, Public Law 100-456, required the annual submission of "* * * A plan for developing the 20 technologies considered by the Secretary of Defense and the Secretary of Energy to be the technologies most essential to develop in order to ensure the long term qualitative superiority of United States Weapons Systems."

This year, the Department of Defense submitted the first of these required critical technology plans.

In this plan, DOD identified 22 critical technologies.

I won't read this list to you. In a separate chart inside the study, DOD identified 14 of these 22 technologies as essential to aircraft.

In this same chart, DOD identified 13 of these technologies as essential to submarines.

Mr. President, this report was presented to the Armed Services Committee on March 17. It was reported by the media, but without much fanfare—just another day, boring Government report.

But in appendix A to the report, where the Defense Department went into detail about each individual technology, there was important information about Japan.

Eight of the thirteen critical technologies identified as essential to submarines in this report are Japanese targets, according to this appendix.

The Japanese have also targeted 9 of the 14 technologies identified by the report as being critical to aircraft.

Let me explain what I mean when I say that the Japanese have targeted these technologies. I will start with the first critical technology, microelectronic circuits and their fabrication. The report stated:

Today, Japan is considered the leader in memory device manufacture (such as dynamic random access memories) while the U.S. leads in microprocessors and application—specific integrated circuits. Japan is believed to be equal to (or slightly ahead of) U.S. efforts in Gallium arsenide integrated circuit fabrication techniques.

Current trends suggest that the United States continues to lose ground to Japan in a growing number of microelectronics fabrication technologies. The most rapid decline appears to be in basic materials, packaging, and mask blanks. Today, the U.S. appears to have a clear lead in only two key areas—In Computer-Aided Design and in implantation. In every other key area, Japan is judged to be at least equal to the U.S. or has taken the lead. If current trends continue the United States can be expected to become dependent on Japanese suppliers of many key materials and production and test equipment by the year 2000.

Let's look at the second critical technology area, the "Preparation of Gallium Arsenide and other compound semiconductors." The report said:

Japan is the undisputed leader in the preparation of Gallium Arsenide materials technology, making many of the major fabrication advances in the late 1970s and early 1980s. In fact, the Japanese are now poised to take a clear leadership position over the United States if current trends continue for several more years.

The fifth critical area of technology, machine intelligence and robotics, is the next one identified as essential to submarines and aircraft. The report states:

Japanese robotics R&D will benefit from a $500 million 10-year project called the fifth-generation computer. Additionally, in 1983 a 7-year joint project was formed under the ministry of international trade and industry (MITI) to advance Japanese Robotic R&D. The MITI project addresses sensors for sight and touch; vision control; versatile robot arms capable of both high precision and high weight capability; efficiency motors for robots; and low-weight, high-strength materials for robots.

Also identified as essential to aircraft and submarines is the seventh critical technology, integrated optics. The report states:

Japan is pursuing research and development in all areas of optical processing. Government, industry, and Universities are all heavily involved. The key government participant is the Ministry of International Trade and Industry (MITI). Most of the large electronics companies in Japan have made a commitment to this effort. The optoelectronic industry and technology development association * * * is a special trade organization founded in 1980 to coordinate industrial activity, foster cooperation, and encourage standardization. Universities in Japan are also playing a key role. They perform much of the basic materials research on which the technology development is so dependent. In summary, Japan has a large, well coordinated program addressing all aspects of optics.

Next, we have fiber optics. The report states:

Japan clearly leads the world in converting fiber optic technologies to various commercial applications and has manufactured considerable amounts of law loss optical fibers. * * * In 1988 the Japanese (FUJITSU) demonstrated the first broadband optical information service.

Rather than going through the entire list, I'm going to skip ahead to the next to the last critical technology, and the last one identified as essential to aircraft and submarines, superconductivity. The report states:

Among friendly nations Japan maintains the most vigorous superconductivity program, one of magnitude on a par with that of the U.S. Their program is well balanced, extending across both low temperature superconductivity and high temperature superconductivity and across both small-scale and large-scale applications. Of particular concern is their commanding position in low temperature superconductivity digital electronics, which could very well comprise the technology of choice for a future and much-higher-performance generation of supercomputers. Moreover, being first in low temperature superconductivity digital electronics builds a strong foundation for leadership in high temperature superconductivity digitalelectronics as well.

Mr. President, what we are doing with the FSX deal is pouring gasoline on a fire. You will recall how many times the Japanese Ministry of International Trade and Industry [MITI] was mentioned in the report. It could have been mentioned more often, because it and the Japanese defense agency are the key coordinators of this effort to dominate these technologies.

Remember, nine of these critical technologies are Japanese targets.

This is our problem. We need to retain dominance in the technologies that are essential to these weapons systems and our ability to support and produce these weapons systems. Yet here we are, about to seel the F-16 technical data package to Japan, data from which they can learn many things.

Let us go back to the major issue. This next chart shows all of the areas identified in the DOD critical technologies report where the Japanese are making major effort.

Wake up America.

This is our future—our national security is at stake.

It must not be for sale, for the sake of good relations or for any other reason. Japanese dominance in these areas will tie our hands, putting limits on our foreign policy and on our ability to act in a crisis.

If we have to go to Tokyo for parts—or for entire weapons systems—we will also have to go to Tokyo for approval of our policies. When they speak, we will listen. When they object, we will hesitate to act.

This is unacceptable. Now is the time for us to act. We must say no to the FSX deal and make it stick.

In closing, I again urge my colleagues to remember those closed shipyards and steel mills, and what they contributed to our national survival in World War II. FSX goes to the heart of our future security. We must not let our aerospace industry experience the same fate as our smokestack industries, or our security will be in the hands of Japanese bureaucrats.

Mr. PELL. Mr. President, the distinguished President pro tempore [Mr. BYRD], and the Senators from Missouri [Mr. DANFORTH] and New York [Mr. MOYNIHAN], and I are offering an amendment that would apply critically important safeguards to the FSX codevelopment arrangement, as well as to any future agreement or coproduction.

In drafting this amendment, we took care to ensure that our amendment would not detract from the vigorous and well-informed debate on the merits of the case. Most particularly, we did not see our amendment as an alternative to the resolution of disapproval offered by the Senator from Illinois [Mr. DIXON]. We saw this

amendment as a necessary safeguard in the event the administration's proposal succeeded, as now appears will be the case. We believe that it is important that the Senate put safeguards in place and do so now. We believe further that the amendment merits the broad, bipartisan support of both supporters and opponents of the arrangement.

Mr. President, I must tell you that I personally have a number of concerns regarding this sale. In the end, I decided that the President should be given the benefit of the doubt. Accordingly, I voted against the Dixon resolution. At the same time, I believe it is crucial that the Congress enact the controls incorporated in our amendment, in order to ensure that this is a fair deal for the U.S. Government, as well as for the commercial firms involved and for American workers.

Mr. President, the purpose of our amendment is to ensure the Governments of the United States and Japan clearly understand that the Congress insists upon strict standards in the joint development phase, as well as in the coproduction phase, should the FSX project proceed into production.

Our amendment would apply an important standard in the codevelopment phase. The amendment would require that all technology, defense articles and defense services provided to Japan by the United States Government or any United States corporation or entity to codevelop the FSX shall be subject to the requirements of section 3 of the Arms Export Control Act. This would make certain that the controls regarding third-party transfers normally applied to regular sales would be applied fully to the codevelopment.

In an unprecedented and, possibly, precedent-setting arrangement such as this, it is crucial to be absolutely certain that these safeguards are assuredly in place.

With regard to any coproduction phase, the amendment would apply the same standard on third-party transfers. In addition, the resolution expressly prohibits the sale or retransfer by Japan of the FSX weapons system or any of its major subcomponents that may be codeveloped or coproduced with the United States. This will ensure that the FSX weapon will be utilized solely in Japan's national defense and not be ultimately in competiton with United States aircraft on the international market.

In addition, the amendment would prohibit the transfer to Japan of critical engine technologies. This prohibition would include, but not be limited to, hot section and digital fuel technologies. This prohibition is consistent with an assurance given to the Committee on Foreign Relations by Secretary of Defense Richard B. Cheney. The amendment serves the important purpose of making this assurance a matter of law. This will safeguard against any Japanese effort to proceed alone with engine production instead of purchasing the engines or obtaining them through a carefully constructed licensed coproduction agreement with us.

Finally, with regard to controls, the resolution expresses the sense of the Congress that any coproduction memorandum of understanding should specify that the U.S. share of the total value of that coproduction shall not be less than 40 percent of that value, including spare parts and support. This will make clear the importance that Congress attaches to the assurances given in the April 28, 1989, exchange of letters between Secretary of State Baker and the Japanese Ambassador, Nobuo Matsunaga.

The amendment will also require that the Comptroller General monitor the codevelopment closely and report annually thereon to the Congress. In addition, the amendment will ensure that the Secretary of Commerce is a key player as this arrangement progresses and in subsequent phases.

Mr. President, I regret that this has been such a contentious and troubling issue. That need not have been the case.

Clearly, the previous administration did not do at all well either in consultations with Congress or in coordinating internally among its own departments. As a result, a deal was formulated which raised a number of concerns whether our national security, foreign policy, and economic interests had been properly served. President Bush was quite correct to direct a reevaluation, after hearing of congressional and executive branch concerns. The reevaluation led to further discussions with the Japanese and the side letters of April 28. I believe that the side letter removed some key concerns. Nonetheless, I hope the administration realizes that a better handling of the negotiation from the start would have obviated the need for the subsequent fixes.

We and the Japanese have many interests in common and should be interacting with greater harmony. The contentiousness and suspicion which has been brought about in our economic and commercial relations has clearly infected our political and security relationship. Even if this proposal is allowed by the Congress, the Japanese Government and industry must see this debate as a clear warning that the economic and commercial relationship must change substantially—and as soon as possible—for the better. It is intolerable for us to be, in effect, the guarantors of Japanese security interests and have Japan still reluctant to give a fair deal on the economic front. We have stood by them and intend to continue doing so. As we do so, however, we must be treated honestly and fairly.

If this is understood here in Washington and in Tokyo, I would hope that the Japanese will make it clear to us that they will comport themselves so as to quickly allay the fears and concerns now evident. If so, the debate will be markedly different several years from now when the Congress is asked to approve a coproduction arrangement for the FSX. I would hope by then the concerns and mistrust so evident now will have been replaced by economic, commercial, diplomatic, and security relationships marked across the board by mutual trust and fairness.

Mr. SIMPSON. Mr. President, I rise in opposition to the resolution of disapproval of the joint agreement to develop the fighter support-experimental, or FSX.

The agreement was carefully worked out in the Reagan administration and now "fine tuned" by the current administration, and it is one that is mutually beneficial to both the United States and Japan, and it is acceptable to the aerospace industry in this country. Under the agreement, Mitsubishi and General Dynamics will work closely together to modify F-16 fighter jets. Japan will fund the entire cost of the program.

This agreement assures United States firms 40 percent of production contracts, and it assures that Japanese access to certain sensitive software will be restricted. Any technology that is developed from F-16 technical data will be returned to the United States, and we will have the exclusive option to purchase any technology that the Japanese develop.

Japan and the United States are allies and this agreement works to benefits both of us. The Japanese were not interested in purchasing the existing F-16, but they were very interested in developing their own technology. This agreement protects our interests—both security and commercial.

World War II ended nearly 45 years ago. This is not a trade war issue. We still disagree with our fine ally from time to time, but this is an occasion on which we can and should link arms and work together to implement this peacetime agreement.

Ms. MIKULSKI. Mr. President, today's vote on the F-16 codevelopment and coproduction agreement with Japan represents one of the knottiest issues the Senate has faced in a long time. On the one hand is the promise of short-term financial gains and U.S. employment; on the other hand is the danger of transfering sensitive technology to our major economic competitor.

I will vote to disapprove the agreement.

The technology we are proposing to transfer in this package is not state of the art, but it is a significant step forward for the Japanese. In the past the Japanese have built major sectors of their economy on technologies legitimately obtained from United States sources. They transformed these into high quality consumer goods aggressively marketed around the world. I have every reason to believe that they could, and would, do the same with our aerospace technology.

If the Japanese were simply interested in acquiring an aircraft to fulfill the mission of protecting their sealanes, then it would make more sense to buy the F-16. It is less than half the cost of the FSX. Another option is to coproduce the F-16 with the United States retaining all sensitive technology.

If their main interest is to find a way to keep their aircraft workers employed as their F-15 and F-1 production lines wind down, then coproduction would do the job.

If, on the other hand, their goal is to obtain advanced aeronautic expertise to develop their own industry—as Japanese leaders have acknowledged openly—then it is clearly not in our best long-term interest to create a competitor to our own industry by handing over billions of dollars in United States technology. A Japanese aerospace industry could not sustain itself merely by supplying domestic needs; it would have to enter the world market.

Let us look to the future. Let us learn from the past.

U.S. ingenuity and know-how have produced the world's best military and civilian aircraft. Despite intense competition from other governments, we are the supplier of choice in world markets. Aircraft sales are one of the few bright spots in our dismal trade record. We will need to maintain our superiority in the years to come, and we won't be able to do that if we give a leg up to one of the world's most dynamic economies. It would not be wise to risk the future of U.S. aerospace workers in exchange for the U.S. jobs to be gained on this one project.

The Japanese economy has already built upon United States technology to establish extraordinarily successful electronics and auto industries. Let us not add aircraft to that list.

Japan is an ally, and defense and economic ties must be maintained. I am not convinced, however, that the FSX agreement is necessary to fill a defense need. I believe that it can only exacerbate the tense trade situation that now exists between our two countries.

Mr. BOND. Mr. President, the FSX deal, under which General Dynamics will codevelop with Mitsubishi Heavy Industries a new fighter based on the F-16 has been a topic of hot debate on the floor for many months now.

We have heard Members on both sides of the issue give extensive and detailed arguments in support of their position. I do not intend to go over all of the issues that have been raised. A fact which probably pleases everyone.

However, I would like to discuss a few points that I believe Senators ought to be considering as they decide how they will vote on the resolution now before us.

I will support the agreement because, although I agree with my colleague from Missouri that in future deals we need to ensure that our economic concerns are given appropriate weight earlier on in the process, I believe that the modifications negotiated by the Bush administration make the deal a good one for the United States.

I would also agree with my colleagues who have said that everyone would be much happier if the Japanese simply bought American fighters off the shelf. However, the Japanese are not going to do that, and I do not believe we are in a position to force them to do so. I wish we were. But this is 1989, not 1949.

Mr. President, if we do not follow through on this deal, it is clear the Japanese will proceed on their own with the development and production of the FSX. It is important to remember that, initially, that was the course the Japanese wanted to pursue. It was only after strong objection from Members of Congress and the administration that the Japanese Government agreed to negotiate a deal with United States aerospace companies.

We all know that the Japanese have a history of unfair trade practices and protectionism. I believe as much as anyone that we must hold them accountable for their actions and pressure them to open their markets. What I do not think we should do, however, is throw up our hands and say that by our so-called giving away of 15-year-old technology, that somehow the Japanese will whiz by us and take away our aerospace business.

Implicit in this argument is that American workers cannot compete with their Japanese counterparts. I find this line of reasoning offensive. We do compete, in fact we're winning, and I know we will continue to do so.

I say this as a representative of one of the Nation's largest aerospace producing States—as someone who is vitally interested in U.S. aerospace jobs and in the long-term health and competitiveness of our aerospace industry.

Instead, the way for us to maintain our critical lead in aerospace is by supporting the development of new technology through programs such as the national aerospace plane.

Therefore I believe it is a mistake to try to maintain our leading position in the aerospace field by spending all our time looking back, checking to see who, if anyone is gaining on us. We should stick with what got us so far ahead to start with, always looking forward, developing the next generation technologies, as the competition tries to figure out or copy our old.

Mr. President, I hope my colleagues will vote to support this deal. I yield the floor.

Mr. HELMS. Mr. President, I have said many times during the past few months that the FSX proposal is a bad deal for America, and I have given a detailed listing of the reasons why it is a bad deal. Today, since we will vote shortly on the resolution of disapproval of the FSX program I would like to discuss several misleading arguments put forth by the proponents of FSX that should not go unchallenged.

But before I do, I would like to read a letter from Tom Clancy, the best selling author, to the Business and Industrial Council on the subject of FSX. I had the privilege to attend the Army-Navy game with him last year and I know him to be a thoughtful and reflective man who understands well the importance of U.S. leadership in technology. I quote him with his permission. Here is what he wrote about the FSX program:

> SIR: I find myself in total agreement with you on the FSX issue. At the most benign level, it smacks of GM sending R&D money to Ford. More disturbingly, however, why do we refer to Japan as an ally? What military or strategic services have they ever performed for us? The bases we have on Japanese soil, I seem to recall, we won the old fashioned way. An alliance is an exchange of services and interests, and I see that element of exchange somewhat lacking in this case. This is the opinion, I hasten to add, of the number one best-selling author in Japan. I am against the FSX deal. If they want some good fighter planes, let them purchase the planes, for cash, just as I purchase Nikon cameras and Sony electronics gear.
>
> If there is anything I can do to assist you on this issue, please let me know.
>
> Regards,
>
> Thomas L. Clancy, Jr.

I think the letter speaks for itself and there is nothing that I need to add to it directly. I might say though that my mail, and I understand the mail of quite a few other Senators, is, like Mr. Clancy's letter, running strongly against the FSX. The American people are not fooled one bit by the false claims made by the proponents of FSX.

Now let me turn to some of the more misleading arguments that have been put forth by the FSX advocates. The proponents of FSX make much of the fact that they believe approximately $2.5 billion worth of work will come to the United States as a result of the FSX program. They think that the United States should be very satisfied that the Japanese are going to give us this workshare. What's more, they say

that it is about equal to what the United States would have gotten had there been an outright buy of F-16's.

Let us do a litle simple arithmetic, Mr. President, to see if the FSX proponents are correct in their claim. General Dynamics offered to sell the Japanese the 130 airplanes they need for the FSX mission for about $3 billion. If the Japanese had been fair and cooperative allies, they would have begun purchasing those planes a year or two ago, in order to meet the very real Soviet threat which exists today.

If the Japanese had done the fair and cooperative thing, the first F-16's could be in Japan now and we wouldn't be standing here discussing FSX at all. And in the next year or two, all 130 planes could have been delivered. That means that the entire $3 billion of a direct buy could have come to American companies and the American workers by 1991 or 1992.

Let's look again at the current FSX agreement. Right now the FSX deal guarantees the United States only $480 million during the development program, which will last until 1996 or so. After that, if, and that's a mighty big if, the FSX goes into a production phase, the Japanese say in a side letter the United States will get approximately 40 percent of the production program—again that is if the program goes into production and if the Japanese live up to the side letter.

Now I am not an economist, Mr. President. But I do not have to be one to understand that the FSX program will provide a guarantee of only $480 million between now and 1996 and the hope of $2 billion between 1997 and 2007. You will note that I said 2007 because that is how long the FSX production program will take. I do not have to be an economist to know that the total proposed FSX share of $2.5 billion over the next 18 or 19 years does not equal the $3 billion we should have earned by 1992 from the sale of F-16's. Cash up front is always better than payment in dribs and drabs over a 20-year period.

But that is what the administration is telling us, Mr. President. They have said over and again that the FSX earnings would be about the same as the earnings from a direct buy of F-16's would have been. That is total nonsense, Mr. President. I think the American people understand that the Japanese and the FSX proponents are in cahoots on this one. They are trying to put the best face on the figures to lull us into thinking that we got as good a deal as if the Japanese had bought F-16's. But that is simply not true.

And what about spare parts for the FSX? I am sure, Mr. President, you will not be surprised to learn that there are no provisions in the FSX agreement for American companies and workers to make FSX spare parts. Our negotiators, who claim they did such a good job on the FSX agreement, never thought to address the question of spare parts. Even in the review and renegotiation of the FSX deal ordered by the President, there was no consideration given to spare parts.

Spare parts are not a very exciting subject. I will be the first to admit that, Mr. President. But they are very important economically. Because, over the life of an aircraft, the spare parts necessary for maintenance, add up to about 3 times the original purchase price of the aircraft. Again a little simple arithmetic will tell us that three times the original $3 billion purchase price of 130 F-16's is $9 billion in spare parts over the life of the program.

So let us continue with our arithmetic lesson, Mr. President. If the Japanese had done the right thing and bought F-16's—and I have not heard one person, even those for the FSX, say that a buy of F-16's isn't the right thing for Japan to do—then the total income to the United States would have been $3 billion for the airplanes and $9 billion for spare parts. That's a total of $12 billion. That is a little bit more than the $2.5 billion that the FSX proponents are crowing about.

Let us look one more time at the earnings we are supposed to be getting out of FSX. First, we are transferring $5 to $7 billion of our finest aerospace technology. If everything goes perfectly with FSX, we will get $2.5 billion in return. Mr. President, even if we take the lower figure of a $5 billion American taxpayer investment in the F-16, and then we subtract the $2.5 billion the FSX proponents say we will earn, the result is still a net loss of $2.5 billion to the United States. That does not sound like a very good deal to me, Mr. President.

I just do not know how the FSX proponents can claim the FSX program equals about what a direct buy would have been. Their willingness to support the FSX for $2.5 billion in spite of all the legitimate defense and commercial reasons not to do so implies that they can be swayed by the prospect of earning a few bucks. In other words, they do not care how much of their scarce defense resources the Japanese waste on the FSX, as long as a high enough percentage of it comes America's way. This type of thinking is just plain wrong. No wonder our $55 billion trade deficit with Japan doesn't seem to faze the FSX proponents.

There is also a corollary argument offered by FSX proponents. They say that we would get nothing if we turn down FSX. The Japanese would go their own way and build their own plane. So, their thinking goes, we had better take the $2.5 billion, even at the price of giving up $7 billion in F-16 technology. If we do not, we will get nothing.

First, I do not agree with the underlying premise of this argument. It is a defeatist premise, one that does our country a great deal of harm. Essentially, the premise is that we must accept the fact that the Japanese will not buy our best products. Thus we must negotiate the best deal we can given the circumstances. But, Mr. President, I submit that such is not the case. We have all sorts of leverage that we can and should use to make the Japanese buy our products. Continued access to our markets is one that comes to mind immediately.

There are other levers we could use very effectively, but don't. For example, not once during the FSX negotiations was the power of the office of the President of the United States brought to bear to influence the Japanese.

Second, even if the Japanese were to build their own plane, they would still need to buy foreign engines to power that plane. They admit that they simply do not have the technology necessary to make the advanced jet engines. That is why they are so interested in getting licensed production of one of the new F-16 engines from Pratt & Whitney or General Electric for the FSX engine. They want to grab as much of our technology as they can.

The point is that the Japanese would have to come to the United States for the engine if they stay with a single engine plane. We have the only engines in the free world in this class. If the Japanese reverted back to their original twin engine design, there are two possible engine candidates, Rolls Royce and General Electric. I admit it is not clear what the outcome would be, but again, we do have the leverage to make them buy our engines. And if they went to the British just to spite us, I can think of a number of ways in which the favor could be returned.

So why are the FSX proponents so fond of arguing that we will get nothing if the Congress in its wisdom turns down the FSX deal? Why are they so defeatist and pessimistic about the ability of our companies to compete with the British for the engine business?

The FSX proponents do not want to analyze what really might happen if the FSX were turned down. They would rather use scare tactics instead. Go through with FSX or you'll get nothing. They do not want to put together a serious strategy to maximize our national objectives and to preserve our national security. They just throw up their hands and say, "We've just got to accept unfair Japanese behavior and take the best offer they make us."

This coddling of the Japanese is not the attitude that made our Nation great. It is not an attitude that will preserve this Nation as one after the other of our finest industries are destroyed. If we are to survive as a great Nation, we must take a stand. That is what this vote is all about today. It's about whether we have the courage to fight for American interests in the face of Japanese intransigence. We must reject the posture of the FSX proponents, who want to cave in to the Japanese whenever the going gets rough.

Apparently, it is fine with the FSX proponents if the Japanese spend three times what an F-16 would cost to make an FSX. It is fine with them if the Japanese use their scarce, one-percent-of-GNP defense resources to subsidize the building of an aerospace industry. It is fine with them if the American taxpayer has to continue paying to protect Japan for another 18 years until the last FSX is finally in place in 2007. All their objections fade simply because the Japanese have offered us $2.5 billion. It seems like a lot of money, Mr. President, but when you look at the stakes, American interests are being sold short for peanuts.

As I have said, I do not believe that we would get nothing if the Japanese went their own way. I think that there is probably a billion dollars or more of work in the engines and other components that we could sell the Japanese. But let us suppose that the FSX proponents are right, Mr. President. Suppose that there was absolutely nothing for us if the Japanese went their own way. Mr. President, I would rather have nothing from FSX than to give the Japanese a big boost in aerospace.

Because that is what the FSX deal is, Mr. President, it is an elevator ride to the top for the Japanese, in our elevator. To sell out in our one remaining profitable high tech industry, one that earns us many billions each year, for the price of $2.5 billion over 19 years is just ridiculous, Mr. President. And it shows how misguided the proponents of FSX are. They are willing to let American industry and American working men and women pay any price, rather than rock the boat with the Japanese.

And that brings us to another one of the false charges that FSX proponents make. They say that if we turn down the FSX deal, then irremedial harm will be done to our diplomatic and security relationship with Japan. Therefore, they say, we must always pull all our punches when we speak about Japan. If we raise our voices ever so slightly, the Japanese will get upset and we cannot have that. It is as though we must conduct a relationship walking on eggs.

Mr. President, it is high time that we put an end to this special treatment. It is time we spoke directly to and about the Japanese. I think it is wrong to continue to treat the Japanese as though they were a fragile flower, one that can be raised only in a specially constructed hot house.

Because that is what the situation is today, Mr. President. Japan lives in a special economic and security hot house that we helped them construct after World War II in order to help them recover from the devastation of the war.

Mr. President, there is no need for that hot house today. It is time that we dismantled that obsolete structure. Japan must take her place among the mature nations of the world and act according to the duties and responsibilities of an important and mature ally.

It is demeaning to the Japanese to argue, as the FSX proponents do, that Japan must continue to receive special treatment, that we must overlook the fact that they refuse to abide by the rules of free trade and buy our incomparable F-16's.

The FSX proponents act as though if this one deal does not go through, our entire relationship will fall apart. How can that be, Mr. President? Does this mean that the Japanese will refuse to let us protect them? Will they tell us to take our bases and go home? Will a nation that depends profoundly on the United States for its conventional and nuclear defense ask us to leave? Not likely, Mr. President. Japan would be virtually defenseless without our military umbrella. It is sheer nonsense to think that Japan would ask us to withdraw if FSX does not go through.

What about our economic relationship if FSX falls through? The suggestion is made indirectly by the FSX proponents that the Japanese will stop buying our Treasury bills and stop financing our debt. How do you think we finance our defense budget to protect them, Mr. President? How do we pay for all those Japanese consumer goods? Are the Japanese willing to stop sending us cars, televisions and VCR's? Do the proponents of FSX really think that the Japanese economy is totally independent of ours?

Again, Mr. President, these arguments are premised on the fact that FSX proponents think that the Japanese need or deserve special treatment. There is no real analysis or logic behind the arguments of the FSX proponents, just an intuitive sympathy for the Japanese point of view. Well, I reject that rationalization of the Japanese viewpoint, Mr. President. I believe it is about time that the American point of view received strong consideration, and strong representation, by the executive branch in our dealings with the Japanese. And if the executive branch cannot or will not do that, Mr. President, then it is up to the Congress to see that American interests are properly protected.

Another disturbing argument by the FSX proponents is that the Japanese have special mission requirements for the FSX and that no foreign plane could meet those requirements. So the Japanese of necessity had to design and build their own plane. I was disappointed to hear our new Secretary of Defense, Mr. Cheney, make this specious argument before the Foreign Relations Committee. Now I am sure Secretary Cheney will prove to be a fine Secretary but he needs better briefers on this topic. They should give him the position of DOD's own technical experts.

When DOD's Sullivan team went to Tokyo in April 1987, they told the Japanese that we rejected the notion that the FSX had a special or unique mission. In fact, they told the Japanese that any one of our most modern fighters, the F-14, F-15, F-16, or F-18, could perform the multiple missions that we foresaw for the FSX. This information was confirmed in testimony before the Armed Services Committee last week. The F-16 can perform the FSX mission superbly. The Sullivan team told the Japanese that we regarded the Japanese claim of a special or unique mission as nonsense. It was simply an attempt to rig the process and exclude American aircraft from consideration.

Now 2 years after we thought that Japanese argument had been put to rest, we find the American Secretary of Defense raising it on behalf of the Japanese before the United States Senate. Now I know that Mr. Cheney came to this matter recently, but his staff has done him, and us, a great injustice in feeding him Japanese lines of argumentation. The Japanese must be smirking to hear the American Secretary raise an argument that his own technical experts rejected out of hand 2 years ago.

The Japanese use the unique argument all the time to exclude our products from the markets. It is not only that the FSX mission is unique, so the Japanese do not have to buy United States fighters. The Japanese argue that their snow is unique, so they do not have to buy foreign skis. That is right, they actually claimed that foreign skis would not work on their snow. They claim that the mud in Kansai Bay is unique, so that American construction firms would not know how to deal with it and, therefore, could not build the new airport there. They claim that Japanese intestines are unique, they are 5 feet longer than those in other human beings, so that the Japanese cannot digest United States beef. And so on. Needless to say, Mr. President, the uniqueness argument is pure hogwash.

Mr. President, having addressed some of the more misleading arguments of the FSX proponents, I would like to review quickly a few additional reasons why the FSX is such a bad deal for America. The United States not only believes in, but also practices free trade. Japan says it believes in free trade, but practices mercantilism. That fancy word means Japan closes its markets and refuses to buy our highly competitive products.

Instead of having access to world class American products, Japanese consumers, businesses, and Government departments are forced to buy inferior Japanese imitations of our best products. In the meantime, the Japanese import the technology behind our best products and keep trying until they perfect products almost as good as ours. Then they dump those products on our markets below cost and destroy our industries. Finally, after our industries have been decimated, the Japanese open their markets partially, but we have no products left to sell because they have put us out of business. In short, the Japanese are protectionists of the first order. And that is what they intend to do to us in aerospace, Mr. President.

What could be a better example of Japanese protectionism than their refusal to buy the world's best, and least expensive, fighter aircraft, the F-16 Fighting Falcon? Instead, they are going to reinvent the wheel—as they have with so many high quality American products—and build their own plane. That is protectionism pure and simple.

And what about the cost of the FSX? Japan spends about $35 billion a year on defense. The United States spends about $285 billion, or nine times the Japanese amount. One would hope that the Japanese would spend their small defense resources carefully. Unfortunately, they do not. Instead of buying 130 F-16's for about $3 billion, they are going to spend $1.2 billion on development and $8 billion on production, a total of about $9 billion. That is three times what the same number of F-16's would cost.

And that figure of only three times the cost of the F-16 is extremely optimistic. The respected British magazine, The Economist, estimated in a recent issue that the development costs would be triple the Japanese estimate, or $3.6 billion instead of $1.2 billion. I do not think that any proponent of the FSX can justify the extra $5 to $8 billion cost of the FSX in light of scarce defense resources on both sides of the Pacific. And, ironically, while the FSX Program is wasting billions of dollars, DOD will almost certainly be engaged in long, drawn-out burden sharing negotiations with Japan, trying to get the Japanese to ante up another $100 million or so to meet common defense goals.

Aside from the much-ballyhooed $2.5 billion, is there really anything in the FSX Program for the United States? The proponents claim that there is access to advanced Japanese technology. The Japanese are always trumpeting their so-called advanced technology. But let us be honest about it—the Japanese are not now major players in aerospace. It is unlikely that they have the technology that they claim to have. But to be fair and to be thorough, several other Senators and I commissioned a GAO study in order to find out if there was in fact advanced Japanese technology. The GAO has just concluded their study and they have found that the claim of advanced technology is a false claim. There is no advance Japanese technology in the two areas of DOD interest, the phased area radar and the cocured composite wing. U.S. companies are far ahead in these areas.

But the thing that I fear, Mr. President, is that the Japanese will be given access to the advanced United States technologies in these areas during the course of the FSX Program once they have failed in their own attempts. Then, in order to show that the FSX did provide advanced Japanese technologies, we will make a purely political decision and import back Japanese technologies that are built on our technology. And that technology will be incorporated into future versions of the F-16 just to show how good the FSX Program was. And the United States companies that invented the technology in the first place, they will be closing their doors, while the Japanese companies will be adding a second shift to pump out the items for United States fighter aircraft.

So what is it that the Departments of State and Defense really want from the FSX Program, Mr. President? According to the GAO report, State and DOD admit that their reasons for promoting the FSX Program are not commercial or technological. They admit, Mr. President, that their reasons are purely political. What DOD and State really want is to protect the status quo with Japan. They are willing to pay any price to see that their heretofore comfortable political and security relationship is not disturbed. But they are living in the past. That relationship was built on an economic and political situation that does not exist today. It cannot endure on a false foundation.

And what is the FSX deal really all about for the Japanese? It is not about the common defense or Japan would be buying F-16's today in order to meet the current Soviet threat. It is not about saving scarce defense resources, or again Japan would be buying United States aircraft instead of spending billions of extra dollars on the FSX.

What FSX is really about for the Japanese is meeting their stated national goal of having a full fledged aircraft industry with which to challenge the United States in the next century. As John Harbison of Booz, Allen and Hamilton, wrote 2 weeks ago in the Sunday New York Times: "The Japanese are not trying to develop a plane; they are trying to develop an industry." FSX is part of a sophisticated Japanese national effort to develop a viable Japanese civilian aircraft industry. That's why the Japanese are so adamant about proceeding with FSX. They see their military aircraft industry as a necessary precursor and a critical component of their high tech aerospace future.

If they want an aircraft industry to try to compete with us that is fine, but we should not help them one bit. We should not give them one piece of technology that will further their goals on either the military or commercial side. It is very naive to argue, as the administration does, that they have scrubbed the F-16 technology list to remove commercially applicably technologies. The very existence of the FSX Program provides a kind of aerospace university in which Japanese engineers will learn the systems integration skills necessary to compete with us in both military and commercial aircraft.

It is time that we realize the stakes in the FSX Program are a lot higher than whether Japan can build one military aircraft. This debate is about our national future and the future of our alliance with Japan. If the Japanese continue to ignore free trade principles and common defense interests, then there can be no alliance in the future. If they are going to go their own way, so be it—but let us not be deceived into the thinking that they are acting as steadfast allies when they are not.

If, as some newspaper reports indicate, the Japanese will turn to the Europeans or the Israelis for help if the FSX deal is not approved, again so be it. If those are the true Japanese colors, it would be good to see them now, while we can still take appropriate action. And if they do go to those countries, then maybe the Europeans or Israelis should also be made responsible for Japan's defense.

For all these reasons, Mr. President, the FSX is a bad deal for America. The United States should not participate in or encourage this program in any way. The decision on FSX is really part of a larger decision about the survival of the United States as the world's preeminent economic and military power. I intend to protect America's preeminence and to vote against U.S. participation in the FSX Program. I urge my colleagues to do the same.

Mr. HEFLIN. Mr. President, I rise today to address the proposed technol-

ogy transfer to Japan so they can build the FSX fighter plane.

When consideration of the transfer of the United States F-16 fighter plane technical data to the Japanese began, a tremendous debate broke out ove the exchange. When the Senate first considered the transfer of technology to enable the Japanese to build their own FSX fighter aircraft, I felt that the deal had not been fully explored and voted to encourage the President to delay the transfer. After reviewing the administration's revised agreement, I still feel that the technology transfer would not be in the United States' best interests.

In my judgment, the transfer of this advanced fighter technical data to Japan could have severe long-term economic and national security consequences. I have seen nothing about this deal which would be to the United States' best interest except what some might call "a show of good faith." If this deal were the drawing of straws, Japan would get the long straw each time.

Supposedly, Japan will bear the entire cost of the program. They will pay us around $400 million for our most advanced technology which is worth over $7 billion. That does not sound like a good deal. The Japanese could get the same protection by purchasing American F-16's off the shelf. If the Japanese bought the F-16's, Americans would do 100 percent of the work. With the FSX, Americans will do only approximately 40 percent of the work. That does not sound like a good deal. The Japanese could buy the F-16's at a savings of $30 million per plane but have instead chosen to produce the more expensive FSX. That does not sound like a good deal. In exchange for our technology, the Japanese will give us their technology in areas in which we already hold the lead. That does not sound like a good deal. The General Accounting Office has said that in both composite wing technology and advanced radar technology, the United States holds the lead. The Japanese decided not to purchase the existing and proven F-16 fighters and honor their commitment to help reduce the growing trade deficit. That does not sound like a good deal either. This does not sound like a good deal for one reason—it is not a good deal.

The only way the exchange of information for the FSX fighter sounds like a good deal is if you are the Japanese Government with plans to create a dominant aviation industry. Every aspect of this trade gives the Japanese an unfair competitive advantage by selling our most advanced technology for a small price. The aviation industry remains a place where the United States has a large comparative advantage over the rest of the world. We should not throw away this advantage by giving the Japanese this technology on a gold platter. All factors of this trade indicate that the Japanese are more interested in creating a competitive aviation industry than in their actual defense.

We have seen this pattern before and will not have learned anything if we allow this trade to occur. The Japanese have consistently acquired technology from a country and soon competed against the original owner in the world market. Should we allow our comparative advantage in the aviation industry to disappear by giving away this technology as we did the technology for TV's, VCR's, and semiconductors?

Mr. President, let me touch just a moment on the technology transfer aspect of this deal. The F-16 is our most advanced fighter aircraft. The administration says that the F-16 technology transferred to Japan will be protected and the advanced technology developed in the FSX program can only be used for this limited program. However, this is virtually unverifiable. We fell into the same situation recently with highly sensitive submarine propeller technology. Toshiba leaked this important information to the Soviets. We still do not know the extent of the damage of this intelligence leak—only that it will cost us billions to overcome. Are we going to fall into the same trap again? I certainly hope not.

Also, Mr. President, I am very disturbed by recent reports that Mitsubishi Heavy Industries, the Japanese company that will build the FSX, possibly was involved in the construction of the plant in Libya which is suspected of producing dangerous chemical weapons. I believe that this matter must be cleared up before we jump headlong into the FSX deal.

Mr. President, the Japanese spend only 1 percent of their GNP on defense and we should not allow them to squander these funds. They should purchase the F-16 fighters from the United States and save $30 million per plane. This would reduce the trade deficit, allow Japanese defense funds to be spent elsewhere, provide 100 percent American jobs for the fighters, preserve the American lead in the aviation industry, and provide for the Japanese defense much sooner than the FSX fighters. That sounds like a good deal because it is a good deal. We should scrap the FSX and sell the Japanese F-16 fighters.

Thank you, Mr. President.

Mr. KERRY. Mr. President, the FSX deal is not just an airplane deal. It simultaneously concerns broad issues of defense, foreign affairs, and the economy—indeed, the very definition of national security in the coming decades.

As I've been saying for some time, we cannot be the strongest nation in the world militarily if we are not the strongest nation in the world economically. Our Federal budget and trade deficits—including a $55 billion trade deficit with Japan—are evidence of fundamental economic problems that if uncorrected threaten our national strength.

The trade deficit is not something new. It's been in tens of billions a year now for most of the eighties and shows no real signs of abating. Throughout that period, we've found oursleves seeking to redefine our economic relationship with Japan by getting it to buy our goods. These efforts have largely failed.

Now, comes the FSX deal, which in many ways is a response to that environment.

On the one hand, the FSX deal is evidence that Japan can be encouraged to buy American technology when we make it in their interest to do so. Under the terms of the deal, they would be purchasing some $2.5 billion of American goods and know-how in codeveloping the plane.

On the other hand, the FSX deal is evidence that Japan continues to refuse to buy American-made goods even when they are cheaper than what Japan can manufacture. We know, and so do the Japanese, that Japan could buy state-of-the-art F-16's for many billions less than the cost of the FSX. Japan has no interest in doing that, however, because they have a second goal: To gain knowledge about how to build planes, and to them that is worth a lot of money.

So it is fair to say that the FSX deal is indeed characteristic of our relationship with Japan generally. The Japanese will buy from us—but only as a means of developing further the ability to produce the goods later on their own. The question that we then need to ask ourselves, is it in the interest of the United States to help them do so?

Let us look at the details of just what each side promises under the deal.

The United States will give Mitsubishi Heavy Industries, the prime contractor on the deal, detailed technical data on the F-16, including design and test data. General Dynamics, the prime U.S. subcontractor on the deal, will not only supply Mitsubishi with the design information, but provide technical assistance throughout the development process, and produce parts of the prototypes for the plane.

In return, United States firms are to be granted access to any new Japanese technology derived from the technology provided by the United States, as well as other technologies developed by Japan in the course of the project. Mitsubishi will allocate 40 percent of the development work to U.S. companies. And the administration has stated that Japan has committed to

giving United States firms 40 percent of the production work as well.

So, the potential good brought about by the FSX deal is—

First. That the United States gets some new access to current Japanese technology's high-strength materials and radar, and

Second. That the United States gets whatever "flow back" takes place in new Japanese developments from the codevelopment, as the Government describes it, "automatically and at no cost," and finally,

Third. That United States companies get some additional business with Japan, amounting to about $480 million for the codevelopment, and perhaps $2 billion for production.

That summarizes the upside.

The downside can be summarized much more simply—the risk that the deal will help Japan develop an aviation industry that kills off our aviation industry through predatory competition.

It has happened before.

We all know where Japan's economy was after the end of World War II, and where it is today, and where our economy was then, and where it is today. Then, the United States produced goods for the world. Now, Japan does. Then, the United States was the biggest creditor nation in the world. Now Japan is, and the United States is the biggest debtor nation in the world. Then, we were the economic leaders, the technical innovators, now Japan is.

The phenomenon has been called "Trading Places," which is also the title of a recent book by former Reagan administration trade negotiator Clyde Prestowitz, Jr., subtitled "How We Allowed Japan To Take the Lead." The book is a sobering description of how in industry after industry, the United States allowed Japan to reverse places with the United States.

In the opening chapter of his book, Prestowitz recounts case after case to document the reversal in our country's economic fortunes over the past 20 years:

> The United States had effectively lost its consumer electronics industry by the mid-1970's and had also been forced to protect its textile and steel industries. In 1981, it begged Japan to restrain auto exports.
>
> In 1984, the President's Defense Science Board warned that the nation was falling behind in high technology.
>
> On 5 November 1985, members of the President's cabinet met at the White House to consider the crisis in the semiconductor industry. The heart of the high technology underpinning both the nation's prosperity and its defense, this key industry was being devastated by Japanese competition. Nevertheless, most present opposed taking any action, believing, as one of the President's top advisors remarked—that "If our guys can't hack it, we ought to let them go."
>
> On 24 October 1986, Japan's leading computer manufacturer, Fujitsu Corporation, made an offer to buy Fairchild Semiconductor Company, but withdrew it after opposition was voiced by Secretary of Commerce Baldrige and Secretary of Defense Weinberger on the grounds that the US was becoming too dependent on Japan for critical technology.
>
> Over the summer of 1987, as the US became the world's largest debtor, interest rates continued to rise as foreign investors, primarily Japanese, demanded a higher return for investing in an increasingly risky US market. One French leader noted that the US now had two central banks, the Federal Reserve system and the Japanese insurance companies.
>
> In late 1987, as the US international debt surpassed that of Mexico and Brazil combined, US payments to foreign investors exceeded US income from holdings abroad for the first time in fifty years. Meanwhile, Japan became the world's largest creditor and passed the United States in per-capita gross national product.

Prestowitz argues that the situation has become a serious threat to United States national security, and is the result of "a critical misunderstanding about the nature of Japanese society and economic thinking * * * to them, promotion of key industries is not economically harmful but is, on the contrary, necessary to ensure the future prosperity of the nation, which they see as inextricably linked to its power."

"As a result of policies based on false assumptions and ignorance, the power of the United States and the quality of American life is diminishing rapidly in every respect," Prestowitz writes. He then quotes a former official of the Japanese Ministry of International Trade and Industry or MITI who had one of the most powerful positions in Japan, Keichi Konaga, who asked Prestowitz one question about United States relations with Japan—"why don't you wake up?"

Why do we not wake up, indeed? If the Japanese do use the FSX deal to develop an industrial base for an aerospace industry, how will we repair the damage?

In 1970, the United States produced 90 percent of phonographs sold in the United States—today 1 percent. In 1970, we produced 90 percent of the color TV's, today 10 percent. In 1970, we produced essentially 100 percent of machine tools, today 40 percent; 99 percent of telephone sets, today 25 percent; 89 percent of semiconductors, today, only 64 percent.

I for one, am not willing to take the risk that the U.S. aerospace industry that today reduces our trade deficit by $16 billion a year will join those industries.

The administration contends that the U.S. commercial aircraft industry need not fear from the FSX deal, because commercial and military technologies differ.

Yet the 1989 National Trade Estimate Report on Foreign Trade Barriers published by the Office of the U.S. Trade Representative suggests that the opposite is true. According to the report:

> Japan has targeted its aerospace industry for development. The government had formulated a plan and taken significant steps to enhance the competitiveness of its domestic industry. The effects of Japan's targeting efforts have not yet hindered U.S. industry, but there is a potential for negative effects.
>
> The Japanese government plans to make aircraft production one of Japan's major industries within 20 years. This would mean direct competition with the U.S. aerospace industry which is the largest in the noncommunist world. Japanese competition could come earlier in the rotocraft and aircraft components industries. * * * [I]f Japan's target goal is met, future lost sales to the U.S. industry would be significant although now impossible to quantify.

Dr. Robert Barthelemy, the United States National Aerospace program director, recently addressed a group of Senate staffers, and told them that the Japanese have informed him that they intended to excel in the aerospace industry, and were committed to spending $16 billion to achieve the goal.

That is not a change—the Japanese have been looking to build a civilian aerospace industry for a long time. In September 1980, MITI—the Japanese Ministry of International Trade—reported that:

> Although costs and performance requirements for commercial and military aircraft are different, development and production techniques are closely related. Therefore, research and development of commercial and military aircraft should be carried out in tandem.

In the words of MIT Prof. Richard Samuels, who heads the MIT-Japan program, we should believe the Japanese—

> When they say clearly that this project is an important step for Japanese producers who seek to establish a global position in aerospace in the 21st century * * * for the Japanese this is not just about creating jobs, but about creating comparative advantage * * * the FSX is a next major step in the development of the Japanese aerospace industry.

I believe we are endangering a $16 billion a year industry in return for a one-time payment less than $3 billion; that the Japanese will use the deal to consolidate technologies which they will then transfer to the civilian aviation industry, and that we are giving them the means to take away our markets in yet another essential industry.

We should also recognize that the deal allows Japan again to fail to honor its promises to buy American products when they are superior in price and quality; and to share less of the defense burden for Japan by spending billions to develop an aircraft that will be less capable than planes already available.

Indeed, in a way, the FSX deal itself is a consequence of a Japanese unfair trade practice—its unwillingness to

buy our F-16 planes, which are completely sufficient to meet Japan's needs for national defense.

I believe it is not in the interests of the United States or the American people to help Japanese firms become global competitors with United States firms in the aerospace industry. Unless and until our economic relations with Japan generally have been put on a far more equal basis than they are today, we should make it our national policy to promote United States penetration of Japanese market shares in essential industries, not the other way around.

We should remember that our aviation industry did not grow up in a vacuum, but rather traces its technological roots and branches to an extraordinary investment on the part of the American people through years of spending on our air force. Every one of us paid the price to make sure that no country in the world had a more sophisticated capacity to defend its skies.

Having made that investment, it would be foolhardy for the American people to permit their Government to turn these technologies over, virtually free of charge, to a close and valued ally, who is also a tough and sometimes predatory competitor.

Mr. President, it defies common sense for us to give away this investment to the Japanese, and allow them to use it to take away our markets in the future. This is not a statement of hostility to Japan or its people. It is simply not rational economic behavior on the part of the United States to provide Japan with essential technologies and experience in the aerospace industry, allowing them to shortcut the development process that we went through.

I urge the Senate to affirm the Dixon resolution to disapprove the FSX deal.

Mr. KOHL. Mr. President, after carefully examining the proposed cooperative development program for the FSX fighter between the United States and Japan, I have come to the conclusion that it is not in our national self-interest. Accordingly, I intend to vote against the agreement. Let me explain why.

To begin with, I think it is misleading to suggest that this is a military deal. Clearly Japan is not approaching this agreement from a military perspective. After all, if their interest was in getting a sophisticated fighter, they could have had the F-16, for about a billion dollars less than they will spend on the FSX. And they could have had it now, rather than waiting for years until the FSX is produced. They aren't looking for a plane; they are looking for a technology.

It is also clear that Japan is not entering into this agreement in order to reduce its $52 billion a year trade surplus with the United States. The most effective way to achieve that goal would have been to buy the F-16 or eliminate some of the trade barriers which prevent our products from entering their markets. They are not looking for a way to reduce the trade surplus; they are looking for a way to develop an industry.

No, Mr. President, this is not a military deal—it is a deal that has to be evaluated in terms of its effect on our economic security.

Now in that context, some of the proponents of this sale tell us that it really is good for our economy. They tell us that working with Japan on the FSX will allow our industry to learn about new technologies which the Japanese have and we do not. That may be what the proponents of the sale tell us, but it sure isn't what the objective General Accounting Office of the United States says. The GAO reported on May 8, 1989 that the FSX program, according to Department of Defense itself, "was not pursued with the primary objective of obtaining access to Japanese technology or balancing the exchange of technology." The GAO did report that once the deal was agreed to in principle, then the United States started to talk about trying to get access to any technology Japan might have. But, in the two areas touted as giving the United States a technological boost, the GAO concluded that "the United States has superior composits technology and appears to be ahead in the radar development."

Of course, even if we do not get any technological benefits, we are supposed to get an economic boom from the deal. Not as much, clearly not as much, as we would get if Japan simply bought our F-16's off the shelf, but still some benefits. After all, we are told, the new and improved agreement which the administration negotiated is designed to make sure that we get "approximately" 40 percent of the work for both the development and production phases of the agreement.

If we could be sure that we could get 40 percent of the work, that would be something. But we ought to look at that commitment very closely before we start to get too excited.

When the agreement was negotiated by the Reagan administration, it included the 40-percent standard just for the development work. In terms of production, all we were told was that there would be a "good faith effort" made to achieve a similar division of the work. The Bush administration, particularly the Commerce Department, was not satisfied and attempted to get a more concrete agreement. When the renegotiation began, Japan is reported to have tried to translate its "good faith effort" into language which assured the United States 28 percent of the work. If "good faith" equals 28 percent, then it is possible that "approximately" will turn out to be 30 percent. In fact, it is possible that the value to America of production work may be nothing since this agreement covers only development—we would have to negotiate a new agreement if Japan decided to produce the plane. The point is that we do not have any firm understandings about our workshare of the production; we do not even have vague understandings about the more lucrative spare parts market which may be worth as much as two or three times the original deal; and what we do have is included in an exchange of letters rather than in the memorandum of agreement itself.

Well, if we do not get much from the deal, what do the Japanese get? Mr. President, they get what they have always wanted: the technology to develop their own aerospace industry.

I would ask my colleagues to take a look at "Made in America: Regaining the Productive Edge" by Michael Dertouzos, Richard Lester, Robert Solow and the MIT Commission on Industrial Productivity. Their analysis of the aircraft industry begins on a bright note: "among all the industries studied," they report, "the commercial-aircraft industry is the strongest exporter and has the healthiest trade balance." But, they go on to suggest that our position is not really secure. We all know about the competition coming from Airbus, but the MIT study also tells us that "the Japanese Government has designated aerospace as one of three key technological areas for the 21st century, and Japan looms as a potential independent competitor." But if Japan is to become a major competitor, they have to develop their technology. They are: the MIT study reports that in Japan "by the early 1980's government aid to jet engines almost equaled that given to computers and exceeded that for telecommunications, energy, and new base technologies." Their advances in this area make them a substantial player; the FSX deal will make them a major player since, as MIT concludes, "international partnerships inevitably tend to diffuse new technologies among the cooperating nations." And that is true, Mr. President, no matter how tightly one tries to restrict the technology transfer.

Mr. President, I want to work with Japan. I want to see them pick up more of the burden of defending themselves. I want to see our trade relationship improve. But giving away the store is not the best way to improve relationships or protect our own interests.

Mr. President, I was in business for a long time. I know that deals are never all good or all bad. I recognize that once Japan decided not to buy our F-

16's, they were going to get some technological benefit. I also suspect that if we do not make this deal with Japan, they will try to reach an agreement with other nations in an effort to get the technology they want. And if that happens, we will not enjoy the "approximately" 40 percent of the work that this deal does give us. So I know there is a downside to rejecting this proposal.

But Mr. President, it comes down to this: I do not see why we ought to cooperate in our own destruction. I do not understand why we do not put up a stronger fight for our own interests. I can not comprehend why we simply roll over and play dead. We ought not make it easier for Japan, or any other nation, to gain an advantage over us. This deal does just that—and that is why I will oppose it.

THE FSX SALE

Mr. PRYOR. Mr. President, we are about to vote on whether America should hand over to Japan, specifically to Mitsubishi Heavy Industries, the technology behind the world's finest fighter, the F-16 Fighting Falcon.

Mr. President, Americans believe in free trade and we practice it in those areas of international commerce where there is reciprocal free trade. Unfortunately, Japan has too often practiced protectionism in its trade dealings with America, which has led to a whopping $54 billion a year trade deficit with the United States.

Nowhere is this unfair Japanese approach to trade more apparent than in our rice trade, or, more accurately, our lack of rice trade with Japan. In short, Mr. President, we are completely shutout of the Japanese market for rice.

This is not free trade? It is not fair trade?

Let us talk for a moment about whether this FSX deal is a free and fair trade. Mr. President, we are giving the Japanese roughly 7 billion dollars' worth of F-16 technology that they will use to develop their military and commercial aviation industries. It is hardly a secret that one of Japan's long range goals is to develop an indigenous aircraft industry that could challenge United States aviation leadership.

What are we getting in return? Based on what I have learned I would say that we are getting some false hopes. We are being promised $400 million in return for $7 billion worth of our technology. We are also being promised that the Japanese will hand over two new technologies developed in Japan.

However according to the General Accounting Office, these so-called new Japanese technologies are available and of superior quality in the United States.

Is it a fair trade, Mr. President. I say no.

At issue is this debate is not whether we support our military allies. Japan is an important ally, but we have proven our dedication to protecting Japan's interest over and over again. We prove it by spending a good deal of our defense budget on projecting the United States military umbrella to include Japan. We have proven it by putting our Navy in harms way to keep sea lanes open in the Middle East through which oil crucial to Japan's economy must be transported.

Finally, Mr. President, we have proven our dedication to Japan's defenses by offering to build for them as many F-16's as they want to buy. Mr. President, it does not make sense and it is not fair that we are now being told that we must again prove our loyalty by giving away the technology underlying the F-16.

Mr. President, America spends almost $300 billion a year on our military. Japan spends roughly $35 billion. If the ultimate goal is to strengthen Japan's defenses, then it would make sense for Japan to commit its limited military budget to purchasing advanced aircraft from the United States rather than embarking on an expensive and risky venture into building its own advanced aircraft.

No, Mr. President, the FSX deal we vote on shortly is not a good deal or a fair deal and if it goes through we have no one to blame but ourselves.

I will vote for the Dixon amendment to disapprove of the FSX agreement.

Mr. PELL. Mr. President, I think the Senator from Illinois [Mr. DIXON] has put forth a cogent and interesting case. Nonetheless, I have concluded that I must, with reluctance, vote against his Senate Joint Resolution 113.

I have made this decision for the following reasons:

I do not believe that we could have achieved a substantially better arrangement with Japan. I would have preferred very much that the Japanese had purchased the F-16 aircraft, which is a frontline fighter in our own inventory and would have served them well. Unfortunately, that was not an option, and our realistic choice was to allow the Japanese to go it alone or in partnership with some other nation. Frankly, I believe the correct choice has been to craft a workable, cooperative arrangement, rather than to have the Japanese go in another direction. Had the Japanese pursued a different course, I believe it would have made it much more likely that they would compete with us on the international market at a measurable cost in American jobs and income.

We have been arguing for some years with the Japanese that they should take on a greater share of their own defense and that we would cooperate with them in this. Having encouraged them in that direction, it does not make sense for us to impede their own efforts in that direction.

This arrangement will benefit American industry and labor. The codevelopment project could mean that the United States will gain about $500 million. If this cooperative arrangement proceeds into a production arrangement, it could mean considerable profit to the United States with workshare yielding perhaps $2 billion or more.

The President has, in reaction to congressional criticism and substantial dissent within the administration, acted to improve the deal. As a result, the safeguards in the arrangement are much more clearly spelled out.

The President achieved an important new control on any future production by achieving an arrangement that the U.S. workshare will be approximately 40 percent. This workshare has been a highly contentious matter and the President was most prudent in determining that clarification was essential.

Having reviewed this deal carefully, Senators BYRD, DANFORTH, MOYNIHAN, and I, as well as others, have concluded that additional safeguards were feasible and could be achieved. We have incorporated these safeguards into an amendment which I believe merits and will receive the support of the Congress.

Finally, against this background, I believe that the President can safely be given the benefit of the doubt. There are sufficient protections and the Committee on Foreign Relations, which I chair, as well as the full Senate will be following this matter closely as the codevelopment arrangement proceeds. Given the debate, I am sure that the administration will wisely consult closely with the Congress as it moves toward a coproduction agreement.

Mr. BAUCUS. Mr. President, we are witnessing a unique debate on the Senate floor today.

Japan is a close and trusted ally of the United States.

The very idea that a major military agreement with a close ally could be endangered by trade concerns was unheard of even a few years ago.

So what has changed?

Mr. President, the real issue we are debating here today is much bigger than the FSX fighter.

Senators have not taken the floor to vigorously argue against this agreement because they believe Japan is not a trustworthy ally.

Senators have taken the floor because the economic relationship between the United States and Japan is fundamentally out of balance.

The $55 billion United States trade deficit with Japan is the most obvious symptom, but there are others.

Simply put, Japan has refused to play by the rules.

As James Fallows eloquently pointed out, Japan has pursued an economic policy of discouraging imports and encouraging exports. A policy that called for Japanese economic dominance in all sectors.

In an interdependent world economy, that is an unacceptable national policy.

Japan—perhaps more than any other nation—has prospered from free and open world markets. But Japan has not been willing to open its own market.

Mr. President, 2 weeks ago, the U.S. Trade Representative released the National Trade Estimate.

The National Trade Estimate—commonly referred to as the NTE—is a listing of foreign trade barriers.

In the NTE, 18 pages were devoted to simply listing Japanese trade barriers. No other nation warranted more than 10 pages.

The NTE listed Japanese trade barriers ranging from restrictions on forest product exports to violations of the Semiconductor Trade Agreement to barriers limiting United States exports of supercomputers.

And the NTE is only the latest in a large body of evidence.

Two recent studies, one by the Brookings Institute and one by the Institute for International Economics, concluded that Japan imports 25 percent to 40 percent less than would be expected for a nation at its level of development.

A recent report by the President's private sector trade policy advisory group estimated that Japanese trade barriers may be costing the United States as much as $30 billion each year.

The evidence is so overwhelming that distinguished U.S. business groups, such as the U.S. Chamber of Commerce, the National Association of Manufacturers, and the Emergency Committee for American Trade—long unflinching advocates of free trade, have asked the U.S. Government to take action against Japanese trade barriers.

The refusal of the Japanese Government to buy the United States F-16, instead opting to produce its own aircraft, is only the latest example of a very consistent pattern of behavior.

The debate today demonstrates that the U.S. Senate is no longer willing to accept the status quo.

We can no longer afford to open our market to Japanese products while Japan closes the door to our exports.

We can no longer afford to have the Defense Department and the State Department negotiate agreements without regard for U.S. trade and economic interests.

In large part to address the problem of Japanese unfair trade practices, the Trade Act of 1988 contained a provision known as Super 301.

Super 301 established a procedure for identifying those nations that maintain extensive trade barriers and initiating negotiations to eliminate those barriers.

Although no nations were specifically referenced in the provision, the main target of Super 301 is Japan.

As this debate goes on in the Senate, another debate is raging within the administration over whether or not to use Super 301 to attack Japanese trade barriers.

According to the New York Times this morning, the State Department is vigorously arguing against using Super 301 on Japan.

I hope that the administration takes note of the sentiments expressed in this Senate debate and uses Super 301 to attack Japanese trade barriers.

If the administration fails to use Super 301 on Japan, the consequences could be far graver than just losing the FSX agreement.

I plan to reluctantly vote against approval of the FSX agreement. The choice I am faced with is very difficult.

We should have pushed harder to convince Japan to simply buy our F-16's.

Also, I believe we should have considered our economic interests earlier rather than waiting to the end of the process when there is no alternative to turning the agreement down.

I understand the irritation turning this agreement down causes our Japanese allies. They thought they had a deal.

But my patience has run out.

According to the GAO and other unbiased observers, the FSX agreement is a bad deal for the United States.

The agreement will help Japan fulfill its long-term goal of establishing a world-class aerospace industry—an aerospace industry that would soon be competing head-to-head with the most successful sector of the United States manufacturing industry.

We cannot sit by and watch America's competitive edge be wiped out in yet another industry.

Economic and trade issues must be given greater weight in future dealings with Japan.

Apparently, the only way to get that message to the administration is to take drastic action. That is a very unfortunate reality for executive-congressional relations.

The United States and Japan need each other. The underlying relationship between the United States and Japan is strong. And a continuing strong bilateral relationship is vital to both countries.

But the inequitable trade relationship is undermining the positive aspects of the United States-Japan relationship.

In the interest of preserving a strong relationship into the next century, the United States and Japan must immediately begin to solve the trade and economic problems.

Finding a more equitable solution to the FSX issue is the first step down that road. I hope that we use Super 301 as a springboard to go further.

The Congress will no longer stand by and see economic problems swept under the rug.

Mr. DIXON. Mr. President, I simply wanted to say while my dear friend and colleague from Illinois is still on the floor that PAUL SIMON honors me greatly by his statement and his vote in the committee in support of my resolution of disapproval. There is no more thoughtful man in the U.S. Senate than my colleague from Illinois, Senator PAUL SIMON.

I have had the pleasure and the distinction and the honor of serving with PAUL SIMON in public service since we were very young men in the Illinois House of Representatives in the very early 1950's. As many here know, we do not always vote the same way, so that his vote here was not a vote to be voting the same as ALAN DIXON. His vote here was a thoughtful and careful vote that he arrived at after hearing all the evidence. I would just like to tell one story about my colleague, Mr. President, who I have the deepest personal affection and the greatest personal admiration for.

One time many years ago when we were very young men in the Illinois House, there was a tremendously popular man in our State who was auditor of public accounts, and he came from our part of the world from southern Illinois. He was from Granite City, I was from Belleville and Paul was from Troy. We were each about half an hour away from this fellow, the auditor of public accounts. Everybody was fond of him. Everybody said he would be Governor sometime soon.

He had an appropriation bill to substantially increase the appropriation for the operation of his office as auditor of public accounts. Everybody in the House of Representatives voted for it save one. Everybody thought, how in the world could PAUL SIMON vote against that appropriations for our popular friend who is auditor of public accounts? Frankly, many were very critical of him. He was a very young man in either his first or very early term in the Illinois House.

Mr. President, that auditor of public accounts was indicted for stealing millions from the State of Illinois out of the funds in his office. He was sent to the penitentiary and served many years' time in this penitentiary of our State, and one thoughtful man in all of the legislature at that time had the good sense and the courage to vote no on his appropriation bill.

I have been watching PAUL SIMON'S votes all my life since then, Mr. President. No man has the integrity and the mission and the purpose that I have ever known that I find in my colleague and friend. I am deeply honored that he is supporting me in what I consider to be this very worthy cause, and I express to him my profound personal appreciation.

Mr. DURENBERGER. Mr. President, I want to commend the proponents of this resolution for their broad exposition of the troubling issues surrounding the FSX codevelopment arrangement entered into between the United States and Japan. They have presented cogent and well-reasoned arguments as to why the United States should hesitate before entering into a technology transfer arrangement of the proportions of the agreement currently before us.

And I want to commend the opponents of this resolution for placing the FSX arrangement in a broader geopolitical perspective and for their forthright response to the many concerns that everyone of us in this body have concerning this transaction. On balance, this has been one of the most elucidating and important debates we have had in the Senate in many years.

Mr. President, before casting their votes, I urge my colleagues to consider precisely the nature of the issue that we will soon vote on, and the forseeable consequences that will surely result if this codevelopment arrangement is disapproved or if it is approved. In that context, I would point out that the issue before us is not whether the Japanese should purchase the General Dynamics F-16 fighter aircraft off the shelf as part of its effort to upgrade its air defense forces. That is not the issue currently being debated and was never a viable option.

The reason the Government of Japan decided to upgrade its air defense forces is because it made a commitment earlier in this decade, to assume primary responsibility for protecting Japanese airspace, coastal waters, and sea lanes out to 1,000 miles. In deciding what fighter would be most suitable for this task well into the next century, the Japanese Government has always considered only two development options. The first option, strongly supported by Japanese defense contractors, was to manufacture an entirely new fighter aircraft relying exclusively on Japanese domestic technology. The second option considered was to develop jointly with the United States a modified version of the F-15, F-16, or F-18, or to codevelop a modified version of the British Tornado fighter in conjunction with the West Germans and the Italians.

In 1987, when evidence began to mount that the Government of Japan was leaning strongly toward the go-it-alone first option, the Government of the United States entered into a series of high level negotiations in an effort to convince the Japanese to instead agree to joint development of a new fighter aircraft using a United States fighter as the basis for the project. Bowing to United States pressure, the Japanese in October 1987, announced that it would forego domestic development of a new fighter and instead decided to spend approximately $6 billion developing an advanced version of an American fighter, namely the F-16.

After more than a year of negotiations aimed at implementing the memorandum of agreement [MOU] between the two countries, the Reagan administration finalized the agreement in late 1988. However, when questions arose concerning some of the technology proposed to be transferred, and the exact share of the project that would be awarded to the American subcontractor, the new administration successfully sought to reopen the agreement.

I am convinced that the final package negotiated between the two countries is a significant improvement over the original agreement by not only protecting sensitive computer software source codes, but also ensuring that American industry will receive a fair percentage of the development work associated with this project.

Mr. President, what should be eminently clear today is that the agreement that we are debating is an agreement that was: First, actively sought and pursued by the United States Government and the U.S. defense contractors who will participate in a large share of the project; and second, reopened and renegotiated at the request of the U.S. Government.

I ask my colleagues the simple question: "What will happen if we disapprove this agreement that was initiated at our request?" Japan's vast financial resources and advanced technological expertise guarantee that it will not turn around and decide to purchase off-the-shelf F-16's. It will either begin to develop and produce the FSX on its own, or it will seek to collaborate with the advanced aerospace companies in Western Europe to develop another version of the FSX. In either case, one thing is certain: Defense contractors in the United States and thousands of their employees will not receive a single dollar of the nearly $3 billion in development work that can be expected from this agreement. That money will either stay in Japan or be funneled to our European aerospace competitors.

Mr. President, I have heard many arguments in the past week that the FSX arrangement is a one-sided giveaway of American technology that will ultimately build the foundation of a vigorous Japanese competitor to the American aerospace industry. Although I have some misgivings about sharing some of our most advanced aerospace technology with the Japanese, I am not that concerned that this agreement is such a one-sided giveaway.

In the first place, the Japanese will license the F-16C block 40 design which is a second generation redesign of the 1978 version of the fighter. I would note that this is not even the most advanced version of the F-16, since General Dynamics is currently developing a block 50 design that contains even more advanced electronic systems than the block 40. Moreover, our defense contractors are currently developing far more sophisticated and advanced fighter aircraft than the F-16, specifically the Stealth F-19 fighter, which will ensure U.S. preeminence in military aircraft technology for the foreseeable future.

More importantly, this is not a one-way deal that only benefits the Japanese. The time is long gone when the United States can believe that it holds a monopoly on all high technology development and production. In fact, there are several areas where experts would concede that the United States can learn many lessons from the Japanese about how to produce high technology products more efficiently and effectively. I believe the United States may turn out to learn as much from this arrangement about high technology production as the Japanese will learn about aircraft production from the agreement.

For example, we will surely gain many insights into Japan's technological advantages in composite technologies and phased array radars. More importantly, the Japanese have agreed to return any improvements they make in the production process at no charge to the United States and to make available any original Japanese technology used in the FSX development project that is specifically requested and paid for. In effect, this agreement may well serve to improve United States military aerospace technology and production through the transfer from the Japanese of much of their commercial manufacturing and electronics expertise.

Mr. President, this morning the Defense Department released a report indicating that the Japanese currently have a significant lead in developing 6 of 22 technologies that the Pentagon considers crucial to national security and the long-term qualitative superiority of American weapons systems. For example, the report found that Japan is ahead of the United States in certain areas of microelectronic circuitry and integrated optics.

Certainly if these rapidly developing technologies are incorporated into the FSX, the United States will be able to

share in technological and security benefits that are associated with these advances. To reject this codevelopment project is to walk away from gaining intimate access to these extraordinary advances.

Mr. President, underlying this entire debate is less a fear that Japan will become a significant military competitor to the United States than that it will use the manufacturing technologies developed in this project to become a significant threat to our commercial aviation industry. What is indeed most surprising is that none of this Nation's premier commercial aerospace companies, including world leader Boeing, oppose this agreement. And the reason the commercial aerospace industry does not oppose the project is because the industry knows that most of the military technology transferred pursuant to the FSX project will not facilitate Japan's entry into the commercial aviation industry because most of the critical manufacturing processes and technological specifications for military hardware are far different than are necessary for commercial aviation.

In addition, because of the extremely high development costs and risks associated with new generation commercial aircraft, the commercial aerospace industry is already well ahead of our military in codevelopment projects involving jet engine technology and airframe development. In fact, the Japanese are already engaged in coproducing portions of the advanced Boeing 767 commercial airliner and have been engaged in a joint research project with Boeing on the next generation of fan-jet commercial aviation known as the 7J7.

Finally, Mr. President, we should not overlook the fact that Japan is not only our most important economic partner in the Pacific but also serves as the foundation of our strategic interests in the Pacific. At the very moment that we are debating the issue of our military and economic relations with the Japanese, the leaders of the Soviet Union and the People's Republic of China are meeting in Beijing to attempt to rebuild a relationship that fell apart 30 years ago. The implications of this renewed partnership offers great possibilities for future peaceful change in the Pacific region. But it also could serve to diminish U.S. influence in this part of the world and undermine our strategic interests in the region.

Mr. President, all of us will concede that Japan must do more to open its markets to our commercially competitive products. It is neither in Japan's best interests, nor ours that our bilateral trade deficit continues to run at the level of the past recent years. But we should not allow the commercial tensions between our two countries to serve as the vehicle to undermine the vital political and military interests that we hold in this region.

I believe that our military, economic, technological, and political interests will be best served if we fulfill our commitment to carry out this codevelopment project. If we renege on this commitment, the long-term consequences to our bilateral relations could reverberate well into the 21st century.

Mr. GORE. Mr. President, if Congress votes against the FSX contract, we shall have turned a very important corner. Such a vote would mean that Congress—having weighed Japan's value as a military ally on the one hand, and Japan's threat as an economic competitor on the other, is prepared to give greater consideration to the latter.

It will signify our readiness to invite the Government of Japan to do whatever it then deems to be in its best interests, and live with the consequences of that, rather than proceed with the FSX contract.

This is not a minor matter. It can have a profound impact upon the thinking of the Japanese people, as well as of their government. The fact that such a decision will come at a moment when we are at loggerheads over nuclear modernization with another major ally—the Federal Republic of Germany—only underscores the strength of the centrifugal forces now at work on the system of collective security, which this country created, and of which it remains the necessary center.

And yet, the economic stakes are very great: far outstripping the immediate value of shares of production and access to technology in and around the FSX project itself. The game here ultimately concerns aerospace: one of the few areas where the United States retains a marked advantage.

It is obvious that the FSX has its place in a larger Japanese interest, far transcending the need for a new military aircraft. Were military necessity to be all that is at work here, then Japan ought to have purchased the F-16, or worked out a coproduction arrangement. Instead, Japan's first preference was to have developed the FSX entirely on their own, but failing that, to codesign it with us. And the reason for that is clear. This is the way in which Japan can gain experience in advanced materials, engine design, avionics, and systems integration: not for the next military aircraft, but for a larger scale venture into commercial aerospace.

Like other Members of the Senate, I have scrutinized information provided us about the details of the FSX contract. I hoped to find guidance there as to whether we should proceed or not. But it would be possible to vote against the FSX even if the contract were itself in perfect order. The choice involves issues larger than the local technicalities of this deal.

This will be instead, an apples and oranges decision. A decision in which national military security and national economic security must be balanced, even though they are values measured in different units of account.

The only bridge between these values is not in place. It would be a forward looking United States strategy aimed at sustaining our lead in aerospace, not just against potential competition from Japan, but against actual ongoing competition from Europe. Europe after all is hot on our tails with real products: Europe is competing with us for the civil aviation market; the military aviation market, and the space-launch market. Not 10 years from now. But right now.

And what is the U.S. Government's plan for aerospace? A vacuum. We are ditching the national aerospace plane—and, yes, I know it is to be transferred from the Department of Defense to NASA—but it will arrive there destitute. This was to have been the program that would push us into the far frontier of materials technology, propulsion technology, and avionics. We are about to abandon it.

We have invited our major aerospace companies to enter the field of commercial launch services in space. And there they encounter present and rising future competition from launch vehicles backed to the hilt by foreign governments. Left to fend for themselves in that environment, our private companies are going to take a bath. Where is the prospective remedy for that? Not visible.

We see every day that the U.S. computer industry, which is parent to avionics, is under seige. And what is our answer to that? Nothing.

We are even told by the administration that the FSX codesign project is to be the first of others. Indeed it may well be. What foreign government worth its salt will be interested in merely coproducing an aircraft with us, if instead it can get to where the value is really added: in designing and integrating the project. How many other systems will be codesigned, until the overseas market for U.S. aircraft is gerrymandered, and our lead in both technology and production is dissolved?

If there is no sign of the dawn of strategic commercial thinking in this government, then it is just as well that we have a crisis to wake us up: just as well that we have to confront the stakes in the FSX issue.

This debate should be an alarm in the night for the Bush administration. It cuts across party lines. It involves people who have no immediate concerns about the aerospace industry—but who are deeply concerned about

the security of the Nation. It says that we are at the point where the national interest is no longer clear enough to sustain consensus; not even clear enough to sustain a clean party-line view. It says we have a form of chaos, where each of us must reason alone.

In this process, the first and only question is what benefits the United States most, in the balance. And here is how I reason:

Rejecting the FSX contract will administer a major shock to the United States-Japanese security relationship.

Rejecting the FSX contract will also have an impact on general Japanese political opinion, by undermining the perceived value of a security relationship with us.

Rejecting the FSX contract will liberate the Japanese Government to seek its objectives by means totally independent of us.

Rejecting the FSX contract will provide another major instance of U.S. inconsistency and unreliability as a partner: An example that will affect our standing in many other places and circumstances.

Rejecting the FSX will cause direct financial damage to the U.S. defense industry.

Rejecting the FSX will impede, but not stop Japan's search for entry into the aerospace market. It will do nothing at all about competition from Europe and elsewhere.

Rejecting the FSX will not substitute for the lack of a proactive U.S. Government plan for the future of this country in aerospace.

Rejecting the FSX will do nothing to redress other grievances we have against Japanese trade practices. On the contrary, it may make it harder for us to make progress with them because of its impact on the overall psychology and politics involved in trade bargaining.

Therefore, rejecting the FSX will harm us militarily by damaging ties with a vital ally, and by keeping that ally weaker than it should be in order to do its part. But rejecting the FSX will do nothing to secure our long-term economic interests.

For these reasons, and with misgivings, I shall vote to support the FSX venture. It is just barely the right thing to do. And if the Bush administration doesn't want to see this kind of scene repeated with variations, again and again, it had better take a hint.

This country needs proactive economic and commercial strategy. We need a strategy based on growth, on investment, on innovation, on education. Without it, we will eventually retreat ever further into protectionism and withdrawal. And as we do so, the stable world order we created based on the free trade of goods and ideas will collapse, leaving behind the tragic memory of a golden age which could not be sustained, for want of wisdom.

Mr. DASCHLE. Mr. President, I have examined the administration's agreement with Japan to codevelop the FSX fighter aircraft. I have reviewed the Foreign Relations Committee's findings on the resolution of disapproval that is before us today. I have spoken with my colleagues and with constituents. And I have listened intently to the arguments of my good friends who oppose this agreement.

The FSX codevelopment project is a difficult and emotional issue. As its opponents have underscored on the Senate floor over the past week, our choice is not clear cut.

Yet, after careful evaluation of the arguments on both sides of the debate, I believe President Bush's FSX agreement with Japan serves the best interests of the United States. I would like to take this opportunity to outline why I have come to this conclusion.

The United States has been negotiating with Japan about the development of a fighter aircraft for over 2 years. After the first agreement was presented to Congress, many Members, including myself, expressed concern to the administration about the need for stricter safeguards to preserve the security of U.S. technology. In response, the administration reopened negotiations with Japan and secured the assurances we demanded—protection of our technology. Those protections are the foundation of the argument for proceeding with the codevelopment project.

Mr. President, Japan is a strong ally of the United States. That nation plays a very important role in maintaining a peaceful climate in the Pacific. Our debate on the FSX agreement is being followed in Japan, and we should be cognizant of its impact.

I understand how passionate Members are about their convictions on this issue. Yet, it is undeniable that the misinformation and emotional rhetoric surrounding the negotiations on the FSX agreement affects our relationship with Japan.

I certainly understand the concern of those Americans who fear the growing economic reach of Japan. It should not be minimized. At the same time, however, U.S. policymakers must approach complex trade issues such as the FSX codevelopment project with clear objectives in mind, paying attention to both the immediate and longer-term implications of our policy. The FSX agreement is an example of an issue that should be debated within the context of the present and with a eye toward the future.

Since 1960, Japan has been using the F-1 aircraft to defend crucial sealanes. The FSX is designed to replace this aging fighter plane.

At the beginning of our bilateral discussions about the development of a new fighter, Japan indicated its desire to develop and produce the fighter in Japan. The United States argued that Japan should base the FSX on an American aircraft. After intense negotiations, Japan abandoned its plan for indigenous development and opted for a codevelopment project with the United States based on the F-16 aircraft.

Under the final agreement negotiated by the administration, the Japanese Government will bear the entire financial responsibility for the project. United States firms will receive 40 percent of the work share in the development phase, and, if production occurs, the American work share will be approximately 40 percent of the value of the project. In addition, all Japanese technological developments that are based on United States technology will flowback to the United States at no cost.

This arrangement will mean approximately $2.4 billion to American industry. Secretary of Defense, Richard Cheney told the House Foreign Affairs Committee that this agreement will result in thousands of man-years of quality work and more than $2 billion for American industry. If Congress rejects the administration agreement, we will have nothing. Japan will go it alone.

Furthermore, this agreement is consistent with United States demands for Japan to assume a greater share of the defense burden in Asia. Because of Japan's spectacular economic success, many in Congress and the administration have urged that stronger efforts be made to ease the military burden the United States bears for the Japanese Government. I support that objective.

Japan has done more in recent years to improve its own defense capabilities than any other United States ally and has set impressive goals for the future. Japan currently spends more on defense then our traditional allies in Europe. Its military budget has risen at an average of 5 percent a year for the last 8 years. The New York Times recently reported that this year, when Pentagon spending is expected to be frozen, Japan's military outlays will rise 5.9 percent, to $31.4 billion.

Japan is willing to spend $6 billion to develop its own fighter plane, which, in turn, will ease the United States defense burden in the Pacific rim. Japan's willingness to lessen our burden should be encouraged, not criticized.

Having acknowledged the benefits of the FSX agreement, I have also evaluated its potential liabilities. As I mentioned earlier, my primary concern about this agreement is maintenance of the security of United States technology. This is a serious consideration.

Critics maintain that the administration agreement makes precious United States technology vulnerable to com-

mercial exploitation by the Japanese. Yet, the technology we would share with Japan is over 10 years old and will not be applicable to their commercial industry.

I examined the technology issue by dividing it into three distinct areas: The airframe; the engine; and the software. According to Secretary Cheney, the airframe technology to be shared with Japan is more than 15 years old, and the engines will be bought off-the-shelf from an American company.

Two issues lie at the heart of the software debate. The first is flight source codes—the codes controlling the avionics systems. The second is mission source codes—the codes dealing with fire control.

The United States has a clear lead in flight code software. This software is easily applicable to the commercial industry. Under the President's agreement, Japan will be required to write its own flight code software—our codes will not be shared. The avionics will be produced solely by Japan.

We will, however, share some mission source codes affecting fire control. Japan will have to write its own codes for other functions of the mission's computer—navigation, radar, etcetera. According to the administration agreement, Japan will not have access to software that could benefit its commercial industry.

Critics of the agreement point out that Japan could buy the F-16 off-the-shelf from the United States, which would benefit the American economy.

Japan, however, has indicated that it has no interest in buying anything off-the-shelf from anyone. Japan says it has a legitimate need for a new fighter aircraft. It anticipates future mission and design requirements of the aircraft that no existing off-the-shelf aircraft would provide. Japanese leaders ask what European country wouldn't expect to be allowed to develop an indigenous fighter. The F-1 was developed indigenously by the Japanese, and Japan entered into production agreements in the cases of the F-4, F-15 and P-3.

The Japanese Government simply will not consider purchasing an aircraft off-the-shelf. If Japan indicated a willingness to purchase a fighter, I would insist the United States built F-16 be considered. If denied that option, I would prefer that Japan codevelop the project with the United States rather than look elsewhere to meet its defense needs. Our economy would not benefit from the latter scenario.

Critics say we are giving away 7 billion dollars' worth of F-16's for a deal that only means, at the most, $3 billion to the United States. If the Japanese government bought F-16's off-the-shelf, the purchase price is estimated $2.9 billion. We are receiving approximately that amount in the codevelopment project.

Critics also report that many American companies have found problems with some of the single-wing composite technology Japan will likely be sharing with us under the flow-back provisions of the agreement. Likewise, they maintain that the radar systems that will be shared have been known to Hughes Aircraft and others for as long as ten years. However, Commerce and Defense Department officials refute these assumptions and cite these technologies as an important part of our continued commercial and military aircraft production.

Moreover, the United States did not predicate this agreement on the flow-back of technology. The Air Force has specifically indicated great interest in this technology. Under the codevelopment agreement, the Japanese will be paying us almost $3 billion to watch them develop, produce and test this technology. We would save the expense of testing this technology ourselves, and if we don't pursue this agreement, we will incur the expense of trying to acquire this technology from Japan after the fact.

Mr. President, the American relationship with Japan is strong and growing. One hopes that wise leadership and clear vision, in the United States and Japan, will build on this foundation for the benefit of both countries and the world. On balance, the FSX agreement is good for the bilateral relationship and good for America. The resolution of disapproval should be rejected.

Mr. MITCHELL. Mr. President the Government of Japan has elected not to purchase an existing American aircraft for its next-generation support fighter, the FSX. This decision appears to be based upon economic considerations rather than national security considerations.

If the Japanese Government had decided to select the most capable aircraft to do the job, it would have selected an existing American aircraft. If the Japanese Government had decided to make the most cost-effective decision, it would have selected an existing American aircraft. If the Japanese Government had decided to use its defense resources most efficiently, it would have selected an existing American aircraft and used the balance of the dollars saved on other defense needs. If the Japanese Government had decided to make a meaningful gesture of their commitment to reducing the enormous trade imbalance between our two countries, it would have selected an existing American aircraft.

The Government of Japan decided not to base its decisions on any of the above considerations. Instead, it selected the route of development of a new aircraft, based on the design of the United States F-16 with substantial Japanese technology.

The current imbalance in our trade relations with Japan must be corrected. The Japanese Government must make a commitment to end that imbalance and must follow up that commitment with concrete actions. These actions do not include refusing to buy our products—especially our military aircraft, which are the best in the world—or investing resources to develop their own aerospace industry to compete with ours. If we proceed with this agreement, we may be assisting in the creation of our own future competition.

I do not believe we should lend our assent to such a development.

If this agreement is permitted to go into force, it could be interpreted as an endorsement of the path of codevelopment, when a purchase of our own aircraft would have been the preferred course. At some point, the practice of refusing to purchase U.S. products while continuing to acquire U.S. technology must be reversed.

Our relations with Japan are important. Japan and the United States enjoy a close security and military relationship which should be strengthened and developed. It clearly serves the naitonal interests of both countries. At the same time, our economic relationships have developed an imbalance which threatens to weaken the security relationship. The proper way to address this potential problem is to correct the imbalances in the trade and economic flow. Each government must commit to that course as well. In this case, the Japanese have passed up an opportunity to take an important step in that direction.

We must send the message that it is time for a change in the manner in which our economic relations have been conducted. As a practical matter, issues of trade and issues of military cooperation are now linked. The economic and commercial factors must be taken into consideration in making defense cooperation decisions. The Japanese Government clearly understands this and acts accordingly. The United States must as well.

FSX AND THE PRAYING MANTIS

Mr. DIXON. Mr. President, there is a fatal flaw in the efforts of the administration to give away our American technology on the FSX fighter plane to the Japanese.

That flaw is that the American negotiators have taken the short run view. Several of my colleagues and I have argued that the long-run view is vital in this matter—vital to the well-being of the American aerospace industry, vital to the overall well-being of the American economy.

Mr. President, I would like to cite a new book on Japan that makes some telling points that are right on the

mark on this FSX proposed deal. In a moment, I am going to cite some of those very salient points. But first, I would like to say I would like to see the folks at the State Department and the Defense Department focus on some key points in this book.

I have not tried to digest the entire volume, Mr. President, and it is truly a weighty treatment of a weighty subject. Some observers would immediately say it is a dull book. There is an important distinction I have discovered over the years, Mr. President: There is unimportant dull, and there is important dull. If the experts view the book as dull, I want them to know that "The Enigma of Japanese Power," by Karel Van Wolferen is important reading. At least I have found it so in relation to the FSX package the administration is trying to peddle up here on the hill.

Let me quote from the book, Mr. President:

> The greatest apparent international advantage the Japanese system has enjoyed so far lies in Western misconceptions concerning the Nature of the Japanese challenge. The United States has been especially vulnerable to Japan's industrial onslaught in that the U.S. Government agencies overseeing its interests in this respect have no institutional memory. Every two years or so, new sets of U.S. officials must learn afresh that the Japanese economy does not operate in the same way as our own. Hence the continued self-imposed handicap of doctrinal adherence to inapplicable free-trade theories. The result has been misguided stopgap policies. * * *

What the author is saying, Mr. President, is that our negotiators are easily hornswoggled in deals with the Japanese. The plain fact is that we do not think the way the Japanese think. We do not take the long-range view the Japanese take in the negotiations. Another plain fact is that the Japanese economy truly does not operate the way our American economy works. In short, Mr. President, we end up with misguided stopgap policies and the Japanese end up with another industrial base in their economy to the detriment of our manufacturing industry and our competitive edge in trade. We end up looking at the short end of the stick when the long end of the stick is what we should be concentrating on, least we end up with no stick at all.

Let us look at this deal after it's been in effect for a while. The way the deal is skewed presently, we will get 40 percent of whatever transpires. The Japanese, however, will have our technology. They will build these planes in Japan. They will sell them abroad. The author of the book I've cited points out another important fact: The Japanese move into foreign markets with rock-bottom prices. After this deal gets rolling real good, Mr. President, we will wake up to find a brand spanking new aerospace industry in Japan, a new trade competitor in the world and a bad case of how did we ever let this happen jitters once it is too late to do anything about it.

Maybe I can best sum up the point made in this book that is so relevant to the FSX deal. Keyes Beech hit directly upon the point in his thoughtful review of the book when he posed the key question I find pertinent to this debate. The question is this: Is it possible for international free trade to survive when the West, and particularly the United States, does not have a trade strategy to match that of Japan, especially when the Japanese target and kill off entire industries in a host country?

And how do the Japanese kill off entire industries? Accordingly to Charles Furguson, a Massachusetts Institute of Technology postdoctoral research associate, the Japanese do it this way:

> Strategically, the system involves exclusion of foreign competitors; systematic acquisition of external technology; rapid design cycles and short product life spans; a progression from technically mature, low-cost mass markets to advanced and differentiated high-technology markets; flexible mass production of related but customized products, and long-term links with other domestic industries and suppliers. It has proved an excellent system for highly integrated, computerized production processes and is especially well suited to high-technology industries, where competition takes place in global markets that are volatile and differentiated.

Furguson further states that historically, with the aid of cooperation between industry, finance, and the government, Japanese high-technology firms "systematically excluded United States firms from Japanese markets; imported, copied, and stole United States technologies; and eventually launched export drives into the American market."

The fact that the Japanese target countries and target industries when it is to their advantage is a very real phenomenon that we Americans—and especially our negotiators—ignore at our peril, Mr. President. This business of targeting an industry, killing it off in a host country and usurping the market in international trade calls to mind the praying mantis, Mr. President. The praying mantis is opportunistic, tackling anything that looks edible. The mantis fools its prey because it raises its front legs as if praying. This marks the position of the mantis when it is hunting. Once the mantis stops praying and starts eating, everything disappears from view. That's what is happening on the FSX, Mr. President. I asked by staff to check, and I must report here today that the praying mantis is a part of the landscape in Japan.

My plea to our American negotiators is twofold, Mr. President. I ask them to read the relevant parts of this new book dealing with the enigma of Japan. Secondly, I ask that they be fully aware of the presence of the praying mantis in Japan. My counsel is this: Be wary of this deal on the FSX fighter. America and Americans stand to lose far too much to let this deal become a reality. It will become a matter of our everlasting regret as a Nation if we give away our technology, if we give away our competitive edge in trade, if we hand the Japanese a whole new industry without getting anything worth one whit of value in return. The mantis appears to be praying before it strikes. Let us never, ever forget that. We will be sorry unto our last days if we do.

The PRESIDING OFFICER. The question is on the engrossment and third reading of the joint resolution.

The joint resolution was ordered to be engrossed for a third reading and was read the third time.

The PRESIDING OFFICER. The joint resolution having been read the third time, the question is, shall the joint resolution pass?

So the joint resolution (S.J. Res. 113) as amended, was passed, as follows:

S.J. RES. 113

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. CODEVELOPMENT OF THE FSX WEAPON SYSTEM.

(a) IN GENERAL.—The President shall ensure that all technology, defense articles, and defense services provided by the United States or any United States corporation or entity to Japan pursuant to the agreement described in subsection (b) to codevelop the Support Fighter Experimental (FSX) weapon system shall be subject to the requirements of subsections (a), (c), and (d) of section 3 of the Arms Export Control Act.

(b) DESCRIPTION OF AGREEMENT.—The agreement referred to in subsection (a) is the agreement for which the President submitted a certification pursuant to section 36(d) of the Arms Exports Control Act on May 1, 1989 (transmittal no. MC-9-89).

SEC. 2. COPRODUCTION OF THE FSX WEAPON SYSTEM.

(a) IN GENERAL.—In the event that the United States and Japan seek to coproduce the FSX weapon system—

(1) the United States and Japan shall negotiate and sign a Memorandum of Understanding (MOU) containing the terms and conditions for that coproduction; and

(2) such MOU shall—

(A) prohibit the transfer to Japan of critical engine technologies (including, but not limited to, hot section and digital fuel control technologies); and

(B) prohibit the sale or retransfer by Japan of the FSX weapon system or any of its major subcomponents codeveloped or coproduced with the United States.

(b) APPLICATION OF ARMS EXPORT CONTROL ACT.—Technology, defense articles, and defense services resulting from any coproduction of the FSX weapon system by the United States and Japan shall be subject to the requirements of subsections (a), (c), and (d) of section 3 of the Arms Export Control Act.

29-059 O-90-25 (Pt. 7)

(c) POLICY ON UNITED STATES WORKSHARE.—It is the sense of the Congress that any Memorandum of Understanding (MOU) between the United States and Japan on coproduction should specify that the United States share of the total value of the coproduction shall be not less than 40 percent of that value, including the value of manufacturing spare parts and other support items which are part of the lifetime maintenance costs of the FSX weapon system.

SEC. 3. GAO REPORT.

(a) IN GENERAL.—Beginning 6 months after the date of enactment of this joint resolution, and every 12 months thereafter, the Comptroller General of the United States, after consultation with appropriate officials of United States agencies represented on the Technical Steering Committee, shall submit to the Speaker of the House of Representatives and the chairman of the Committees on Foreign Relations, Armed Services, Commerce, Science and Transportation, and Banking, Housing, and Urban Affairs of the Senate a report describing the progress made in implementing the Memorandum of Understanding (MOU) between the United States Department of Defense and the Japan Defense Agency on Cooperation in the Development of the FSX Weapon System, signed on November 29, 1988, and related documents thereto.

Such report shall state—

(1) whether any technology involved in development of the FSX weapon system has been transferred to the Japanese space shuttle program or any other part of the Japanese aviation sector aerospace technology;

(2) whether any technology has been diverted to any third party country unauthorized to receive such techology, in violation of the license and technology assistance agreement for the FSX weapon system; and

(3) whether any such technology has been made available, legally or illegally, to adversaries who could use such technology to the detriment of the North Atlantic Treaty Organization (NATO), the United States, any other member country of NATO, Japan, Australia, or New Zealand.

(b) DEFINITION—For purposes of this subsection, the term "Technical Steering Committee" refer to the FSX Technical Steering Committee established jointly by the Japan Defense Agency and the United States Department of Defense.

SEC. 4. IMPACT OF MOUS RELATING TO THE FSX WEAPON SYSTEM ON THE COMPETITIVE POSITION OF THE UNITED STATES.

(a) SOLICITATION OF RECOMMENDATIONS.—In the implementation of the Memorandum of Understanding (MOU) and related agreements between the United States and Japan regarding the codevelopment of the FSX weapon system, and in the negotiation, renegotiation, and implementation of future memoranda of understanding and related agreements concerning coproduction of the FSX weapon system, the Secretary of Defense shall regularly solicit and consider comments or recommendations from the Secretary of Commerce with respect to the commercial implications of such agreements and the potential impact on the international competitive position of United States industry.

(b) REVIEW BY SECRETARY OF COMMERCE.—Whenever the Secretary of Commerce has reason to believe that any such memorandum of understanding or related agreement has, or threatens to have, a significant adverse impact on the international competitive position of United States industry, the Secretary of Commerce may request a review of the agreement. If, as a result of the review, the Secretary of Commerce determines that the strategic commercial interests of the United States are not being served, the Secretary of Commerce shall recommend to the President any modification to the agreement he deems necessary to ensure an appropriate balance of interests.

(c) CONSIDERATION OF RECOMMENDATIONS.—(1) The President shall consider the recommendations of the Secretary of Commerce concerning—

(A) the commercial implications of any such memorandum of understanding or related agreement, and

(B) the potential impact on the international competitive position of United States industry.

in determining whether such memorandum of understanding or related agreement shall be implemented or agreed upon.

(2) Any such memorandum of understanding or related agreement shall not be implemented or agreed upon if the President determines that such agreement is likely to have a significant adverse impact on United States industry that outweighs the benefits of implementing or entering into such an agreement.

SEC. 5. DEFINITIONS.

As used in this joint resolution, the terms "defense article" and "defense service" shall have the same meanings as are given to those terms in paragraph (3) and (4), respectively, of section 47 of the Arms Export Control Act.

Mr. DIXON. Mr. President, I move to reconsider the vote by which the joint resolution, as amended, was passed.

Mr. LUGAR. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. LAUTENBERG. Mr. President, I voted to go forward with the joint United States-Japanese development of the FSX fighter aircraft because I believe it is in our commercial and national security interests, and because it will create jobs in this country.

Under the agreement, U.S. firms will receive 40 percent of the work share in the development phase of the aircraft, estimated to be worth $480 million. When the FSX goes into production, the U.S. work share will be about 40 percent of the value of the project, estimated to be about $2 billion. So, the FSX deal will mean $2.5 billion in business for the United States and at least 22,700 man years in employment, the same benefit to our trade deficit that would have resulted from off-the-shelf purchase of our F-16's.

All Japanese technological developments that are based on U.S. technology will flow back to the United States at no cost. In four areas—radar, electronic countermeasures, inertial navigation, and mission computer hardware, the technology used will be entirely Japanese, and the United States can buy it if it wants. All other technology is, by definition, United States technology, and any improvements the Japanese make on it flow back to the United States free of cost. A Technical Steering Committee consisting of defense representatives of the two governments, and one from Commerce, is established to oversee the implementation of the agreements and to monitor the use of the technology by the two contractors.

Further, Japan will contribute 130 highly advanced aircraft to the defense of the Northwest Pacific in the 1990's. Japan's defense establishment will remain heavily dependent on United States weapons technology for the remainder of this century.

Opponents of this deal argue that Japan should buy the F-16 off the shelf to narrow the trade gap between the two countries. Let me make clear that I, too, would have preferred that the Japanese buy our F-16's off the shelf. But that is just not in the cards.

Japan's alternative to the joint FSX development agreement is to develop its own advanced fighter, their initial preference, or to codevelop with Europe. That might take longer, but it would leave American firms and workers in the cold. Japan would never have bought the F-16 off the shelf. It has not purchased that way since the 1950's, and all the indications at the outset of the negotiations were that it would not do so again.

The FSX deal will actually help the trade deficit. We'll get about $480 million from the codevelopment and $2 billion from the production phase. That translates into $2.5 billion in Japanese business the United States would not have without the agreement, approximately the same as the dollar value of a straight sale of F-16's. Buying 130 planes off the shelf at about $20 million apiece would yield us about $2.5 billion.

Opponents of the sale argue that it will aid the development of the Japanese aerospace industry, and the development of a civilian aircraft manufacturing capability. But the representatives of the aerospace industry, the Aerospace Industry Association, support the agreement. So do the two major U.S. commercial aircraft builders, Boeing and McDonnell Douglas. Why would they do so if they believed that this agreement would contribute to the creation of a Japanese competitor?

In fact, most aircraft experts believe there is very little technology directly transferable from a military aircraft like the FSX to the process of designing and manufacturing a civilian aircraft. While it is well known that the Japanese are committed to developing their own aerospace industry, little in the FSX agreement will contribute directly to that goal.

Opponents to the deal argue that the United States is giving away $7 billion worth of technology and getting nothing in return. But the F-16 did

not cost $7 billion to develop, it cost about half of that. And those expenses have long been paid for by the American taxpayer. The United States is not giving away but is selling knowledge, and will recoup development costs which were expended many years ago.

Further, the United States is not providing its leading edge technologies. Many of the technologies used in designing and building the FSX should not be shared with the Japanese, and much of the F-16 technology is now 15 years old. In fact, most of the technology to be transferred in the FSX is widely available in the global aerospace market, and could be easily provided by many European companies. The United States would not be providing Japan with our state-of-the-art technology on our latest F-16's under the agreement.

In turn, the deal's opponents have underestimated the benefits of what we will get from the Japanese. The Air Force and American companies are very interested in the technologies that may be developed, such as the manufacturing process used in the radar and the cocured composite wing. These processes are not currently possessed by U.S. companies. According to the Air Force, the Japanese are ahead of us in cocuring of structural and surface components of large and complex structures. The Japanese have already made a small wing using cocured composite technology, and although it's not clear that they will be able to make the large wing, if they can't, the risk and cost is all on them.

In the process of designing the FSX, we should learn more about advanced Japanese technology, including radar systems and composite fabrications, than Japan's aircraft will benefit from American advances.

Opponents of the deal argue that the recent revelation that Mitsubishi Heavy Industries helped Libya to build its chemical weapon plant is only the latest in a series of incidents that cast serious doubt on Japan's ability, or willingness, to protect the sensitive technical data and manufacturing technology to be transferred under the agreement. This is certainly a concern I take seriously. I believe we need to carefully monitor the agreement to make sure that this concern is kept in mind and continuously assessed.

However, I would point out to the critics that there are restrictions on retransfer of U.S. technologies and these controls have been reaffirmed as a result of the letters of clarification exchanged between the two countries. These also clarified the provisions for flowback of technology, identifying those technologies which are provided exclusively by the Japanese which the United States may have access to.

A Japanese-American committee, including representatives from Commerce and Defense, will ensure that the United States has access to FSX technology developed by Japan, and that American engine technology and software are protected as specified in the joint development agreement. If the United States feels that Japan has not held up its end of the bargain, the United States can bring the project to a halt. Without the American fuselage and engines, there will be no FSX.

Mr. President, any agreement is only as good as our willingness to enforce it. I believe the terms of the FSX deal are in our interest, and we need only make sure that these provisions are vigorously and faithfully enforced.

In short, I believe this deal is in America's best interests, and should go forward.

---

## JAPANESE INVOLVEMENT IN LIBYAN WEAPONS PROGRAMS

The PRESIDING OFFICER. Under the previous order, the Senator from Alaska is to be recognized. The Senate will be in order. The Senator from Alaska is recognized.

Mr. MURKOWSKI. I thank the Chair. Mr. President, I rise and on behalf of myself and Senator BRADLEY I send a resolution to the desk and ask for its immediate consideration.

The PRESIDING OFFICER. The clerk will report the resolution.

The assistant legislative clerk read as follows:

A resolution (S. Res. 129) relating to Japanese involvement in Libyan weapons programs.

The Senate proceeded to consider the resolution.

Mr. MURKOWSKI. Mr. President, it is my understanding that this resolution has been cleared by the majority.

The reason for the resolution specifically is that the Toshiba incident raised concern over Japanese commitment to export controls enacted for the protection of the Western Alliance. These concerns were revived when we learned that Japanese firms had basically had an involvement in building the metallurgical complex at Rabat, which ultimately we have reason to believe were part of Libya's chemical weapons effort.

I think it is important to recognize in the trust and security relationship which we enjoy with Japan that the pending FSX proposal should be undertaken in an atmosphere of mutual trust between our friends, the Japanese, and ourselves. Trust is essential to the maintenance of our security relationship. We seek to, of course, understand the motivation of our Japanese allies. And I think that our contribution to their defense over the last 40 years proves that we have a genuine interest. We also hope that our Japanese neighbors understand our interests as well, but we do have specific sensitivities.

The resolution calls attention to our friends in Japan to what we are sensitive to, which to our reading is a form of a breach of mutual trust. It should not be necessary to explain how we feel about chemical weapons—this body and the House, the administration and Americans in general have enunciated their attitude very clearly—nor should we have to explain to our friends how we feel about terrorist regimes emanating out of Libya.

It should be clear to everybody in the world, including our friends, the Japanese, that our opposition to placing the means of packaging and delivering poison gas into the hands of Libyans—Mr. President, may I have order and the attention of my colleagues?

The PRESIDING OFFICER (Mr. ROCKEFELLER). The Senate will be in order. The Senator from Alaska is correct. The Senate will not proceed until the Senate is in order.

The Senator from Alaska may proceed.

Mr. MURKOWSKI. I thank the Chair.

I think we should not have to pass legislation informing our Japanese friends of our objections to what their commercial activities have done to aid the Libyan chemical effort. However, it is necessary that before we embark on the very significant FSX arrangement we have some clear understanding. We must understand each other on the specific point where we have seen testimony in the Foreign Relations Committee centered on whether the various terms of the deal are clearly stated. Well, we have lots of questions on this. This body has gone over that at great length.

We know in 1990 for instance that there is going to be another agreement that will necessitate MOU's before production is to be initiated on the FSX fighter. It is not necessarily clear what that agreement will contain. Much is unclear about the FSX deal. Much is left to negotiate.

I congratulate my colleagues, the junior Senator from New York, and the Senator from Illinois, for bringing these points out in this discussion as well as the senior Senator from West Virginia through the last action of this body.

The amendment sends a clear signal to our friends in Japan making it perfectly clear how we feel about past actions with respect to the Libyan chemical warfare program and how we would feel about any further Japanese assistance to that program.

Mr. President, this is not anything more than pure communication. The resolution is not binding. It does not require the Japanese Government to do anything that they could not easily do. This simply clears the air, and clears the communications between

our two parties. That is the very nature of friendship.

I would also in conclusion call my colleagues' attention to the reality that very few Japanese activities occur overseas without the knowledge of the Japanese Government through the organization of MITI which basically controls their activities.

So I urge in conclusion my colleagues to join me in sending a very clear communication as we embark upon this important agreement with our allies in Japan.

Mr. DIXON addressed the Chair.

The PRESIDING OFFICER. The Senator from Illinois.

The Senator from Rhode Island controls the time.

Mr. DIXON. Will my friend from Rhode Island yield 3 minutes?

Mr. PELL. Yes.

Mr. DIXON. I thank the distinguished chairman of the Foreign Relations Committee for yielding me 3 minutes.

I support, may I say, what is being done by my friend from Alaska. But I want my colleagues and the folks in the country to know that the discussion we are having here which the Senate of the United States is now unanimously endorsing is a resolution that recognizes that the Japanese were involved in the nerve gas plant in Libya, and the information, the classified information that we cannot spell out in full on this floor, is that Mitsubishi, which will be involved in this deal without question, is involved as well in the manufacture of canisters for the nerve gas to be used against their enemies in the Mideast.

So let my colleagues in the Senate know that when we adopt this resolution we are adopting as fact what this Senator and others have said on this floor, that they have been involved in Libya against the interests of the United States. Mitsubishi has been involved, Toshiba was involved, and gave the secret submarine technology to the Soviet Union against the interests of the United States at a cost to the American taxpayers of $3 billion, placing at risk every man and woman in America on the high seas of the world.

I want to say it is a final message that ought to be made in the RECORD. This is a bad deal. The Senate narrowly rejected the resolution of disapproval. The Senate wisely overwhelmingly adopted a resolution of approval with very tight constraints, and I say this will always be remembered as one of the truly, truly bad deals for America.

I support the resolution by my friend from Alaska. It is wisely done. It is well put, and it should be adopted by all 100 Senators.

The PRESIDING OFFICER. Who yields time?

Mr. PELL addressed the Chair.

The PRESIDING OFFICER. The Senator from Rhode Island.

Mr. PELL. Mr. President, I have had the opportunity to go over this resolution. Some small changes were made in it by the Senator from Alaska. I think on balance it is a good resolution, and we are prepared to yield back our time. I urge my colleagues to support it.

The PRESIDING OFFICER. Does the Senator from Alaska yield back his remaining time? The Senator does.

All time is yielded back.

The question is on agreeing to the resolution.

The resolution (S. Res. 129) was agreed to.

The preamble was agreed to.

The resolution, with its preamble reads as follows:

S. RES. 129

Whereas, Libya's chemical weapons program has been using a metal-fabrication facility that Japanese corporations helped to equip at the Rabta technical-industrial complex; and

Whereas, the past association of Japanese corporations with this metal-fabrication facility at Rabta revived doubts about the effectiveness of Japan's control over strategic technologies; and

Whereas, Japanese corporations ended all activities associated with this facility when the Government of Japan advised them, on the basis of information provided by the United States, that the Government of Libya was using it for chemical weapons; and

Whereas, Japanese assistance, in any form, to the Libyan chemical weapons program would, in the future, undermine the trust and confidence necessary for the security relationship between the United States and Japan: Now, therefore, be it

*Resolved,* That it is the sense of the Senate that the proposed export of technology, defense articles or defense services pursuant to an agreement with Japan to codevelop or coproduce the Support Fighter Experimental [FSX] shall not be implemented until the President of the United States receives assurances from the Government of Japan, and transmits those assurances to the Chairman and ranking member of the Senate Committee on Foreign Relations, that:

1. No Japanese personnel are involved with any aspect of chemical weapons production in Libya; and

2. No assistance of any kind will be provided, in the future, to the Rabta complex or to any other part of the Libya chemical weapons program by any Japanese corporation.

Mr. DIXON. Mr. President, I move to reconsider the vote by which the resolution was agreed to.

Mr. MURKOWSKI. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. DIXON addressed the Chair.

The PRESIDING OFFICER. The Senator from Illinois.

ORDER OF PROCEDURE

Mr. DIXON. Mr. President, we are all finished with the work on this. My distinguished colleague on the other side and I have been asked by the leadership on the two sides to do the cleanup work in a moment. We will but, Mr. President, we have to step off the floor, and I suggest the absence of a quorum only for a brief couple of minutes.

Mr. CHAFEE. Mr. President, I wonder if he will hold on that. I have a piece of legislation which I would like to introduce.

Mr. DIXON. Mr. President, if my friend will yield, we are delighted for him to take up time for several minutes while the Senator from Indiana and I are off the floor for about 3 minutes.

Mr. CHAFEE. Let us put it in a gentler fashion. "Take up"—why do we not say the Senator is delighted to have me have the opportunity to introduce the worthwhile piece of legislation, with the accompanying material?

Mr. DIXON. I am truly delighted, and may I say I only regret that I am leaving the floor and cannot be further enlightened for the first few moments. But I look forward in the future to being enlightened by my friend from Rhode Island.

Mr. CHAFEE. Good. I will make sure the Senator receives copies of all of this.

Mr. DIXON. I thank the Senator.

(The remarks of Mr. CHAFEE pertaining to the introduction of legislation are located in today's RECORD under "Statements on Introduced Bills and Joint Resolutions.")

Mrs. KASSEBAUM addressed the Chair.

The PRESIDING OFFICER. The Senator from Kansas.

Mrs. KASSEBAUM. I ask unanimous consent to speak as if in morning business.

The PRESIDING OFFICER. Without objection, the Senator may proceed.

## SPECIAL FAVORS SHOULD BE REMOVED FROM SAVINGS AND LOAN BILL

Mrs. KASSEBAUM. Mr. President, I read with alarm and disappointment that the House has added to the savings and loan bill numerous special exemptions for individual institutions. The practical affect of such provisions is to put well-connected individuals above the law. Mr. President this must not be tolerated.

Such favoritism threatens the credibility of Congress. Surely no one can forget the public outcry against the favors bestowed in the Tax Reform Act of 1986. Citizens felt cheated when asked to comply with laws from which well-connected individuals were excluded. They read with outrage how lobbyists were paid enormous fees and flaunted their ability to carve out exemptions. This fiasco must not be repeated. The average citizen views such

favoritism as little more than organized and sanctioned bribery. The taint of such favoritism stains not only the Members who sponsored the exceptions but all of Congress for allowing it to occur.

I have no doubt the public rebellion against the pay raise was fueled in large part by the resentment against Congress for permitting favoritism at the expense of the common taxpayer.

I am very pleased that the chairman of the Senate Banking Committee, Senator RIEGLE, has announced he will remove all clauses bestowing special favors. We should all support him in this effort. When the conference bill reaches the floor, we must insist that any special exemption be detailed and its presence, as well as the actual name of its beneficiary, be fully explained. There should be no provision that cannot withstand public debate.

It is my hope that the threat of this scrutiny will be such that when the bill emerges from conference we can all be assured that no one is placed above the law because of their connections or money.

Mr. President, I yield the floor.

## MESSAGES FROM THE PRESIDENT RECEIVED DURING RECESS

Under the authority of the order of the Senate of January 3, 1989, the Secretary of the Senate, on May 12, 1989, during the recess of the Senate, received a message from the President of the United States, transmitting a nomination; which was referred to the Committee on Labor and Human Resources.

(The nomination received on May 12, 1989 is printed in today's RECORD at the end of the Senate proceedings.)

## MESSAGES FROM THE PRESIDENT

Messages from the President of the United States were communicated to the Senate by Mr. Kalbaugh, one of his secretaries.

## EXECUTIVE MESSAGES REFERRED

As in executive session the Presiding Officer laid before the Senate messages from the President of the United States submitting sundry nominations which were referred to the appropriate committees.

(The nominations received today are printed at the end of the Senate proceedings.)

## ANNUAL REPORT OF THE NATIONAL SCIENCE FOUNDATION—MESSAGE FROM THE PRESIDENT—PM 44

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, together with an accompanying report; which was referred to the Committee on Labor and Human Resources:

*To the Congress of the United States:*

I am pleased to transmit the annual report of the National Science Foundation for Fiscal Year 1988. This report describes research supported by the Foundation in the mathematical, physical, biological, social, behavioral, and computer sciences; engineering; and education in those fields.

Achievements such as the ones described here are the basis for much of our Nation's strength—its economic growth, national security, and the overall well-being of our people.

Federal investments in research and development should be increased even beyond the current strong levels. Such investments should focus on basic research.

As we move into the 1990's, the Foundation will continue its efforts to expand our Nation's research achievements, our productivity, and our ability to remain competitive in world markets through innovation and discoveries.

I commend the Foundation's work to you.

GEORGE BUSH.

THE WHITE HOUSE, *May 16, 1989.*

## ANNUAL REPORT OF THE NATIONAL ENDOWMENT FOR THE ARTS AND THE NATIONAL COUNCIL ON THE ARTS—MESSAGE FROM THE PRESIDENT—PM 45

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, together with an accompanying report; which was referred to the Committee on Labor and Human Resources:

*To the Congress of the United States:*

In accordance with the provisions of the National Foundation on the Arts and Humanities Act of 1965, as amended (20 U.S.C. 959(b)(c)), I transmit herewith the Annual Report of the National Endowment for the Arts and the National Council on the Arts for Fiscal Year 1988.

GEORGE BUSH.

THE WHITE HOUSE, *May 16, 1989.*

## MESSAGES FROM THE HOUSE RECEIVED DURING RECESS

Under the authority of the order of the Senate of January 3, 1989, the Secretary of the Senate, on May 15, 1989, during the recess of the Senate, received a message from the House of Representatives announcing that the House has passed the following bill, without amendment:

S. 968. An act to delay the effective date of section 27 of the Office of Federal Procurement Policy Act.

ENROLLED BILL AND JOINT RESOLUTIONS SIGNED

The message also announced that the Speaker has signed the following enrolled bill and joint resolutions:

S. 968. An act to delay the effective date of section 27 of the Office of Federal Procurement Policy Act;

S.J. Res. 37. Joint resolution designating the week beginning May 14, 1989, and the week beginning May 13, 1990, as "National Osteoporosis Week"; and

H.J. Res. 247. Joint resolution designating May 29, 1989, as the "National Day of Remembrance for the Victims of the U.S.S. *Iowa.*"

Under the authority of the order of the Senate of January 3, 1989, the enrolled bill and joint resolutions were signed on May 15, 1989, during the recess of the Senate, by the Vice President.

## MESSAGES FROM THE HOUSE

At 12:14 p.m., a message from the House of Representatives, delivered by Ms. Goetz, one of its reading clerks, announced that the House has passed the following bills, in which it requests the concurrence of the Senate:

H.R. 7. An act to amend the Carl D. Perkins Vocational Educational Act to extend the authorities contained in such act through the fiscal year 1995;

H.R. 923. An act to redesignate the Federal hydropower generating facilities located at dam B on the Neches River at Town Bluff, TX, as the "Robert Douglas Willis Hydropower Project";

H.R. 2119. An act to authorize the exchange of certain Federal public land in Madison County, IL; and

H.R. 2178. An act to designate lock and dam numbered 4 on the Arkansas River, AR, as the "Emmett Sanders Lock and Dam."

## MEASURES REFERRED

The following bills were read the first and second times by unanimous consent, and referred as indicated:

H.R. 7. An act to amend the Carl D. Perkins Vocational Educational Act to extend the authorities contained in such act through the fiscal year 1995; to the Committee on Labor and Human Resources.

H.R. 923. An act to redesignate the Federal hydropower generating facilities located at dam B on the Neches River at Town Bluff, TX, as the "Robert Douglas Willis Hydropower Project"; to the Committee on Environment and Public Works.

H.R. 2119. An act to aurhorize the exchange of certain Federal public land in Madison County, IL; to the Committee on Environment and Public Works.

H.R. 2178. An act to designate lock and dam numbered 4 on the Arkansas River, AR, as the "Emmett Sanders Lock and Dam"; to the Committee on Environment and Public Works.

## ENROLLED BILL AND JOINT RESOLUTION PRESENTED

The Secretary of the Senate reported that on May 15, 1989, he had presented to the President of the United States the following enrolled bill and joint resolution:

S. 968. An act to delay the effective date of section 27 of the Office of Federal Procurement Policy Act; and

S.J. Res. 37. Joint resolution designating the week beginning May 14, 1989, and the week beginning May 13, 1990, as "National Osteoporosis Prevention Week."

## EXECUTIVE AND OTHER COMMUNICATIONS

The following communications were laid before the Senate, together with accompanying papers, reports, and documents which were referred as indicated:

EC-1124. A communication from the Secretary of the U.S. Senate, transmitting pursuant to law, the full and complete statement of the receipts and expenditures of the Senate, showing in detail the items of expense under proper appropriations, the aggregate thereof, and exhibiting the exact condition of all public moneys received, paid out, and remaining in his possession from October 1, 1988, through March 31, 1989; ordered to lie on the table.

## EXECUTIVE REPORTS OF COMMITTEES

The following executive reports of committees were submitted:

By Mr. HOLLINGS, from the Committee on Commerce, Science, and Transportation:

Phillip D. Brady, of Virginia, to be General Counsel of the Department of Transportation;

Galen Joseph Reser, of Virginia, to be an Assistant Secretary of Transportation;

David Philip Prosperi, of the District of Columbia, to be an Assistant Secretary of Transportation;

Thomas Jones Collamore, of the District of Columbia, to be an Assistant Secretary of Commerce; and

Michael Rucker Darby, of Texas, to be Under Secretary of Commerce for Economic Affairs.

(The above nominations were reported with the recommendation that they be confirmed, subject to the nominees' commitment to respond to requests to appear and testify before any duly constituted committee of the Senate.)

By Mr. LEAHY, from the Committee on Agriculture, Nutrition, and Forestry:

Alan Charles Raul, of New York, to be General Counsel of the Department of Agriculture;

Richard Thomas Crowder, of Minnesota, to be a member of the Board of Directors of the Commodity Credit Corporation;

Jack Callihan Parnell, of California, to be a member of the Board of Directors of the Commodity Credit Corporation;

Franklin Eugene Bailey, of Virginia, to be an Assistant Secretary of Agriculture;

Charles E. Hess, of California, to be an Assistant Secretary of Agriculture; and

Jo Ann D. Smith, of Florida, to be an Assistant Secretary of Agriculture.

(The above nominations were reported with the recommendation that they be confirmed, subject to the nominees' commitment to respond to requests to appear and testify before any duly constituted committee of the Senate.)

By Mr. CRANSTON, from the Committee on Veterans' Affairs:

Frank Quill Nebeker, of Virginia, to be chief judge of the U.S. Court of Veterans Appeals for the term of 15 years.

## INTRODUCTION OF BILLS AND JOINT RESOLUTIONS

The following bills and joint resolutions were introduced, read the first and second time by unanimous consent, and referred as indicated:

By Mr. PELL (by request):

S. 989. A bill to provide for participation by the United States in a capital increase of the Inter-American Development Bank, and for other purposes; to the Committee on Foreign Relations.

By Mr. WILSON (for himself, Mr. BOREN, and Mr. HUMPHREY):

S. 990. A bill to restrict the use of congressional frank for mass mailings and newsletters; to the Committee on Rules and Administration.

By Mr. WIRTH:

S. 991. A bill to continue the suspension of the duty on d-6-Methoxy-a-methyl-2-naphthaleneacetic acid and its sodium salt; to the Committee on Finance.

By Mr. CRANSTON:

S. 992. A bill to amend Section 8e of the Agricultural Adjustment Act (U.S.C. 608e-1), reenacted with amendments by the Agricultural Marketing Agreement Act of 1937 so as to add kiwi fruit, peaches, pears, nectarines, and plums to the list of imported commodities that must meet the minimum quality standards of domestically produced fruits, vegetable and specialty crops; to the Committee on Agriculture, Nutrition, and Forestry.

By Mr. KOHL (for himself, Mr. PRYOR, Mr. HATFIELD, Mr. GLENN, and Mr. LEAHY):

S. 993. A bill to implement the Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) and Toxin Weapons and Their Destruction, by prohibiting certain conduct relating to biological weapons, and for other purposes; to the Committee on the Judiciary.

By Mr. METZENBAUM (for himself, Mr. THURMOND, Mr. SIMON, Mr. DECONCINI, Mr. LEAHY, and Mr. HATCH):

S. 994. A bill to amend the Clayton Act regarding interlocking directorates and officers; to the Committee on the Judiciary.

By Mr. METZENBAUM (for himself and Mr. THURMOND):

S. 995. A bill to amend the Clayton and Sherman Acts regarding antitrust procedures; to the Committee on the Judiciary.

By Mr. METZENBAUM:

S. 996. A bill to amend the Clayton Act regarding damages for the United States; to the Committee on the Judiciary.

By Mr. MITCHELL (for himself and Mr. DASCHLE):

S. 997. A bill to amend title XVIII of the Social Security Act to provide for eligibility for home health services on the basis of a need for occupational therapy; to the Committee on Finance.

By Mr. PRYOR (for himself, Mr. HEFLIN, Mr. BOREN, Mr. FOWLER, Mr. CONRAD, Mr. DASCHLE, and Mr. FORD):

S. 998. A bill to improve rural medical data and information transmission, and for other purposes; to the Committee on Agriculture, Nutrition, and Forestry.

By Mr. HOLLINGS (for himself, Mr. DANFORTH, Mr. INOUYE, and Mr. BRYAN):

S. 999. A bill to amend the Communications Act of 1934 regarding the broadcasting of certain material regarding candidates for Federal elective office, and for other purposes; to the Committee on Commerce, Science, and Transportation.

By Mr. McCLURE (for himself, Mr. CONRAD, Mr. DASCHLE, and Mr. GORTON):

S. 1000. A bill to amend the Agricultural Act of 1949 to require the Secretary of Agriculture to exclude the malting barley price from the national weighted market price for barley in determining the payment rate used to calculate deficiency payments for the 1989 and 1990 crops of barley, and for other purposes; to the Committee on Agriculture, Nutrition, and Forestry.

By Mr. GORE:

S. 1001. A bill to establish policies and procedures necessary to develop, as a domestically based industry in the United States, a high definition television enterprise in the United States, together with ancillary products and services; to the Committee on Commerce, Science, and Transportation.

By Mr. DURENBERGER (for himself, Mr. LUGAR, and Mr. COATS):

S. 1002. A bill to amend the Solid Waste Disposal Act; to the Committee on Environment and Public Works.

By Mr. CRANSTON (by request):

S. 1003. A bill to amend title 10 and title 38, United States Code, to make certain improvements in the educational assistance programs for veterans and eligible persons, and for other purposes; to the Committee on Veterans Affairs.

S. 1004. A bill to amend title 38, United States Code, and other provisions of law, to improve the administration of veterans' health care benefits and personnel management in the Department of Veterans Affairs and for other purposes; to the Committee on Veterans Affairs.

By Mr. HARKIN (for himself, Mr. PRESSLER, Mr. SIMON, Mr. GRASSLEY, and Mr. DASCHLE):

S. 1005. A bill relating to the sale, purchase, or other acquisition of certain railroads; to the Committee on Commerce, Science, and Transportation.

By Mr. LEAHY (for himself and Mr. THURMOND):

S. 1006. A bill to encourage innovation and productivity, stimulate trade, and promote the competitiveness and technological leadership of the United States; to the Committee on the Judiciary.

By Mr. CHAFEE (for himself and Mr. WILSON):

S. 1007. A bill to amend title 23, United States Code, regarding the reduction in apportionment of Federal-aid highway funds to certain States, and for other purposes; to the Committee on Environment and Public Works.

By Mr. DURENBERGER (for himself, Mr. BURDICK, and Mrs. KASSEBAUM):

S.J. Res. 131. Joint resolution to designate November 1989 as "National Diabetes Month"; to the Committee on the Judiciary.

By Mr. SASSER (for himself, Mr. STEVENS, and Mr. WILSON):

S.J. Res. 132. Joint resolution designating September 1 through 30, 1989 as "National Alcohol and Drug Treatment Month"; to the Committee on the Judiciary.

By Mr. SPECTER (for himself and Ms. MIKULSKI):

S.J. Res. 133. Joint resolution designating October 1989 as "National Domestic Violence Awareness Month"; to the Committee on the Judiciary.

By Mr. LEAHY:

S.J. Res. 134. Joint resolution to designate the week of October 1, 1989, through October 7, 1989, as "National Disability Awareness Week"; to the Committee on the Judiciary.

By Mr. PELL (for himself, Mrs. KASSEBAUM, and Mr. GORE):

S.J. Res. 135. Joint resolution to establish a National Commission on Human Resource Development; placed on the Calendar.

## SUBMISSION OF CONCURRENT AND SENATE RESOLUTIONS

The following concurrent resolutions and Senate resolutions were read, and referred (or acted upon), as indicated:

By Mr. MURKOWSKI (for himself and Mr. BRADLEY):

S. Res. 129. Senate resolution relating to Japanese involvement in Libyan weapons programs; considered and agreed to.

By Mr. HARKIN (for himself, Mr. BENTSEN, Mr. BURDICK, Mr. SHELBY, Mr. COCHRAN, Mr. MCCLURE, Mr. EXON, Mr. CONRAD, Mr. STEVENS, Mr. SANFORD, Mr. THURMOND, Mr. BURNS, Mr. BOREN, Mr. PRYOR, Mr. LUGAR, Mrs. KASSEBAUM, and Mr. GRASSLEY):

S. Con. Res. 37. Concurrent resolution expressing the sense of the Congress that the differential in Medicare payments made to urban and rural hospitals be eliminated; to the Committee on Finance.

## STATEMENTS ON INTRODUCED BILLS AND JOINT RESOLUTIONS

By Mr. PELL (by request):

S. 989. A bill to provide for participation by the United States in a capital increase of the Inter-American Development Bank, and for other purposes; to the Committee on Foreign Relations.

INTER-AMERICAN DEVELOPMENT BANK REPLENISHMENT ACT

● Mr. PELL. Mr. President, by request, I introduce for appropriate reference a bill to provide for participation by the Untied States in a capital increase of the Inter-American Development Bank, and for other purposes.

This proposed legislation has been requested by the Department of the Treasury, and I am introducing it in order that there may be a specific bill to which Members of the Senate and the public may direct their attention and comments.

I reserve my right to support or oppose this bill, as well as any suggested amendments to it, when the matter is considered by the Committee on Foreign Relations.

I ask unanimous consent that the bill be printed in the RECORD at this point, together with the letter from the General Counsel of the Department of the Treasury to the President of the Senate, dated May 10, 1989.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

S. 989

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the Inter-American Development Bank Act (73 Stat. 299, as amended, 22 U.S.C. 283) is amended by adding at the end thereof the following new section:

"SEC. 32. (a)(1) The United States Governor of the Bank is authorized to vote for resolutions—

"(A) which were transmitted by the Board of Executive Directors to the Governors by resolution of April 19, 1989;

"(B) which are pending before the Board of Governors of the Bank; and

"(C) which provide for—

"(i) an increase in the authorized capital stock of the Bank and subscriptions thereto; and

"(ii) an increase in the resources of the Fund for Special Operations and contributions thereto.

"(2)(A) Upon adoption of the resolutions specified in paragraph (1), the United States Governor of the Bank is authorized on behalf of the United States to—

"(i) subscribe to 760,112 shares of the increase in the authorized capital stock of the bank; and

"(ii) contribute $82,304,000 to the Fund for Special Operations.

"(B) Any commitment to make such subscriptions to paid-in and callable capital stock and to make such contributions to the Fund for Special Operations shall be effective only to such extent or in such amounts as are provided in advance in appropriation Acts.

"(b) In order to pay for the increase in the United States subscription and contribution provided for in this section, there are authorized to be appropriated, without fiscal year limitation, for payment by the Secretary of the Treasury—

"(1) $9,169,559,712 for the United States subscriptions to the capital stock of the Bank; and

"(2) $82,304,000 for the United States share of the increase in the resources of the Fund for Special Operations.".

DEPARTMENT OF THE TREASURY,
*Washington, DC, May 10, 1989.*

Hon. DAN QUAYLE,
*President of the Senate, Washington, DC.*

DEAR MR. PRESIDENT: Transmitted herewith is a draft bill, "To provide for participation by the United States in a capital increase of the Inter-American Development Bank, and for other purposes."

The draft bill authorizes the Secretary of the Treasury to take the necessary actions for the United States to participate in the recently negotiated Seventh Replenishment of the Inter-American Development Bank (Bank).

The Bank now faces an unprecedented challenge in restoring significant growth to developing countries in Latin America and the Caribbean. In the 1980's, Latin America experienced one of the worst economic setbacks in its history. The countries of Latin America have yet to recover the levels of per capita output, income and consumption that prevailed in the 1979-81 period. For the period 1980 to 1988, real gross domestic product per capita declined, and now stands at a level first reached a decade earlier. Average unemployment has been at relatively high levels over the last decade, and social outlays have declined in per capita terms at a time when the needs of low income persons have been growing rapidly.

The Seventh Replenishment is the Bank's answer to this challenge. Negotiated over a period of years, it will result in major changes in Bank organization and operations, and increased Bank lending (over $3 billion in disbursements annually) to meet the regional demand for external financing and investment. To this end, the Seventh Replenishment is designed to support a total lending program of $22.5 billion from 1990 to 1993. It involves a capital increase of $26.5 billion and an increase of the Fund for Special Operations (FSO) of $200 million.

In negotiations for the Seventh Replenishment, the United States obtained agreement on such key issues as the decision-making structure for ordinary capital loans, country programming, enhancing environmental protection, and sector lending that be linked to sector lending by the World Bank. The Seventh Replenishment is a major accomplishment supportive of fundamental United States foreign economic policy goals.

The draft bill authorizes the Secretary of the Treasury to vote for the capital increase and the increase of the FSO, to subscribe to 760,112 shares of the capital stock of the Bank, and to make a contribution of $82.3 million to the FSO. The Administration will not request appropriations or program limitation for this subscription prior to the FY 1991 budget. While the draft legislation authorizes the appropriation of slightly more than $9 billion United States participation in the Seventh Replenishment will only involve budgetary authority of approximately $78 million annually a year over a four-year period.

It would be appreciated if you would lay the proposed bill before the Senate. An identical proposal has been transmitted to the Speaker of the House of Representatives.

The Office of Management and Budget has advised that there is no objection from the standpoint of the Administration's program to the presentation of this proposed bill to the Congress and that its enactment would be in accord with the program of the President.

Sincerely,

EDITH F. HOLIDAY,
*General Counsel.*●

By Mr. WILSON (for himself, Mr. BOREN, and Mr. HUMPHREY):

S. 990. A bill to restrict the use of congressional frank for mass mailings and newsletters; to the Committee on Rules and Administration.

RESTRICTING THE USE OF THE CONGRESSIONAL FRANK

Mr. WILSON. Mr. President, yesterday, at the west front of the Capitol, President Bush presented a plan to provide necessary funding for our war against drugs.

This plan, if passed by the Congress—both as an authorization and appropriation—will just about meet the commitment we made in last

year's drug bill. In many ways, that bill was a rubber check, for while it promised $2.7 billion in various kinds of relief and additional funds, to fight the war on drugs, it, unfortunately, has delivered well less than half of that amount—only about $1 billion of the $27 billion promised.

President Bush's plan calls for a more fully funded effort, at a cost of almost $1.2 billion in addition to what he has already requested. And, he has properly recommended that offsetting savings be found elsewhere in the budget to pay for these vital enhancements.

Unlike the standard operating procedure for Congress—which is to spend money on less important programs and then raise the deficit at the end to pay the serious, the important efforts like the anti-drug efforts—the President has forced the issue at the start at the very beginning, of the appropriations process. What he is telling us, and properly so, is that we must put antidrug programs first, and then divvy up the money for the rest of the domestic programs.

Well, Mr. President, I have an idea where we can find a good down payment on the President's request. All we have to do to kick-in $100 million for the fight against drugs is to stop our promiscuous spending on self-promotion in the form of congressional newsletters.

Recently, the Senate did commit to this swap for the public good during our consideration of the fiscal year 1990 budget resolution. We voted to transfer $100 million from the account that pays for newsletters and put it into the account used to fight crime. Now is the time to make good on that commitment.

Mr. President, I am today introducing a bill that would ban newsletters, thereby saving at least $100 million that would otherwise be wasted by the Congress next year. The original request for congressional mailing costs for next year was over $114 million, but recently the clerk of the House said that $20 million more would be needed, for a total close to $135 million—of which at least $100 million would support the mailing of congressional newsletters.

Mr. President, I am in no way trying to cut down on meaningful communications between the Congress and the American people. This legislation would not limit mailings of press releases to the news media designed to engender broad dissemination of information to the public. It would not limit mailings to the leaders of civic groups, corporations, labor unions, and public interest organizations who in turn could spread the word to their constituent members. And, my bill would of course not prevent Members of Congress from replying to constituent inquiries.

Indeed, all that a constituent needs to do is to write one letter on a matter of interest to that constituent and his or her Senator or Congressman could provide regular updates on that very matter.

What my bill is designed to prevent is congressional junk mail—mail that is uninvited, and invariably unwanted by the recipient.

Mr. President, my bill, which I am pleased to say is being cosponsored by the Senator from New Hampshire [Mr. HUMPHREY] and the Senator from Oklahoma [Mr. BOREN] will not simply deal with the profligacy of newsletters, but also with other related problems in the law that engender unrestrained spending.

For example, present law allows us to spend unlimited amounts of money on franked mail—even beyond what has been appropriated. This is possible because we have exempted ourselves from the Antideficiency Act which otherwise prevents spending beyond appropriation levels. If we fail to provide after-the-fact supplemental funds, the Post Office must absorb the difference.

The bill I am introducing would place the same spending restraint on Congress that is placed on every other Federal agency by prohibiting us from spending more than is appropriated.

The bill would also split the present unified congressional mail account into separate House and Senate accounts. Each House would be required to make an allocation from these accounts to each Representative and Senator. A report on expenditures for mass mail would be printed quarterly in the CONGRESSIONAL RECORD. By requiring public reports, we may encourage a reduction in the level of spending on our mail even after newsletters have been banned.

Mr. President, the bottom line question is what is the best way to spend $100 million in taxpayers' money: On newsletters or on the war against drugs?

What the American public needs to know is that a Member of Congress who sends out newsletters is using money that is desperately needed for and that should instead be devoted to the war against drugs.

He is using that money, instead, on a newsletter.

Let us get our spending priorities in order. Let us ban newsletters.

Mr. President, I ask unanimous consent that the text of the bill and a section-by-section analysis be printed at this point in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

S. 990

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. (a) Subsection (a) of section 3210 of title 39, United States Code, is amended—

(1) in paragraph (3)(B), by striking out "congressional newsletter or";

(2) in paragraph (5)(D) by striking out "candidate for public office. For the purpose of this clause (D), the term 'mass mailing' shall mean newsletters and similar mailings of more than 500 pieces in which the content of the matter mailed is substantially identical but shall not apply to mailings—" and inserting in lieu thereof "candidate for public office, provided that this prohibition shall not apply to mass mailings—"; and

(3) in paragraph (6) to read as follows:

"(6)(A) It is the intent of Congress that a Member of, or Member-elect to, Congress may only mail a mass mailing as franked mail if it is specifically describerd in subparagraph (C) of this paragraph and is otherwise not restricted by law or the rules of the Senate or the House of Representatives for Members or Members-elect of each respective House.

"(B) For purposes of this section, the term "mass mailing" means a mailing of more than five hundred pieces in which the content of the matter mailed is substantially identical.

"(C) The only mass mailings eligible to be mailed as franked mail are mass mailings—

"(i) which are in direct response to inquiries or requests from the persons to whom the matter is mailed;

"(ii) to colleagues in the Congress or to elected or appointed Government officials (whether Federal, State, or local);

"(iii) of news releases to the communications media;

"(iv) which consist of individually addressed responses on a specific issue to constituents who have previously written on the issue;

"(v) which consist of news announcements on a specific issue individually addressed to the chief officer or any member of the board of directors of an organization with an interest in the specific issue;

"(vi) which consist of materials not prepared by or relating to a Member of, or Member-elect to, Congress; or

"(vii) the sole purpose of which is to give notice of a town meeting and which is mailable as a 'postcard' as that term is defined in the Domestic Mail Classification Schedule maintained by the Postal Rate Commission.

"(D) The Select Committee on Ethics of the Senate and the Commission on Congressional Mailing Standards of the House of Representatives shall prescribe for each respective House such rules and shall take other actions as the Committee or the Commission considers necessary and proper for Members and Members-elect to comply with the provisions of this paragraph and other pertinent regulations. Such rules shall include, but not be limited to, provisions prescribing the time within which mailings shall be mailed or delivered to any postal facility and the time when the mailings shall be deemed to have been mailed at or delivered to comply with the provisions of this paragraph."

(b) Subsection (c) of section 3210 of title 39, United States Code, is amended by striking out "newsletters,".

SEC. 2. (a) Effective October 1, 1989, subsection (A)(2) of section 3216 of title 39, United States Code, is amended by striking out "by a lump sum appropriation to the legislative branch" and inserting in lieu

thereof "from funds appropriated to (or otherwise available from) the Senate (for costs attributable to the Senate) and from funds appropriated to (or otherwise available from) the House (for costs attributable to the House of Representatives)".

(b) Subsection (c) of section 3216 of title 39, United States Code, is repealed and subsection (d) of such section is redesignated subsection (c).

SEC. 3. Effective October 1, 1989, there shall be—

(a) within the contingent fund of the Senate, a separate appropriation account to be known as the "Senate Official Mail Costs Account", which shall be administered by the Secretary of the Senate, and

(b) within the fund for Contingent Expenses of the House, a separate appropriation account to be known as the "House Official Mail Costs Account", which shall be administered by the Clerk of the House of Representatives.

SEC. 4. The Senate Select Committee on Ethics and the House Commission on Congressional Mailing Standards shall prescribe for each respective House rules and regulations governing any franked mail. Such rules and regulations shall include, for each Member of each respective House, an allocation from the amount appropriated for official mail. For Members of the Senate, such allocation shall be related to the population of the state represented. The costs for postage for such franked mail mailed by or for a Member in excess of the amount of the allocation shall be charged to such Member and shall be paid by such Member (if the allocation is from the Senate) in accordance with rules and regulations as may be prescribed by the Senate Committee on Rules and Administration, and (if the allocation if from the House) in accordance with such rules and regulations as may be prescribed by the House Commission on Congressional Mailing Standards.

SEC. 5. (a) Two weeks after the close of each calendar quarter, or as soon as practicable thereafter, the Sergeant at Arms and Doorkeeper of the Senate shall send to each Senator a statement of the cost of postage and paper and of the other operating expenses incurred as a result of mass mailings, as defined in subparagraphs (iv) through (vii) of section 3210(a)(6)(C) of title 39, United States Code, processed for such Senator during such quarter. The statement shall separatetly identify the cost of postage and paper and other costs, and shall distinguish the costs attributable to different classes of mass mailings. The statement shall also include the total cost per capita in the State. A compilation of all such statements shall be sent to the Committee on Rules and Administration. A summary tabulation of such information shall be printed in the Congressional Record next printed after the statements are received by the Committee and shall be included in the semiannual Report of the Secretary of the Senate. Such summary tabulations shall set forth for each Senator the following information: the Senator's name, the total number of pieces of mass-mail mailed during the quarter, the total cost of such mail, and the cost of such mail divided by the total population of the State from which the Senator was elected.

(b) Two weeks after the close of each calendar quarter, or as soon as practicable thereafter, the House Commission on Congressional Mailing Standards shall send to each Member of the House of Representatives a statement of the cost of postage and paper and of the other operating expenses incurred as a result of mass mailings, as defined in subparagraphs (iv) through (vii) of section 3210(a)(6)(C) of title 39, United States Code, processed for such Member during such quarter. The statement shall separately identify the cost of postage and paper and other costs, and shall distinguish the costs attributable to different classes of mass mailings. The statement shall also include the total cost per capita in the district from which such Member was elected. A compilation of all such statements shall be sent to the House Committee on House Administration. A summary tabulation of such information shall be printed in the Congressional Record next printed after the statements are received by the Committee and shall be included in the quarterly Report of the Clerk of the House. Such summary tabulations shall set forth for each Member the following information; the Representative's name, the total number of pieces of mass-mail mailed during the quarter, the total cost of such mail, and the cost of such mail divided by the total population of the district from which the Member was elected.

---

DESCRIPTION OF WILSON NEWSLETTER BILL

The purpose of the bill is to prohibit the sending of congressional newsletters under the congressional frank and to otherwise prevent unlimited congressional mailings.

SECTION 1

(a)(1) Conforming amendment.

(b)(2) Conforming amendment.

(c)(3) This is the central provision of the bill, rewriting paragraph (6) of 39 U.S.C. 3210(a):

Paragraph (6)(A) establishes the basic rule that the only mass mailings allowed to be mailed under the frank are those that are specifically listed in paragraph (6)(C).

Paragraph (6)(B) defines a "mass mailing" as a mailing of more than 500 pieces of mail in which the material sent is substantially identical.

Paragraph (6)(C) lists those types of mass mailings that are allowed:

(i) Mail in direct response to incoming inquiries or requests.

(ii) Mail to government officials.

(iii) Press releases.

(iv) Follow-up mail to prior incoming letters inquiries.

(v) Mail to leaders of organizations of interest to the organization.

(vi) Materials not prepared by or about the member who is sending them—e.g., consumer booklet prepared by the Commerce Department.

(vii) Town meeting notices printed on a post card.

Paragraph (6)(D) requires the Senate Ethics Committee and the House Commission on Congressional Mailing Standards to establish rules implementing these rules and limitations.

(b) Conforming amendment.

SECTION 2

(a) This provision contains a conforming amendment to section 3. Section 3 splits the congressional franking account into separate House and Senate accounts. This subsection conforms 39 U.S.C. 3216(a)(2), which is the law that establishes the mechanism for paying the Postal Service for the costs of congressional mailings.

(b) The Anti-Deficiency Act generally limits federal agencies from spending more than has been appropriated. However, 39 U.S.C. 3216(c) exempts the Congress from the Anti-Deficiency Act by stating that the Postal Service shall accept as payment in full any amount forwarded by Congress. Subsection (b) of section 2 of the bill repeals this exemption.

SECTION 3

Section 3 establishes separate House and Senate official accounts. Under present law, there is a single congressional account.

SECTION 4

This section requires that the House of Representatives and the Senate allocate to each member of Congress a proportion of the total appropriation made to that House. The Senate appropriation shall be related to the size of the state represented.

SECTION 5

Subsections (a) and (b) of this section require a compilation of statistics on the costs of certain mass mailings—i.e., follow-up mail, press releases to leaders of organizations, government publications, and town meeting notices. Such information is to be summarized and printed in the Congressional Record and in the quarterly expense reports made by the House and Senate.

Mr. HUMPHREY. Mr. President, I am pleased to join the Senator from California as a cosponsor of legislation to restrict the use of congressional mass mailing.

This bill proposes reasonable restraints on the use of congressional mailings. The bill will ban the use of congressional newsletters and restrict the use of other mass mailings. This legislation will save the American taxpayer hundreds of millions of dollars over the next few years.

The bill will also, for the first time, introduce accountability into the congressional franking system. The bill will split the congressional franking account into separate House and Senate accounts. Each House and Senate Member shall receive an individual allocation for official mail, and any postage costs in excess of this allocation shall be charged to the Member.

Under this bill, the Clerk of the House and the Secretary of the Senate shall publish in the CONGRESSIONAL RECORD a quarterly tabulation of the mail costs for each Member. This tabluation shall include the Members name, the total number of pieces of mass mail which were mailed during the quarter, the total cost of the mail, and the cost of this mail divided by the total population of the Member's district.

While the Secretary of the Senate currently reports similar information for the Senate, the House does not. This change, combined with the publication in the RECORD, will create an incentive for each Member to be more frugal with his use of the frank.

According to the Congressional Research Service, over the last 18 years, Congress has spent over $1 billion for official mail. The cost of congressional mailings has escalated from $54 million in fiscal year 1981 to $114 million in fiscal year 1988. During fiscal year

1988, the House of Representatives received 157 million pieces of mail, and sent out 549 million pieces for a total cost of $77.9 million. The Senate received 54 million pieces of mail, and sent out 257 million pieces, for a total cost of $35.5 million.

Thus, last year, Congress spent a total of $114 million on mail costs, and sent out approximately 5 pieces of mail for each letter it received.

If you divide the 806 million pieces of mail sent out by Congress in 1988 by the number of working days in a year, this works out to slightly over 3 million pieces of mail per working day. If you divide that number by the 535 Members of Congress, this means that in 1988, Congress sent out an average of 5,765 pieces of mail, per day, per Member. It would seem to me that if any Senator wants to complain about the high volume of junk mail that he receives in his post office box, he should start pointing the finger at himself.

Since there is traditionally a 25- to 30-percent difference in mails costs between election and nonelection years, the U.S. Postal Service has estimated that Congress would only spend a "mere" $83.3 million in mail costs for fiscal year 1989. However, Congress only appropriated $53.9 million for mail costs, and currently there will be a deficiency of almost $30 million. If Congress does not act to cover this deficiency, the Postal Service will be forced to pick up the tab for these costs.

And how has the Senate responded to this outrageous pattern of spending? On February 28 of this year, the Senate approved legislation which lifted the Senate's self imposed restraints on mass mailings. This system, which had been in effect since 1986, limited mass mailings by imposing a paper allotment on each Senator. Under the new rules passed in February, each Senator would be allowed to send out as many as 6 mailings per year for each postal patron in their State—the same as the current limitation in the House. Senator WILSON has estimated that if each Senator took full advantage of this new rule, the Senate could theoretically spend over $180 million on mass mailings this year—an increase of 500 percent over last year.

Why, Mr. President, was this change made? According to its sponsors, it was an attempt to force the House to evenly divide the annual appropriation for mailing costs. Mr. President, increasing the amount of money the Senate spends on postage, as a method of forcing the House to get in line, makes about as much sense as cutting down the tree to save a cat.

I would also like to point out some information which was reported in the Washington Post on April 19. Last year, the Senate paid $250,000 to purchase a new printing press, which for the first time will allow extensive use of two-color production. Combined with the fact that the removal of the mass mail limits will allow each Senator to send eight page newsletters instead of four, the U.S. Senate could give many daily newspapers a real run for their money.

According to estimates which the Clerk of the House made in January 1989, Congress will send out 777 million pieces of mail in fiscal year 1990, at a cost of $134.7 million. Of this amount, the House will spend $94.6 million. However, these estimates do not even include the increased mass mail allowances which were passed by the Senate in February. It appears likely that with these changes, Congress will easily set another all-time high for mailing costs.

One Member of the House of Representatives is quoted in the May 2 issue of the CONGRESSIONAL RECORD as saying that when he first became a Member of that body, a more senior Member advised him to do three things in order to ensure reelection. "First, you use the frank; second, you use the frank; third, if need be, you abuse the frank."

With this legislation, Senators are presented with an opportunity to eliminate the continued abuse of the franking privilege. Not only will this bill reduce the total amount of mail costs for the House and Senate, but by creating fair and open accounting methods, each Member will be held responsible for individual use of the mail privilege.

For too long, Congress has failed to limit its shameless self promotion. Senator WILSON's bill is an effective way to limit this problem, and it is certainly worthy of support.

---

By Mr. CRANSTON:

S. 992. A bill to amend section 8e of the Agricultural Adjustment Act (U.S.C. 608e-1), reenacted with amendments by the Agricultural Marketing Agreement Act of 1937 so as to add kiwi friut, peaches, pears, nectarines, and plums to the list of imported commodities that must meet the minimum quality standards of domestically produced fruits, vegetables and specialty crops; to the Committee on Agriculture, Nutrition, and Forestry.

AMENDMENTS TO AGRICULTURAL ADJUSTMENT ACT

Mr. CRANSTON. Mr. President, I introduce for appropriate reference a bill to amend section 8e of the Agricultural Adjustment Act, reenacted with amendments by the Agricultural Marketing Agreement Act of 1937, to add kiwi fruit, peaches, pears, nectarines, and plums to the list of imported commodities that must meet minimum quality standards of domestically produced fruits, vegetables, and specialty crops.

The Agricultural Marketing Agreement Act authorizes producers and handlers of fruits, vegetables, and specialty crops to enter into an agreement with the Secretary of Agriculture to develop programs to stabilize and improve markets for their products. These programs, known as marketing orders, can be put into effect only if approved by a majority of the producers of the commodity in a producer referendum. Once approved, however, all producers and handlers in a defined production area are subject to the provisions of the marketing order. The marketing orders can include collection of uniform assessments to fund production and marketing research, generic advertising and promotion, regulation to assure orderly flows to market, and minimum quality standards for products commercially sold.

Currently some 50 agricultural commodities, including kiwi fruit, peaches, pears, nectarines, and plums, are marketed under the provisions of a marketing order. The Federal marketing order for kiwi fruit was established in 1984. It provides for minimum grade, size, and maturity requirements. California fresh pears, plums, and peaches have operated under a marketing order since the 1940's. A separate marketing order for nectarines was established in 1958. The marketing orders for these four fruits also provide for minimum quality standards. These minimum quality provisions ensure that consumers receive a high quality product and help enhance industry sales.

However, efforts by a domestic industry to market only high quality produce under the auspices of a marketing order can be severely undercut by imports of a like commodity that is of inferior quality. Consumers often cannot distinguish between fresh fruits and vegetables that are domestically grown and those that are imported. Section 8e of the Agricultural Marketing Agreement Act provides a remedy to this problem by providing that if domestic producers adopt through a marketing order a plan to establish minimum quality standards for a particular commodity, then the imported commodity marketed domestically must also meet these minimum quality standards. Section 8e thus ensures quality consistency and benefits domestic and foreign producers equally to the extent that the market is enhanced through improved product quality.

Currently there are 20 agricultural commodities being marketed under the auspices of section 8e. California kiwi fruit, peach, pear, nectarine, and plum growers are asking that their products be added to this list of section 8e crops. The State's kiwi fruit industry is relatively new and the kiwi fruit market is heavily dominated by

first-time buyers. The industry believes that consumption of kiwi fruit can be maintained and expanded if consumers have available to them a consistently high quality, tasteful product. However, consumer preference can be easily destroyed by one bad experience especially if it is the consumer's introduction to the fruit. Imports of kiwi fruit have been increasing significantly and include fruit that tends not to ripen enough to result in a high quality product. Unfortunately, this influx of lower quality imported fruit has economically hurt California kiwi fruit growers. The California peach, pear, nectarine, and plum industries have well developed markets, supplying consumers with fruit that is attractive and of good eating quality. However, imports of peaches, pears, nectarines, and plums also have increased substantially over the last 5 years. The upward trend in imports is expected to continue. California growers of these products are interested in amending section 8e so that their past achievements in marketing quality peaches, pears, nectarines, and plums can be successfully continued.

The bill I am introducing today would ensure that kiwi fruit, peaches, pears, nectarines, and plums produced in foreign countries and marketed in the United States have the same minimum quality standards of fruit produced and marketed domestically. It will give the same section 8e coverage already afforded 20 other agricultural commodities.

Mr. President, I ask unanimous consent that the text of the bill be printed at this point in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 992

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That Section 8e of the Agricultural Adjustment Act (7 U.S.C. 608e-1), reenacted with Amendments by the Agricultural Marketing Agreement Act of 1937 is amended as follows: In "a" of Section 8e in the first sentence, before the word "eggplants" the word "or" shall be deleted and a comma added and after the word "eggplants" a comma shall be inserted and the words "kiwi fruit, peaches, pears, nectarines, or plums" added.

---

By Mr. KOHL (for himself, Mr. PRYOR, Mr. HATFIELD, Mr. GLENN, and Mr. LEAHY):

S. 993. A bill to implement the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and Their Destruction, by prohibiting certain conduct relating to biological weapons, and for other purposes; to the Committee on the Judiciary.

BIOLOGICAL WEAPONS ANTI-TERRORISM ACT

● Mr. KOHL. Mr. President, Senator PRYOR and I, along with Senators LEAHY, HATFIELD, and GLENN, are today introducing legislation to prohibit the development and production of biological weapons. The Biological Weapons Anti-Terrorism Act of 1989 will close a loophole in the Criminal Code and complete the implementation of an important international treaty. It will help combat terrorism and, at the same time, reaffirm our Nation's commitment to arms control. Similar legislation has been introduced in the House by ROBERT KASTENMEIER, my colleague from Wisconsin.

In 1972, the United States signed the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and Their Destruction. The Senate unanimously ratified this convention in December 1974. In all, 103 countries, including the Soviet Union, have agreed to its terms.

The convention prohibits signatory governments from developing biological weapons "in any circumstances." Parties to the convention pledge that they will not maintain biological agents or toxins "that have no justification for prophylactic, protective or other peaceful purposes." Article IV of the convention obligates each party to "take any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition, or retention" of biological weapons "within the territory of each such State, under its jurisdiction or under its control anywhere." While several nations have interpreted article IV to require enactment of prohibitions in their domestic criminal laws, the United States has not yet taken this crucial step.

Our Biological Weapons Anti-Terrorism Act will put teeth into article IV of the convention by making it illegal for private persons to develop biological weapons. Implementation legislation will send a signal to the rest of the world: The United States remains firmly opposed to biological weapons at a time when developments in genetic engineering render germ warfare ever more threatening.

Our bill is simple, effective, and straightforward. It would make it a criminal offense knowingly to develop "any agent, toxin, or delivery system for use as a weapon of mass destruction." It would also authorize the Attorney General to seize and destroy such creations. The bill additionally imposes penalties on those who assist foreign nations in acquiring biological agents for use as weapons.

However, the measure would create a safe harbor for research and development that "is for a prophylactic, protective, or other peaceful purpose." Thus, for example, a medical researcher would not face liability for trying to understand a virus. Nor would the Attorney General be authorized to interfere with the dissemination of scientific ideas. In short, the bill poses no danger to the growing biotechnology industry. Moreover, it does not affect the Defense Department's existing Biological Defense Research Program.

Mr. President, even if this legislation were not required by the 1972 convention, we would still be wise to enact the bill to help combat terrorism. Surprisingly, there is no uniform statute that criminalizes the development of biological devices or organisms that are meant to kill others. We cannot rely on existing statutes that may arguably regulate one or another aspect of the problem—for instance, the Toxic Substances Control Act. The prospects of biological terrorism are too ghastly to permit a loophole in our law. As a Chicago Tribune article recently explained, the biological agents necessary for weapons "can be cultivated in an unsophisticated college laboratory from snake venom or a variety of bugs that infect humans or farm animals."

I am pleased to note that President Bush has repeatedly expressed his abhorrence of biological weapons. For example, in accepting his party's nomination in August 1988, Mr. Bush stated:

> Ban chemical and biological weapons from the face of the Earth. That will be a priority with me.

It is a priority for me, too, and I am confident that this proposal will become law in the 101st Congress. I urge my colleagues to support the Biological Weapons Anti-Terrorism Act of 1989.

I ask unanimous consent that the text of the bill be printed in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 993

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE.

This Act my be cited as the "Biological Weapons Anti-Terrorism Act of 1989".

SEC. 2. TITLE 18 AMENDMENTS.

(a) IN GENERAL.—Title 18, United States Code, is amended by inserting after chapter 9 the following:

"CHAPTER 10—BIOLOGICAL WEAPONS

"Sec.
"175. Prohibitions with respect to biological weapons.
"176. Seizure and destruction.
"177. Injunctions.
"178. Definitions.

**"§ 175. Prohibitions with respect to biological weapons**

"Whoever, in the United States or under the jurisdiction or control of the Government of the United States anywhere—

"(1) knowingly develops, produces, stockpiles, transfers, acquires, retains, or posesses any agent, toxin, or delivery system for use as a weapon of mass destruction; or

"(2) knowingly assists a foreign state or an international organization (as defined in section 1116 of this title) to manufacture or otherwise acquire any agent, toxin, or delivery system for use as a weapon of mass destruction;

shall be fined under this title or imprisoned for life or any term of years, or both.

**"§ 176. Seizure and destruction**

"(a) IN GENERAL.—The Attorney General may seize and provide for the destruction of—

"(1) any agent, toxin, or delivery system that exists by reason of conduct prohibited under section 175 of this title; and

"(2) any agent or toxin of a type or in a quantity useful primarily as a weapon of mass destruction.

"(b) DEFENSE.—It is a defense against a seizure under subsection (a) of this section that—

"(1) such agent or toxin is for a prophylactic, protective, or other peaceful purpose; and

"(2) such agent or toxin is of a type and quantity reasonable for that purpose.

"(c) PROCEDURE.—The same procedures and provisions of law relating to a forfeiture under section 924(d) of this title shall so far as applicable extend to a seizure under this section.

"(d) NONEXISTENCE OF PROPERTY RIGHTS.—No property right shall exist in any agent, toxin, or delivery system that is subject to seizure under this section.

**"§ 177. Injunctions**

"(a) IN GENERAL.—The United States may obtain in a civil action an injunction against—

"(1) the conduct prohibited under section 175 of this title;

"(2) the planning, preparation, solicitation, attempt, or conspiracy to engage in conduct prohibited under section 175 of this title; or

"(3) the development, production, stockpiling, transferring, acquisition, retention, or possession, or the attempted development, production, stockpiling, transferring, acquisition, retention, or possession, of any agent or toxin of a type or in a quantity useful primarily as a weapon of mass destruction.

"(b) DEFENSE.—It is a defense against an injunction under subsection (a)(3) of this section that—

"(1) the conduct sought to be enjoined is for a prophylactic, protective, or other peaceful purpose; and

"(2) such agent or toxin is of a type and quantity reasonable for that purpose.

**§ 178. Definitions**

"As used in this chapter—

"(1) the term 'agent' means any micro-organism, virus, or infections substance, capable of causing—

"(A) death, disease, or other biological malfunction in a human, an animal, a plant, or another living organism;

"(B) deterioration of food, water, equipment, supplies, or material of any kind; or

"(C) deleterious alteration of the environment;

"(2) the term 'toxin' means, whatever its origin or method of production—

"(A) any poisonous substance produced by a living organism; or

"(B) any poisonous isomer, homolog, or derivative of such a substance;

"(3) the term 'delivery system' means—

"(A) any apparatus, equipment, device, or means of delivery specifically designed to deliver or disseminate an agent, toxin, or vector; or

"(B) any vector;

"(4) the term 'vector' means a living organism capable of carrying an agent or toxin to a host; and

"(5) the term 'use as a weapon of mass destruction' means—

"(A) use or the threat to use; or

"(B) causing, permitting, or facilitating use;

as a weapon of mass destruction and

"(6) the term 'whoever' includes governmental entities and personnel.".

(b) CLERICAL AMENDMENT.—The table of chapters for part I of title 18, United States Code, is amended by inserting after the item relating to chapter 9 the following new item:

"10. Biological Agents and Toxins..... 175.".●

● Mr. PRYOR. Mr. President, I am happy to join Senator KOHL today as a cosponsor of the Biological Weapons Anti-Terrorism Act of 1989.

Mr. President, the possibility of terrorists using simple biological weapons within U.S. borders is horrible but unfortunately imaginable. It is horrible because lethal biological agents can spread through a population from a single source causing mass destruction on the order of a nuclear attack. It is imaginable because, unlike nuclear weapons, biological weapons are relatively cheap and easy to procure and produce.

Mr. President, realizing the uncontrollable destructive nature of biological weapons, the United States and 102 other nations, including the Soviet Union, signed a convention outlawing the production, stockpiling, or use of such weapons in 1972. We destroyed our stockpiles and today perform only defensive biological weapons research.

The executive branch attempted but failed on two occasions to have legislation enacted to implement the 1972 convention enacted by Congress. The bill was introduced in 1973 when the convention was submitted to the Senate but it was not acted upon because ratification of the convention was delayed until 1975. A second effort was made late in 1980, but Congress was unable to act before the end of the session.

The bill we are proposing is not unlike the measures introduced by previous administrations. It would establish strict criminal penalties, including tough fines and the potential for life imprisionment, for any individual or corporation that knowingly develops or produces biological agents, toxins, or delivery systems for offensive use, or that assists any foreign person in such activities. While it cannot guarantee that a determined group will not gain access to a biological weapon, legislation will minimize the threat by providing direction and a course of action for law enforcement efforts and by creating a stronger incentive for the scientific community to carefully police their work.

Our bill will not affect the current $63 million per year Defense Department Biological Defense Research Program. Nor will it have any impact on the U.S. offensive chemical weapons program. Finally it will not prohibit the use of biological agents for commercial purposes.

With this bill we will send a strong message to those who would make criminal use of biological agents. The message is that such activity will be dealt with severely and with certain punishment. This legislation will also put the United States in a stronger position to assail violations of the 1972 convention by other nations and it will help to fulfill President Bush's pledge to punish violators of biological weapons agreements.

Mr. President, tomorrow the Governmental Affairs Committee will hold an important hearing on biological weapons proliferation. I hope that in that hearing the administration can begin to form its support for this legislation.

I commend Senator KOHL's leadership in this area and urge my colleagues to support his future efforts in the Judiciary Committee and on the Senate floor to see this bill passed.●

● Mr. GLENN. Mr. President, I wish to commend my colleagues Senators KOHL and PRYOR for introducing legislation which will implement article IV of the 1972 Biological Weapons Convention. The bill will make it a criminal offense to knowingly develop, produce, stockpile, transfer, acquire, retain, or possess any agent, toxin, or delivery system for use as a weapon of mass destruction. Moreover, the legislation makes it a criminal offense to knowingly assist a foreign state or an international organization to manufacture or otherwise acquire any agent, toxin, or delivery system for use as a weapon of mass destruction.

The legislation will fulfill a U.S. responsibility in meeting its treaty obligation. At the second Review Conference on the Biological Weapons Convention in 1986, the majority of the States Party to this treaty agreed to encourage the passage of domestic legislation to ensure the physical security of laboratories and research facilities and to prevent the transfer of biological warfare agents, toxin, and weapons. In discussions with members of the Governmental Affairs Committee, officials from the Departments of State and Defense indicate that they are also supportive of measures to implement article IV and discourage the activities of individuals or corporations that violate the Convention.

S. 993 is clearly not an attempt to slow the development of the rapidly growing biotechnology industry. America is the world's leader in this

vital scientific area and we have no desire to hamper legitimate and peaceful biomedical research. However, as Judge William Webster, Director of the Central Intelligence Agency, and others have said, a threat to the U.S. and its allies from biological weapons does exist. Therefore, we must do all that we can to prevent our domestic activities from promoting development of these heinous weapons abroad, especially where they might fall into terrorist hands.

I became an original cosponsor of this legislation because I feel strongly that it will send a clear message to the world of our country's strong commitment to chemical and biological arms control. This is an important message to send at a time when the number of nations considering arming themselves with chemical or biological weapons may be increasing. As the technology to produce biological weapons becomes simpler and more widely known it is more likely that states will resort to their use. It is my hope that this legislation will herald more serious attempts by the U.S. to participate actively in developing verification schemes that will improve the chemical weapons treaty and put stronger teeth into the Biological Weapons Convention.●

---

By METZENBAUM (for himself, Mr. THURMOND, Mr. SIMON, Mr. DECONCINI, Mr. LEAHY, and Mr. HATCH):

S. 994. A bill to amend the Clayton Act regarding interlocking directorates and officers; to the Committee on the Judiciary.

INTERLOCKING DIRECTORATES AND OFFICERS

Mr. METZENBAUM. Mr. President, today I am introducing legislation to reform and modernize section 8 of the Clayton Act which regulates interlocking directorates. Section 8 prohibits an individual from serving as a director of two competing companies. Last year, the Senate approved the modifications to section 8 that are contained in this bill. The changes were supported by the Justice Department. I have worked with Senator THURMOND to develop this legislation and welcome him as a cosponsor, along with Senators SIMON, DECONCINI, LEAHY, and HATCH.

Section 8 was enacted in 1914. The principal sections of the act concerning interlocking directors have not been modified since this original enactment. Consequently, it is appropriate that the Congress review the statute and revise it to address current competitive concerns.

The measure I am introducing today addresses three concerns about the current provisions. First, it is appropriate that the threshold jurisdictional requirement regarding the size of corporation covered by the act be updated. Our bill raises the threshold enacted in 1914, 1 million dollars in net worth, to ten million dollars.

Second, our bill addresses the need for a de minimus exception to the flat bar on a single person serving on the board of competing companies. It is appropriate to prevent the potential sharing of information and other related anticompetitive behavior which may result from the same person serving as a director of competing corporations. However, corporations covered by the act have raised the legitimate concern that in some cases a qualified director cannot serve on a board even though the competitive overlap with another corporation represents only an insignificant portion of either company's sales. In these cases the statute is not serving any useful purpose in preventing harm to competition, but is only hindering the freedom of qualified individuals to serve as directors.

Our bill addresses this issue by providing for three de minimus categories, or safe harbors. If the competitive overlap does not exceed these safe harbors, the bar on a common director would not apply. The bill provides for a safe harbor if the affected sales constitute less than: First $1 million for either company; second 1 percent of either company's sales; or third, 4 percent of both company's sales.

Finally, our bill addresses the concern that the current ban covers only corporate directors, not senior officers. The current provision is illogical because a common senior officer presents an equal or greater potential for reducing competition. The bill would extend the bar to officers of competing corporations.

I appreciate the cooperation of Senator THURMOND who has provided extremely useful and thoughtful suggestions. We have worked to pursue this bill in a spirit of compromise and I hope my colleagues will see fit to support this measure.

I ask unanimous consent that the bill be printed in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 994

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That section 8 of the Clayton Act is amended to read as follows:

"SEC. 8. (a)(1) No person at the same time shall be a director or officer of any two corporations, each of which has capital, surplus and undivided profits aggregating more than $10,000,000, as adjusted pursuant to this subsection, engaged in whole or in part in commerce, other than banks, banking associations, trust companies, and common carriers subject to subtitle IV of title 49, United States Code, if such corporations are by virtue of their business and location of operation, competitors so that the elimination of competition by agreement between them would constitute a violation of any of the provisions of any of the antitrust laws.

"(2) Notwithstanding the provisions of paragraph (1), simultaneous service as a director or officer of two corporations shall not be prohibited by this section if (A) the aggregate competitive sales of either corporation are less than $1,000,000, as adjusted pursuant to this subsection, (B) the aggregate competitive sales of either corporation are less than 1 percent of that corporation's total sales, or (C) the aggregate competitive sales of each corporation are less than 4 percent of that corporation's total sales. For purposes of this paragraph, 'aggregate competitive sales' means the aggregate gross revenues for all products and services sold by one corporation in competition with the other, determined on the basis of annual gross revenues for such products and services over the last completed fiscal year. For purposes of this section, 'total sales' means the aggregate gross revenues for all products and services sold by one corporation over the last completed fiscal year.

"(3) The eligibility of a director or officer under the provisions of paragraph (1) shall be determined by the capital, surplus and undivided profits of each corporation at the end of that corporation's last completed fiscal year.

"(4) For purposes of this section, the term 'officer' means an officer elected or chosen by the Board of Directors.

"(5) For each fiscal year commencing after September 30, 1988, the $10,000,000 and $1,000,000 thresholds in this section shall be increased (or decreased) as of October 1 each year by an amount equal to the percentage increase (or decrease) in the Gross National Product, as published by the Department of Commerce or its successor, for the year then ended, over or under the level so established for the year ending September 30, 1987. At the beginning of October of each year, the Federal Trade Commission shall publish the adjusted amounts required by this paragraph.

"(b) When any person elected or chosen as a director or officer of any corporation subject to the provisions of this Act is eligible at the time of his election or selection to act for such corporation in such capacity, his eligibility to act in such capacity shall not be affected and he shall not become or be deemed amenable to any of the provisions hereof by reason of any change in the capital, surplus and undivided profits, or affairs of such corporation from whatsoever cause, whether specifically excepted by any of the provisions hereof or not, until the expiration of one year from the date on which an event causing ineligibility occurred, or, if practical, the next regularly scheduled election of directors, whichever occurs first."

Mr. THURMOND. Mr. President, I am pleased to introduce, along with Senator METZENBAUM, this legislation which will amend section 8 of the Clayton Act regarding interlocking directorates and officers. I am also pleased that Senators HATCH, DECONCINI, LEAHY, and SIMON have joined as original cosponsors. This bill, which is identical to legislation which was passed by unanimous consent in the Senate last Congress, is long overdue and much needed to modernize the treatment of interlocking directorates.

The amendment contains three provisions: First, it raises the jurisdictional threshold for companies covered by section 8 from $1,000,000 to

$10,000,000; second, it specifically creates certain de minimis exceptions to coverage; and, third, it expands section 8 to include officers elected or chosen by the Board of Directors.

Section 8, which prohibits the same person from sitting on the board of directors of competing corporations, was enacted in 1914 and has remained virtually unchanged since that time. The changes which we are proposing today will do nothing to alter the basic concept of section 8, but will only update it to take into account the economic and competitive changes which have occurred in the last 75 years. This is particularly important with respect to raising the jurisdictional threshold from $1,000,000 to $10,000,000, and establishing certain de minimis exceptions.

The substantial increase in price levels since 1914 means that the size of corporations now covered by section 8 is substantially lower than what Congress originally intended. Such corporations are not likely to be engaged in so significant a degree of commerce as to warrant coverage of the act. The same is true with respect to establishing de minimis exceptions. Current case law precludes the application of any de minimis exceptions. Yet, there is nothing to be accomplished by prohibiting individuals from serving on the boards of two companies if the amount of competitive overlap between the two companies is so small as to be competitively insignificant.

Mr. President, this legislation is an important modernization of one aspect of our antitrust laws. It is apparent from the list of original cosponsors and from the previous action on this legislation, that it has strong bipartisan support. I am pleased to be one of the cosponsors, and I encourage all of my colleagues to support these changes to section 8.

---

By Mr. METZENBAUM (for himself and Mr. THURMOND):

S. 995. A bill to amend the Clayton and Sherman Acts regarding antitrust procedures; to the Committee on the Judiciary.

ANTITRUST PROCEDURES IMPROVEMENT ACT

Mr. METZENBAUM. Mr. President, today I am introducing legislation to reform and modernize certain procedural aspects of the antitrust laws. Several provisions of this bill are identical to those which passed the Senate in the 100th Congress. Last Congress, the Senate approved changes to the Hart-Scott-Rodino premerger notification provisions of the Clayton Act which would close the partnership loophole for premerger filings, extend the review period for acquisitions, and raise thresholds for reporting mergers. This bill includes, in addition, provisions which would increase criminal fines and civil penalties available to the Government for violations of the antitrust laws, permit the Federal Trade Commission to prosecute violations of premerger notification requirements, and establish filing fees for premerger notification forms. I am pleased to be joined in this effort by Senator THURMOND.

The reforms contained in this bill are needed to give the antitrust enforcement agencies tools to police more effectively the laws of free competition. Merger and acquisition activity is again on the rise, with billions of dollars in assets changing hands each year. And the deals are getting bigger and bigger. Just this past year we witnessed three of the largest mergers in history: Campeau's buyout of Federated Department Stores for $6.5 billion; Phillip-Morris' acquisition of Kraft for $13 billion and Kohlberg Kravis & Robert's acquisition of RJR Nabisco for $25 billion. In February, Time, Inc., announced plans to merge with Warner Communications to create a media giant worth over $18 billion. This current merger wave will have lasting effects on our economy and on competition.

The time has come to strengthen the antitrust laws. We must put more teeth in the laws and put more resources in the hands of the enforcement agencies. We cannot afford to sit idly by while our economy becomes more and more concentrated, and while certain companies and individuals continue to flout the laws of free competition. Consumers deserve to know that we are committed to enforcement of the antitrust laws. This bill reaffirms that commitment.

I. CRIMINAL FINES

This legislation would increase the fines for criminal violations of the Sherman Act to $10 million for corporations and to $250,000 for individuals. The current penalties are simply not sufficient to deter criminal behavior, as is evidenced by the dramatic increase in the number of criminal price fixing and bid rigging convictions in the past few years. The penalties for this type of anticompetitive, anticonsumer conduct must be onerous enough that they are not viewed simply as a cost of doing business.

II. HART-SCOTT-RODINO ACT AMENDMENTS

This measure proposes several modifications to the Hart-Scott-Rodino Antitrust Improvements Act of 1976. After more than a decade of experience with reviewing proposed acquisitions under this section of the Clayton Act, the time has come to fine tune what has proven to be an invaluable enforcement tool for the antitrust agencies.

A. TIME FOR REVIEW OF MERGERS

The proposal would lengthen the time given to the antitrust enforcement agencies to complete their review in the case of large or complex mergers and in the case of cash tender offers. These extensions were appoved by the Senate without opposition last Congress.

While current law contains different waiting periods for mergers occurring by means of a cash tender offer and mergers effected in other ways, there is no correlation between the way in which an acquisition is structured and the antitrust issues it raises. Under existing law for cash tender situations, the enforcement agencies have an initial 15-day period to determine whether a more detailed investigation of a proposed acquisition is warranted and to request additional information from the merging parties. The statute currently gives the agency only 10 days to review materials submitted by the parties. In a noncash tender situation, the initial period is 30 days and the second period is 20 days. The proposal extends both the initial waiting period and the second waiting period for cash tender acquisitions to 20 days.

In addition, the bill provides for a process by which the enforcement agencies may seek additional time to review particularly complex mergers. Under this provision, the agencies may request that a court extend the statutory waiting period by an additional 25 days under certain circumstances.

Given the complex antitrust issues posed by the recent spate of stock acquisitions in the food industry, among others, it is unreasonable to expect that the enforcement agencies are not hindered in their review by the very brief time periods originally contained in the Hart-Scott-Rodino Act. The extensions proposed strike a balance between the need for thorough antitrust scrutiny of cash tender transactions and the desire not to interfere unduly with cash tender offers.

B. PARTNERSHIP LOOPHOLE

This provision would close a loophole that currently exists in the Clayton Act which allows wealthy individuals and corporations to evade the requirements of the premerger notification program merely by forming a partnership. The attempted takeover of Goodyear by Sir James Goldsmith and the attempted takeovers of Phillips Petroleum and Shamrock Oil by T. Boone Pickens were structured to take advantage of this loophole. This type of transaction continues to evade antitrust review merely by relying on an artifice that is not accountable under the FTC's current interpretation of its notification rules.

Last year, the FTC promulgated a rule which requires any person holding a controlling interest, that is, 50 percent or more, in a partnership to file premerger notification forms with the enforcement agencies as the parent entity of the partnership. This rule does not, however, require partnerships in which no partner controls at least 50 percent of the venture to

file. As a result, while FTC has narrowed the loophole somewhat by its new rule, the loophole still exists whereby wealthy individuals and corporations can create a new partnership with no partner holding 50 percent and avoid the filing requirements of the Clayton Act. For example, a partnership made up of Exxon, Mobil, and Chevron, each holding a one-third interest, could create a entity to purchase the assets of some business and the transaction would not be reportable because, under current interpretations, no person controls the partnership. Under this bill, any general partner that meets the size of person test may be required to file notification as determined by the Federal Trade Commission.

Many people, including the FTC and the business community, have realized that this loophole exists and is utilized by companies hoping to avoid reporting transactions. As a result, the FTC has recently proposed another rule and is reviewing five options for closing the loophole. If the FTC effectively closes the loophole, our proposal would not be necessary. However, if the FTC is not able to fashion a rule that closes the partnership loophole once and for all, this legislation would accomplish that goal. Large, sophisticated companies should not be able to avoid filing merely by forming a partnership. The intent of the premerger notification program was not to favor certain transactions effected by means of a partnership.

C. FILING FEES

The bill provides for filing fees for those persons making premerger notification reports. It is time to recognize that merger enforcement is in a state of crisis. One cause is easy to understand—the enforcement agencies do not have sufficient resources. Just this year, the Federal Trade Commission fired 30 employees to meet a $4.3 million shortfall and may be required to release additional employees to meet the budget reductions contained in the fiscal year 1990 budget proposal. According to Chairman Oliver, "further budget reductions would necessarily have some adverse impact on our law enforcement activities." Similarly, the proposed 1990 budget for the Justice Department includes a further reduction of five positions in the staff of the Antitrust Division.

And the trend in resources committed to merger enforcement is even more alarming. At the Federal Trade Commission, the workyears devoted to the Commission's antitrust mission fell from 759 in 1980 to 457 in 1988. In 1989, the Antitrust Division of the Department of Justice was staffed with 409 attorneys; in 1988, the Department had only 237 attorneys. This represents a decrease of nearly 60 percent in staffing for antitrust enforcement.

Over the same period of time, the number of merger filings has increased dramatically. In 1980, the agencies received 784 Hart-Scott-Rodino filings; in 1988 the number was 2,746—an increase of more than 300 percent. In addition, the size of mergers has reached incomparable proportions. The number of multibillion-dollar megamergers hit an all time high in 1988, including the three largest mergers in history. These statistics alone define the problem: The agencies have a decreasing work force to deal with an increasing workload imposed by an explosion in the number of merger filings.

The filing fees contained in this bill are designed to alleviate some of the strain placed on the agencies by the current merger craze. Filing fees are a logical way to deal with the problem of how to budget resources devoted to merger enforcement in advance without knowing with certainty the number of mergers likely to take place in a given year. In addition, filing fees are fair in that the parties to a merger—and not the general taxpaying public—bear the cost of the premerger notification program.

Filing fees are common with several other regulatory agencies that deal with specific business transactions. For example, the U.S. Patent Office collects application fees for processing patents and trademarks and for various services offered by the Patent Office, 37 CFR section 1. In 1987, the Patent Office collected over 50 percent of its total budget through application fees. Similarly, the Federal Communications Commission collects general application fees for licenses. Those fees range from $25 to $2,000 per application. Again, this income amounted to one-half of the FCC's operating budget for 1988. The Federal Energy Regulatory Commission has established filing fees for a variety of applications which require regulatory approval, including annual filings that are required by law. Fees effective May 1988 range from $100 for review of remedial orders concerning small projects to a maximum of $19,450 for pipeline certificate applications.

The Securities and Exchange Commission uses a variety of application fees for processing filings related to securities transactions and registration statements. These fees are based on a percentage of the value of the transaction. For example, an applicant must pay a fee equal to one-fiftieth of 1 percent of the "maximum aggregate price at which the securities are proposed to be offered," or a minimum fee of $100, upon filing a registration statement; 15 U.S.C. section 77f(b). Fees collected by the SEC are deposited in the U.S. Treasury and amounted to nearly 200 percent of the total budget of the SEC in 1988.

The fees contained in this bill would amend the existing requirements for Hart-Scott-Rodino premerger filings. The acquiring person would pay a fee of one-fiftieth of 1 percent of the value of the transaction, with a maximum fee of $50,000, in conjunction with filing its notification form. For those transactions in which the precise value of the transaction is not known, the Federal Trade Commission may establish rules for determining the fee to be paid. This fee system would generate approximately $20 million to be divided evenly between the FTC and the Department of Justice for use in antitrust enforcement activities.

These fees would be a nominal additional cost for most transactions and would not be unreasonable in light of the strain that premerger review places on the resources of the enforcement agencies. As an example, the recent takeover of RJR Nabisco by Kohlberg Kravis Roberts & Co. was valued at more than $25 billion. KKR alone received a $75 million fee for arranging the transaction; lawyers, brokers and bankers collected hundreds of millions more. The filing fee required under our proposal would have been a mere $50,000. In fact, according to Fortune magazine, fees paid to brokers and financial analysts in the biggest deals of 1988 were typically over 1 percent of the value of the transaction. Thus, in a typical-sized merger of $30 million, transaction costs would be about $300,000 plus attorney's fees; the proposed fee for the Hart-Scott-Rodino filing would be $6,000. Filing fees of this magnitude would be insignificant in comparison with the enormous transaction costs associated with even the most mundane merger.

D. ENFORCEMENT

This bill would permit the Federal Trade Commission to sue on its own behalf for violations of its premerger notification rules. The Federal Trade Commission is currently empowered to investigate violations of Hart-Scott-Rodino filing requirements and to establish rules necessary to carry out the purposes of the premerger notification program; 15 USC section 7A(D). This bill would allow the Commission to seek a remedy from the court once it determines that it has reason to believe that the statute or its rules were violated. This would facilitate FTC enforcement of premerger notification violations and reduce the burden on the Department of Justice in bringing these suits in behalf of the FTC.

E. CIVIL PENALTIES

This proposal would increase the penalty for violations of the premerger notification requirements of the Clayton Act. Currently, the penalty for such violations is $10,000 for each day the company is found to be in violation. Yet this does not deter

companies from thwarting the law and engaging in reportable transactions without notifying the Government. Once a company surpasses the statutory threshold for reporting stock transactions, it must suspend its purchases for 30 days to give the Government the opportunity to review the purchase. But those who speculate in stocks don't want to wait. In a typical case, the company or individual will continue to trade, often buying and selling stock at tremendous profits, knowing that the cost of getting caught is more than offset by the profits to be gained. This type of evasion is motivated by nothing but greed. The only way to deter such behavior is to increase the cost of violating the law. This bill would increase the daily penalty to $100,000, and would permit the court to order additional relief.

F. FILING THRESHOLD

Under current standards, a proposed merger must be reported to the antitrust agencies if: First, either party to the merger is engaged in commerce or an activity affecting commerce; second, one party has total assets or annual net sales of $10 million or more, and the other party has total assets or annual net sales of $100 million or more; and third, after the acquisition, the acquiring person would hold 15 percent or more of the voting securities or assets of the acquired person, or more than $15 million of the acquired person's voting securities and assets.

This bill would raise the minimum dollar amounts for the "size of person" and "size of transaction" tests originally contained in the Hart-Scott-Rodino Act. The proposal would raise the threshold for persons required to file from $10 million to $15 million, and would raise the threshold for exempt transactions from $15 million to $30 million. These thresholds have not been changed since the law was passed in 1976. These thresholds in essence exempt small companies from the premerger notification reporting requirements where it is unlikely that the transaction would raise antitrust issues.

I appreciate the cooperation of Senator THURMOND who has provided extremely useful and thoughtful suggestions. We have worked to pursue this bill in a spirit of compromise and I hope my colleagues will see fit to support this measure.

I ask unanimous consent that the bill be printed in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 995

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That this Act may be cited as the "Antitrust Procedures Improvement Act of 1989".

CRIMINAL FINES

SEC. 2. Section 1 of the Sherman Act (15 U.S.C. 1) is amended by—

(1) striking out "one million" and inserting in lieu thereof "ten million"; and

(2) striking out "one hundred" and inserting in lieu thereof "two hundred-fifty".

HART-SCOTT-RODINO ACT AMENDMENTS

SEC. 3. (a)(1) Section 7A of the Clayton Act is amended by adding at the end thereof the following new subsection;

"(k) For purposes of this section, annual net sales and total assets of an acquiring person shall, in the case of a partnership, be based upon the annual net sales or total assets of: (1) any general partner, (2) any partner having the right to 50 per centum or more of the profits of the partnership, or (3) any partner having the right in the event of dissolution to 50 per centum or more of the assets of the partnership, provided that the partner or partners required to file notification under this subsection shall be determined by the Federal Trade Commission in accordance with subsection (d).".

(2) This subsection and the amendments made by this subsection shall become effective 120 days after the date of enactment of this section.

(b)(1) Section 7A(a) of the Clayton Act is amended—

(A) in paragraph (2), by striking out "$10,000,000" each place it appears in subparagraphs (A), (B), and (C) and inserting in lieu thereof "$15,000,000".

(B) in paragraph (3)(B), by striking out "$15,000,000" and inserting in lieu thereof "$30,000,000".

(2) Section 7A(b)(1)(B) of the Clayton Act is amended—

(A) by substituting "twentieth" for "fifteenth"; and

(B) by striking out "or (g)(2)" and inserting in lieu thereof the following ", (g)(2), or (g)(3)".

(3) Section 7A(e) of the Clayton Act is amended—

(A) by substituting "20-day" for "15-day" each place it appears;

(B) in paragraph (2) by striking out "(or in the case of a cash tender offer, 10 days)"; and

(C) by striking out "only" from the last sentence of paragraph (2) and inserting at the end thereof the following: "or (g)(3)".

(4) Section 7A(g) of the Clayton Act is amended—

(A) in paragraph (1), by striking out "$10,000" and inserting "$100,000" in lieu thereof; by striking the period at the end of the first sentence and inserting: ", in addition to such equitable relief as the court finds appropriate."; and by inserting the following at the end thereof: "or the Federal Trade Commission."; and

(B) by adding the following at the end thereof: "(3) The court may extend the additional period for up to 25 days if, due to the complexity or scope of the information or documentary material to be evaluated, the Federal Trade Commission or the Assistant Attorney General reasonably requires such additional time to determine whether the proposed acquisition may, if consummated, violate the antitrust laws."

(5) This subsection and the amendments made by this subsection shall become effective 120 days after the date of enactment of this section.

FILING FEE

SEC. 4. The Clayton Act is amended by inserting between section 7A and section 8, the following:

"FILING FEE

SEC. 7B. (a)(1) Notwithstanding the provisions of section 7A, no notification shall be considered filed until the acquiring person filing such notice pays the filing fee required by this section.

"(2) The fee required by paragraph (1) shall be equal to one-fiftieth of 1 percent of the value of the transaction involved in such merger, provided that the Federal Trade Commission may establish rules pursuant to subsection (d) for transactions in which the precise value is not known, but in no event shall the fee exceed $50,000.

"(b) All fees collected pursuant to the provisions of this section shall be evenly divided between the Department of Justice and the Federal Trade Commission and shall be allocated to such agencies for the enforcement of the antitrust laws.".

Mr. THURMOND. Mr. President, I am happy to rise today as a cosponsor of the Antitrust Procedures Improvement Act of 1989. This legislation incorporates amendments, which the Senate passed unanimously in the last Congress, to the Hart-Scott-Rodino Pre-merger Notification Act. It also includes, for the first time, proposals to increase the criminal fines for violations of the Sherman Act, and the imposition of a filing fee in connection with Hart-Scott premerger notification.

The amendments to the Hart-Scott-Rodino Pre-merger Notification Act include closing the "partnership loophole" which has allowed many partnership transactions to escape premerger reporting. Under this legislation, these transactions would have to be reported if any general partner or any partner with a 50-percent or more interest in the partnership meets the "size of person" requirement.

In addition, this bill would also increase the size of person and size of transaction tests which govern whether an entity is required to file a premerger notification. These changes have been proposed to keep pace with inflation and other economic developments which have occurred since the notification requirements were originally enacted. Such changes should reduce the number of required filings and should ease the reviewing burden for both the Federal Trade Commission and the Department of Justice. At the same time, because the significance of a transaction is tied to the size of the parties and the size of the transaction, it is unlikely that these changes will exempt competitively significant mergers from premerger filing and subsequent agency review.

As was the case with the Hart-Scott amendments last Congress, this bill also includes provisions which extend the waiting period for cash tender offers from a total of 25 days—an original 15 and subsequent 10—to a

total of 40 days—an original 20 and an additional 20. These changes allow the reviewing agency a greater time frame within which to screen the merger, but at the same time are consistent with requirements under the Williams Act. Finally, under certain circumstances, the reviewing agency can seek an additional extension of 25 days by application to the court.

As to those provisions which are new to this bill, one involves raising the Sherman Act criminal fines from $1,000,000 to $10,000,000 for corporations, and from $100,000 to $250,000 for individuals. The second would require a filing fee in connection with Hart-Scott premerger notifications. This fee is patterned after similar fees required by the SEC, and would be set at one-fiftieth of 1 percent of the value of the transaction, but in no event more than $50,000. The revenues from these fees would be divided evenly between the FTC and the Department of Justice for antitrust enforcement. In that way, any budget deficits experienced by these agencies could be offset by these revenues.

Mr. President, I believe the proposals contained in this bill are sound, and they deserve our careful consideration, study and support.

---

By Mr. METZENBAUM:

S. 996. A bill to amend the Clayton Act regarding damages for the United States; to the Committee on the Judiciary.

GOVERNMENT REMEDIES IMPROVEMENT ACT

Mr. METZENBAUM. Mr. President, today I am introducing legislation to provide for treble damages for the United States for violations of the antitrust laws. The proposal amends the Clayton Act to permit the Government to recover treble damages in civil suits arising out of the antitrust laws. Several recent grand jury investigations into price fixing and bid rigging have actually involved procurement fraud against the Government. This shows that fraud against the Government is not just an academic issue—the United States can be victimized by price-fixing and bid-rigging schemes. The penalty for defrauding the Government should be no less than the penalty for committing antitrust crimes against citizens.

I hope my colleagues will see fit to support this measure. I ask unanimous consent that a copy of the bill be printed in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 996

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That this Act may be cited as the "Government Remedies Improvement Act of 1989."

TREBLE DAMAGES FOR THE UNITED STATES

SEC. 2. Section 4A of the Clayton Act (15 U.S.C. 15a), is amended by striking out "actual" and inserting in lieu thereof "threefold the".

---

By Mr. MITCHELL (for himself and Mr. DASCHLE):

S. 997. A bill to amend title XVIII of the Social Security Act to provide for eligibility for home health services on the basis of a need for occupational therapy; to the Committee on Finance.

OCCUPATIONAL THERAPY HOME HEALTH BENEFITS

Mr. MITCHELL. Mr. President, today I am introducing legislation to expand the Medicare Home Health benefit to include occupational therapy as the fourth skilled service which will qualify beneficiaries for home care.

Under current law, occupational therapy services are available only after a Medicare beneficiary has otherwise qualified for home health care. Occupational therapy services may continue to be provided to a beneficiary after his or her need for qualifying services has ended.

Occupational therapy is medically prescribed treatment concerned with restoring functions impaired by illness or injury so that the individual can regain his or her ability to function independently. Like physical or speech therapy, occupational therapy is a skilled health service which assists patients in making the transition between an institution and self-care in the home.

Occupational therapy is an important part of the home health care provided to many Medicare beneficiaries. It is especially necessary for persons who are victims of strokes, heart attacks, diabetes, multiple sclerosis, or spinal cord injury, who are disabled by severe arthritis, or who have suffered physical injury as a result of a fall or some other accident.

Occupational therapy focuses on increasing the patient's functional level. The application of this service often plays a critical role in ensuring the patient's full recovery, the prevention of further disability, and a successful readjustment to the home and community environment.

The occupational therapist establishes a treatment program designed to increase the patient's level of physical function. The therapist also teaches the patient, and those family members or others who will care for the patient, compensatory techniques which permit the patient to function more independently with feeding, dressing, and personal hygiene.

This legislation was originally part of a bill introduced during the 100th Congress by Senator BRADLEY and myself. Because we did not have a cost estimate on this provision until recently, the occupational therapy provision was not included in the Omnibus Budget Reconciliation Act of 1987 or the Catastrophic Health bill, like most other provisions contained in the original Bradley/Mitchell bill.

The Congressional Budget Office is now completing its cost estimate on this legislation.

I believe that adding occupational therapy as a qualifying home health service is a reasonable and needed improvement which will strengthen the home health benefit under Medicare. I urge my colleagues to join me in support this legislation, and I ask unanimous consent that a copy of this legislation be printed at this point in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 997

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. ELIGIBILITY FOR HOME HEALTH SERVICES ON THE BASIS OF A NEED FOR OCCUPATIONAL THERAPY.

(a) PART A.—Section 1814(a)(2)(C) (42 U.S.C. 1395(a)(2)(C)) is amended by striking "or speech therapy" and all that follows through "therapy;" and inserting in lieu thereof ", occupational, or speech therapy;".

(b) PART B.—Section 1835(a)(2)(A) (42 U.S.C. 1395n(a)(2)(A)) is amended by striking "or speech therapy" and all that follows through "therapy, (ii)" and inserting in lieu thereof ", occupational, or speech therapy, (ii)".

(c) EFFECTIVE DATE.—The amendments made by subsections (a) and (b) shall apply to items and services provided on or after October 1, 1989.

---

By Mr. PRYOR (for himself, Mr. HEFLIN, Mr. BOREN, Mr. FOWLER, Mr. CONRAD, Mr. DASCHLE, and Mr. FORD):

S. 998. A bill to improve rural medical data and information transmission, and for other purposes; to the Committee on Agriculture, Nutrition, and Forestry.

HEALTH LINK IMPROVEMENTS ACT

● Mr. PRYOR. Mr. President, I joined Senator HARKIN in submitting a concurrent resolution, cosponsored by 15 Senators, that called for the elimination of the inequitable urban/rural Medicare hospital reimbursement differential. Today, I am pleased to introduce the Health Link Improvements Act of 1989, a bill that will provide needed assistance to many of the very rural health care facilities who have been victimized by unfair Federal reimbursement policy.

The primary goal of Health Link is to propel rural health care into the modern area. The bill establishes the Rural Electrification Administration [REA] as the agency responsible for managing funds to provide increased communications between rural and urban health care facilities. The REA would be charged with administering

the construction of data transmission lines, the accompanying computer technology, as well as the support personnel linking less densely populated areas to those that currently have access to quality medical services.

Under this legislation, the REA will allocate funding to establish mobile care clinics, patient transportation services and improved educational opportunities for senior citizens, handicapped, disabled, and other needy people in underserved regions. This will result in more efficient delivery of care and, as a result, may well help prevent hospital closures.

As the rest of the Nation has moved ahead in technology, it has become harder and harder for rural areas to keep pace. Because rural areas are often seen as a high-risk investment, the private sector has been reluctant to invest time, energy and money into these regions. As a result, rural health care facilities have had a difficult time delivering the types of services needed by their community and necessary to keep their facilities financially viable. This, combined with inadequate and inequitable Federal rural health reimbursement policies, has significantly weakened the rural health care delivery system.

Mr. President, almost one-fourth of the United States' population is located in nonmetropolitan areas. Yet, for no other reason than the location of their homes, this 25 percent of our population has been forced to live with economic and Federal policy changes that threaten access to needed health care services. I believe that Health Link has great potential to serve as a crucial foundation for the revitalization of health care in rural America.

It is time that investment into rural development be given top priority. Rural communities and their residents should no longer remain an untapped source. Health Link addresses many of the challenges facing rural health care providers and will pay large dividends in terms of improved access to quality health care and, as a result, lives saved.

Mr. President, this is a modest but important piece of legislation. It sends the message to rural America that we care about their health and well-being, and I urge all of my colleagues to join me in support of it.●

---

By Mr. HOLLINGS (for himself, Mr. DANFORTH, Mr. INOUYE, and Mr. BRYAN):

S. 999. A bill to amend the Communications Act of 1934 regarding the broadcasting of certain material regarding candidates for Federal elective office, and for other purposes; to the Committee on Commerce, Science, and Transportation.

CLEAN CAMPAIGN ACT

● Mr. HOLLINGS. Mr. President, I am introducing today, along with Senator DANFORTH, Senator INOUYE, and Senator BRYAN, legislation that furthers the intent and improves the effectiveness of the political broadcasting laws. The Clean Campaign Act of 1989 seeks to ensure greater balance and accountability in political campaigns. This legislation is identical to the one I introduced 4 years ago. A hearing was held on that bill, but we believed it required further study before moving forward. I believe that in light of the problems that have arisen in recent political campaigns, this legislation is now ripe for action.

The Clean Campaign Act addresses two specific problems that arise in the use of broadcast stations for political campaigns. The first problem involves the use of broadcast time to attack opponents. While such attacks are not new, with the advent of sophisticated uses of electronic media, such attacks are becoming more and more insidious and are contributing less and less to the debate about candidates' qualifications for office. We have all seen and heard on the broadcast media just about every form of animal and every type of hired performer make incorrect or misleading remarks about a candidate's opponent. What's more, the very nature of the broadcast media makes these attacks difficult, if not impossible, to rebut, especially if they occur late in a campaign. Everyone who has run for office knows that rebuttals take plenty of time and are very expensive.

I know full well that we cannot limit—nor would we want to limit—a candidate's discussion of an opponent's character, record, and other qualifications to hold office. This is a fundamental part of political campaigns. On the other hand, the objective of this activity is to inform the voter so an educated choice can be made. The voter deserves that such a discussion be clear and direct. It should not occur through surrogates who have no real responsibility. It is for these reasons that I am only proposing that if a candidate wants to discuss an opponent in a broadcast advertisement, he do so in person. In this way, candidates can discuss whatever they wish about their opponents, while being more responsible for what they say.

The second problem involves the use of PAC money to air advertisements on broadcast stations. We all have seen how PAC's can seriously damage the balance in a campaign through the expenditure of enormous amounts of money. In effect, a candidate budgets to fight one well-financed opponent but then ends up fighting many.

While the existing political broadcasting laws give a candidate equal opportunities vis-a-vis an opposing candidate, the laws offer far fewer protections when it comes to PAC's—and even these protections will evaporate if the Federal Communications Commission has its way. The current requirements of lowest unit advertising rate or free response time or just the ability to respond promptly do not apply with PAC's. In addition, when a candidate responds to a PAC, he then triggers the equal opportunities provision of the law. In the end, he finds he keeps making one statement for two or more on the other side. How can he hope to compete fairly? To cure this problem, my legislation again takes a straightforward approach, which in no way limits the ability of PAC's to advertise: If a broadcaster airs PAC advertisements, the broadcaster must then give the candidate who is opposed or otherwise not supported free response time within a reasonable period.

In conclusion, the approach taken in this legislation is reasonable and infringes on no person's free speech rights. It will improve the accountability of candidates and the balance in campaigns. In the end, the public will benefit by having the best information possible on which to make an intelligent choice.

Mr. President, I ask unanimous consent that the bill be printed in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 999

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That this Act may be cited as the "Clean Campaign Act of 1989".

SEC. 2. (a) Section 315 of the Communications Act of 1934 (47 U.S.C. 315) is amended—

(1) by redesignating subsections (b), (c), and (d) as subsections (d), (e), and (f), respectively; and

(2) by inserting immediately after subsection (a) the following new subsections:

"(b)(1) If any legally qualified candidate for any Federal elective office (or an authorized committee of any such candidate) who utilizes rights of access and conditions of access under the provision of this Act uses a broadcasting station to refer, directly or indirectly, to another legally qualified candidate for that office, such reference shall be made in person by such legally qualified candidate.

"(2) If any licensee permits a broadcasting station to be used in a manner not in accordance with the requirements of paragraph (1) of this subsection, such licensee shall provide, within a reasonable period of time, to the candidate to whom reference was made the opportunity to use, without charge, the same amount of time on such broadcasting station, during the same period of the day, as was used by the legally qualified candidate (or by an authorized committee of such legally qualified candidate).

"(c)(1) If any licensee permits a person to use a broadcasting station to broadcast ma-

terial which either endorses a legally qualified candidate for any Federal elective office or opposes a legally qualified candidate for that office, such licensee shall, within a reasonable period of time, provide to any legally qualified candidate opposing the candidate endorsed (or to an authorized committee of such legally qualified candidate), or to any legally qualified candidate who was so opposed (or to an authorized committee of such legally qualified candidate), the opportunity to use, without charge, the same amount of time on such broadcasting station, during the same period of the day, as was used by such person.

"(2) For purposes of this subsection, the term 'person' includes an individual, partnership, committee, association, corporation, or any other organization or group of persons, but such term does not include a legally qualified candidate for any Federal elective office or an authorized committee of any such candidate.".

(b) Section 315(a) of the Communications Act of 1934 (47 U.S.C. 315(a)) is amended by striking "section" and inserting in lieu thereof "subsection".

(c) Section 315(e) of the Communications Act of 1934, as so redesignated by subsection (a) of this section, is amended—

(1) by redesignating paragraphs (1) and (2) as paragraphs (2) and (3), respectively; and

(2) by inserting immediately after "section—" the following new paragraph:

"(1) the term 'authorized committee' means, with respect to any candidate for nomination for election, or election, to any Federal elective office, any committee, club, association, or other group of persons which receives contributions or makes expenditures during a calendar year in an aggregate amount exceeding $1,000 and which is authorized by such candidate to accept contributions or make expenditures on behalf of such candidate to further the nomination or election of such candidate;".

SEC. 3. If any provision of this Act or the application of it to any person or circumstance is held invalid, the remainder of this Act and the application of the provision to any other person or circumstance shall not be affected by such invalidation.●

● Mr. DANFORTH. Mr. President, today I join my colleague Senator HOLLINGS in introducing the Clean Campaign Act of 1989. This bill does two things to restore balance and accountability in political campaign advertising.

First, the bill requires Federal candidates who refer to their opponents in broadcast ads to make those references in person. If an ad is broadcast in which a candidate refers to his opponent, but does not do so in person, his opponent receives free response time. This provision doesn't prevent negative advertising, but it is designed to increase accountability. If a candidate wishes to sling mud at his opponent, the public should be able to see the candidate's dirty hands.

Second, this legislation addresses independent political ads placed by political action committees or other third parties. The bill provides that if a third party runs an ad opposing a Federal candidate, then that candidate will get free response time. If a third party airs an ad endorsing a Federal candidate, then the opponents of that candidate get free response time. This bill does not eliminate or restrict ads by third parties. But it does attempt to restore balance into a campaign in which independent ads are aired. This provision will give candidates some ability to respond to messages that otherwise might be unanswerable.

The goal of this legislation, Mr. President, is to address perhaps the most troubling aspect of current American politics—the increasing negativism of political campaigns. We have always had negative campaigns. But the use of the electronic media, and the development of the independent political ad have exacerbated the problem. This bill does not make it illegal to run a negative campaign. But it does allow the public to hold accountable the candidate who runs such a campaign.

Mr. President, this bill, which amends the Communications Act of 1934, is the same bill that I introduced with Senator HOLLINGS in 1985. We held a hearing on that bill 4 years ago, but did not move the bill forward. Considering the increasingly negative tone of recent campaigns, I think the time is right to move this legislation. After all, Mr. President, what is more important than improving our political process?●

---

By Mr. McCLURE (for himself, Mr. CONRAD, Mr. DASCHLE, and Mr. GORTON):

S. 1000. A bill to amend the Agricultural Act of 1949 to require the Secretary of Agriculture to exclude the malting barley price from the national weighted market price for barley in determining the payment rate used to calculate deficiency payments for the 1989 and 1990 crops of barley, and for other purposes; to the Committee on Agriculture, Nutrition, and Forestry.

DEFICIENCY PAYMENTS FOR 1989 AND 1990 CROPS OF BARLEY

● Mr. McCLURE. Mr. President, I rise today to introduce a bill which will provide some equity to the barley producers of this Nation.

In the feed grain provision of the 1985 farm bill, the target price for feed grains, sorghum, barley, and oats were to be set at a comparative level to the target price of corn in a manner that yields a value that is reasonable and fair. The USDA decided to set target prices between the feed grains based on their comparative feed energy value to corn. In short, the barley target price was based on its relative feed value to corn with no consideration given to the barley that is malted for human consumption and sells at a premium price.

However, when USDA calculates the barley deficiency payment, they include both the feed barley price and the malt barley price. In order to be reasonable and fair, it is important that the malt barley price be dropped from the barley deficiency payment calculation because malt barley is not included when calculating the target price. If target prices are based on relative feed value, then it only makes sense that the deficiency payment calculation should be based on feed prices.

In December 1988, the USDA announced that the 5-month national average price of barley—June through October—was $2.83 per bushel, well above the target price. USDA then announced that barley growers would have to repay all of the 30-cent advanced deficiency payment given them in the spring of 1988. This places barley growers at a distinct disadvantage—one not faced by corn growers because they are the base by which all other feed grains are set. Barley growers feel that it is unfair to include malting barley in the calculation of the target price because the target price was originally based on barley's relative feed value in relation to corn. Because, malting barley is not a feed, it should not be included when determining the barley deficiency payment.

Only about 30 percent of the barley produced in the United States is used in the malt industry. Almost 70 percent of the barley produced is marketed as feed barley. The USDA is actually punishing the majority of the barley producers by including the malt barley price in the deficiency payment calculation.

In an ideal world there should be a separate farm program for feed barley and malt barley. In reality, separating the two classes of barley would be difficult and costly to administer. The fact is, all barley is feed until someone buys it for malt. There is no method of stopping rejected malt barley production from entering the feed barley channels. Trying to administer a program which dropped or separated feed barley from malt barley would be a nightmare to administer and would also be very costly. That is why it makes better sense to simply drop the malt barley price from the barley deficiency payment calculation, especially when it is not considered in setting the target price in the first place.

Some suggest that the barley growers will be making more money if the malting barley price is deleted from the calculation. In fact, malting barley varieties are generally lower yielding and need a higher degree of management thus is more costly to grow. In addition, malt barley growers face a higher risk than a feed barley grower. Thus it is doubtful that, in the long run, barley growers will be making more money if this change is made. The majority of those producers raising malt barley varieties sell their barley as feed. Since only about 30

percent of the barley produced in the United States is used in the malt industry the USDA is penalizing 70 percent of the growers by including malt barley prices in the barley deficiency payment. The truth is that the majority of them will never see a malt barley premium.

Barley growers are being treated unfairly. The current formula used is inconsistent and unfair. Malt barley is not being included during the target price determination. Therefore, it should not be included when the USDA calculates the barley deficiency payments. If the value of malt barley and the total value of feed barley were included in the target price formula, the barley target price would be above or equal to corn. If the target price were higher, barley growers would not have to repay the advanced deficiency payment. Barley growers want only to be treated as they should be under the farm bill, with fairness in relation to all other feed grains. This bill will provide fairness. I hope that my colleagues will join me in passing this measure this year.

Mr. President, I ask unanimous consent that the text of the bill be printed in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 1000

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. DEFICIENCY PAYMENTS FOR 1989 AND 1990 CROPS OF BARLEY.

Effective only for each of the 1989 and 1990 crops of barley, section 105C(c)(1)(F) of the Agricultural Act of 1949 (7 U.S.C. 1444e(c)(1)(F)) is amended by adding at the end thereof the following new sentence: "The payment rate for each of the 1989 and 1990 crops of barley shall be based on the national weighted average price received by producers during the first 5 months of the marketing year for barley (other than malting barley), as determined by the Secretary.".●

---

By Mr. GORE:

S. 1001. A bill to establish policies and procedures necessary to develop, as a domestically based industry in the United States, a high definition television enterprise in the United States, together with ancillary products and services; to the Committee on Commerce, Science, and Transportation.

DEVELOPMENT OF U.S. HIGH DEFINITION TELEVISION INDUSTRY

Mr. GORE. Mr. President, by every estimate, HDTV stands to be the next wave in consumer electronics. Even this understates its more fundamental importance. HDTV is itself a potentially huge market for another product; semiconductors. Well before the market for HDTV is fully developed, HDTV production will consume more semiconductors than the U.S. personal computer industry. Indeed, because HDTV's essentially are computers, it is likely that both product lines will begin to fuse.

If the United States does not secure a large portion of the HDTV market, it will forgo the opportunity to produce electronic components in numbers high enough to provide economies of scale. Without economies of scale, neither price nor qualitative competition is possible in the electronics industry. Therefore, failure to seize this chance to reenter consumer electronics means that in due course the United States will lose what is left of the semiconductor industry. Thereafter, the chances increase that we will also lose leadership in the computer industry, much of which is already highly dependent on components imported from foreign competitors.

We have only one purely U.S. firm still manufacturing television sets. To speak of capturing a significant share of the market in HDTV's is, therefore, to speak of reconstituting an industry. Left to market forces, that is impossible. The investment costs are too high, the risks too great, and the U.S. manufacturing base too thinned out. But with the Federal Government as prime mover, operating in league with American industry, it might be done.

It is apparent to this Senator that the United States cannot allow HDTV to slip by; that while private industry is key, the Federal Government has to provide at least an initial impulse; but that it is not certain government will step up to this challenge unless encouraged by Congress.

At any rate, in order to encourage this process, I have today submitted a bill designed to assure that the U.S. Government does at least think through in detail what would be needed if an HDTV industry is to be established in the United States. This bill does not seek to move large amounts of money around. It does not attempt to define policy. It merely directs that by a date certain, both the President and Congress shall have received a detailed breakdown of everything which must be done.

Recently, the American Electronics Association released its concept of such a plan. Now, we need an equally detailed response from the Federal Government. Whether we subsequently carry out any such grand plan then becomes a matter of political choice. But first we must have some idea of how to proceed, in what stages, with what kinds of support from the Government, with what division of tasks within the Government, and with what levels of cooperation in industry.

I hope that the bill I have introduced will induce the U.S. Government to take the first and most necessary step: to evaluate our situation, and to formulate a strategy.

Mr. President, I ask unanimous consent that the text of the bill and a summary of its provisions be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

S. 1001

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. (a) On or before the expiration of the 90-day period following the date of the enactment into law of this, the Secretary of Commerce shall submit to the President of the United States and the Congress a report concerning the establishment, as a domestically based industry within the United States, of a high definition television enterprise or enterprises, together with ancillary products and services.

(b) The report required under subsection (a) shall identify the requirements for establishing in the United States of a viable industry for the production of high definition television, the components of such television, production and transmission equipment relating to television programming, and the development and manufacture of derivative and hybrid products relating to the computer and telecommunications industries.

(c) The report required under subsection (a) shall—

(1) be comprehensive, including not only issues such as the encouragement of technologies, but issues pertaining to licensing, regulations, international standards, international trade, and specialized financing problems; and

(2) separately detail the recommendations of the Secretary of Commerce for the value of the Federal Government in the development of such enterprise, including missions for individual elements of the executive branch, timelines and methods for attaining full coordination, requirements for legislative action necessary to the development of such enterprise, and anticipated funding needs.

(d) For purposes of this Act, an enterprise shall mean—

(1) an entity—

(A) formed in the United States;

(B) operating its productive facilities in the United States; and

(C) owned in its entirety by citizens of the United States; or

(2) a foreign owned entity if such entity—

(A) establishes and operates research facilities in the United States for the purpose of developing and producing high definition television in the United States;

(B) all personnel of such entity engaged in such research in connection with high definition television in the United States are citizens of the United States;

(C) the research product of such entity is available for licensing without bias to any public and private entity or agency within the United States, and on an equal footing with any foreign entity or agency;

(D) establishes and operates production facilities in the United States for the purpose of manufacturing finished components, components and subcomponents relating to high definition television, and its ancillary equipment and its spinoff products; and

(E) all personnel of such entity engaged in the establishment and operation of such production facility are citizens of the United States.

SEC. 2. There is authorized to be appropriated such sum as may be necessary to carry out this Act.

SUMMARY OF BILL

The legislation gives the Secretary of Commerce 90-days from its enactment to submit to Congress and the President a detailed report on the establishment of a HDTV industry. That report would:

Identify the requirements of such an industry, the components of such television, production, and transmission equipment related to HDTV programming, and the development and manufacture of products also related to the computer and telecommunications industries;

Include not only issues covering technological incentives, but also issues related to licensing, regulations, international standards, international trade, and specialized financing problems; and

Separately detail the recommendations of the Secretary of Commerce on the value of federal action, including the responsibilities of different Administrative agencies, timelines and plans for coordination, requirements for legislative action and, for funding.

"There's only one U.S. company still manufacturing television sets. When we talk about capturing a significant share of the HDTV market, we're talking about rebuilding an industry. Left to market forces, that would be impossible. The investment costs are too high, the risks are too great, and the U.S. manufacturing base too thin. But if industry and government work together, it can be done."

"Our first major step must be a detailed analysis of how to promote a U.S. HDTV industry. We must have some idea of how to proceed, in what stages, with what kinds of support from the government, with what division of tasks within the government and, with what levels of cooperation with industry."

---

By Mr. DURENBERGER (for himself, Mr. LUGAR, and Mr. COATS):

S. 1002. A bill to amend the Solid Waste Disposal Act; to the Committee on Environment and Public Works.

SOLID WASTE DISPOSAL ACT AMENDMENTS

● Mr. DURENBERGER. Mr. President, I am today introducing legislation to amend the Resource Conservation and Recovery Act [RCRA] with respect to the cleanup of hazardous wastes at steel and aluminum manufacturing facilities across the country. This legislation has been developed in consultation with representatives of the steel industry. I am pleased that Senator LUGAR and Senator COATS have agreed to join me on this bill.

In 1984, the Congress amended RCRA adding two new requirements for the cleanup of facilities releasing hazardous waste into the environment. One provision mandated the cleanup of all existing units at any facility before any new unit could receive a permit for waste treatment or disposal. The other provision gave EPA the authority to order cleanup at units which are known to be releasing wastes. EPA has been working diligently over the past 4 years to develop regulations that will implement these two legislative mandates. It is expected that the so-called corrective action regulations may soon be promulgated, and when they are, many industrial facilities which have disposed of waste onsite will be facing a big cleanup job.

This task will be especially difficult for the steel industry where many plants have been operating—and disposing of waste—on the same site for decades. Some of the larger steel producing facilities may have dozens of separate units on a single piece of property. The way RCRA works, each of those units must be cleaned up to the boundary of the unit, before any new waste management operation at the site can receive a permit.

Some companies in the industry commissioned a study of the potential cost of this cleanup task. The study, which was based on a thorough analysis of waste disposal practices for a hypothetical integrated steel making plant located in a river valley and disposing of waste onsite since the early part of this century, estimates the average costs of cleanup under RCRA as currently written at $40 million per facility—$34 million of that expense is capital costs. Most of those costs are for ground water cleanup, an extraordinarily expensive undertaking. It goes without saying that the American steel industry would find it very difficult to finance that kind of cleanup expense given the economic circumstances which it faces.

Environmental managers for some of the companies looking at these costs asked if there might be a more rational way to approach the problem—to provide adequate environmental safeguards, but take into account the nature of the industry and the way it has developed. And they have recommended an approach which is somewhat different than current law. Their recommendation is that we move the point of compliance for environmental standards from the boundary of each individual solid waste management unit to the property boundary for the whole facility. Let me say again that most large plants will contain many existing units. And RCRA requires that they all be cleaned up right to the edge of the unit, even if that means cleanup in the middle of a large operating steel plant.

The alternative is compliance at the boundary of the entire facility. This alternative would reduce average cleanup costs to approximately $8 million but would continue to afford protection for health and environmental resources anywhere outside the plant's fenceline. To assure that no contaminants crossed the boundary at levels that would be hazardous, each facility would have to conduct ground water monitoring within the plant area and at a distance from the boundary sufficient to assure that cleanup measures could be implemented before any contaminated plume of ground water affected environmental quality outside the plant. The monitoring would continue so long as the plant was in operation. When operations ceased, plant owners would be required to provide financial assurances sufficient to operate the monitoring equipment and any remedies in effect for a period of 30 years. The assurances would also include a contingency for any corrective action that might become necessary after plant closure.

Mr. President, I would ask that the text of the bill be printed in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 1002

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That section 3004(u) of the Solid Waste Disposal Act is amended by inserting "(1)" after "(u)" and by adding at the end thereof the following new paragraph:

"(2) For the purposes of this subsection and section 3008(h), corrective action with respect to ground water at any existing solid waste management unit at any facility that is in Standard Industrial Classification Code 331 and 3334 shall be construed to mean—

"(A) the selection and implementation of corrective measures that assure that ground water protection standards are met at the facility property boundary during the period such facility remains in operation and the additional period provided under subparagraph (C);

"(B) the implementation of ground water monitoring at the facility property boundary and at appropriate points within the facility taking into account the nature of the solid waste management units, any releases, and the hydrogeologic setting, so that, to the extent practicable and necessary to ensure that ground water protection standards are met at the facility property boundary, corrective measures can be taken in advance of hazardous constituents reaching the facility property boundary; and

"(C) the inclusion in the schedule of compliance contained in a permit or order of a requirement that upon cessation of industrial operations at the facility in which the solid waste management units are located, if all hazardous waste and hazardous constituents in concentrations in excess of media protection standards are not removed from such facility, the owner or operator of such facility shall establish a fund or provide other assurance of financial responsibility in accordance with subsection (t) in an amount adequate to assure monitoring and the operation and maintenance of corrective measures under this paragraph for a period of thirty years after such cessation of operations, including a reasonable contingency for additional corrective measures that may prove necessary during such period. For the purpose of this subparagraph, the sale or other transfer of the facility to another entity that intends to continue industrial operations at such facility and accepts the obligation to continue corrective measures under this paragraph shall not constitute a cessation of operations.".●

---

By Mr. CRANSTON (by request):

S. 1003. A bill to amend title 10 and title 38, United States Code, to make certain improvements in the educational assistance programs for veterans and eligible persons, and for other purposes; to the Committee on Veterans' Affairs.

VETERANS' EDUCATIONAL ASSISTANCE IMPROVEMENT ACT

Mr. CRANSTON. Mr. President, as chairman of the Veterans' Affairs Committee, I have today introduced, by request, S. 1003, the proposed Veterans' Educational Assistance Improvements Act of 1989. The Secretary of Veterans' Affairs submitted this legislation by letter dated May 10, 1989, to the President of the Senate.

My introduction of this measure is in keeping with the policy which I have adopted of generally introducing—so that there will be specific bills to which my colleagues and others may direct their attention and comments—all administration-proposed draft legislation referred to the Veterans' Affairs Committee. Thus, I reserve the right to support or oppose the provisions of, as well as any amendment to, this legislation.

Mr. President, I ask unanimous consent that the text of the bill be printed in the RECORD at this point, together with the May 10, 1989, transmittal letter and enclosed section-by-section analysis of the proposed bill.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

S. 1003

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE: REFERENCES TO TITLE 38, UNITED STATES CODE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "Veterans' Educational Assistance Improvements Act of 1989."

(b) REFERENCES TO TITLE 38.—Except as otherwise specifically provided, whenever in the Act an amendment or repeal is expressed in terms of an amendment to, or repeal of, a section or other provision, the reference shall be considered to be made to a section or other provision of title 38, United States Code.

(c) TABLE OF CONTENTS.—The table of contents of this Act is as follows:

TABLE OF CONTENTS

Sec. 1. Short title; references to title 38, United States Code; table of contents.

TITLE I—EDUCATIONAL ASSISTANCE AND VOCATIONAL REHABILITATION PROGRAM IMPROVEMENTS

Sec. 101. Vocational Training for Certain Pension Recipients.

Sec. 102. Accepting Alternate Secondary School Credentials For Montgomery GI Bill Eligibility.

Sec. 103. Establishment of Date by Which Certain Individuals Must Elect not to Participate in the Montgomery GI Bill.

Sec. 104. Provision for Permanent Program of Independent Living Services and Assistance.

Sec. 105. Deletion of Provisions for Advance Payment of the Work-Study Allowance.

Sec. 106. Provision for Work-Study Benefits for Service-Disabled Veterans.

TITLE II—ADMINISTRATIVE AND MISCELLANEOUS PROVISIONS

Sec. 201. Elimination of Rehabilitation Subsistence Allowance Advance Payment.

Sec. 202. Accepting School Certification for Renewal of Educational Benefits After Unsatisfactory Progress.

Sec. 203. Clock-Hour Measurement of Certain Unit Courses or Subjects Creditable Toward a Standard College Degree.

Sec. 204. Technical and Clerical Amendments.

TITLE I—EDUCATIONAL ASSISTANCE AND VOCATIONAL REHABILITATION PROGRAM IMPROVEMENTS

SEC. 101. VOCATIONAL TRAINING FOR CERTAIN PENSION RECIPIENTS.

(a) Elimination of Mandatory Evaluation Requirement.—

(1) section 524(a) is amended—

(A) by striking out paragraphs (a) (1) and (4) and redesignating paragraphs (2) and (3) as paragraphs (a) (1) and (2), respectively;

(B) in paragraph (a)(1) (as so redesignated) by striking out "subject to paragraph (3)" and all that follows through "applies" and inserting in lieu thereof "subject to paragraph (2) of this subsection, if a veteran who is awarded pension on or before January 31, 1992, applies"; and

(2) Section 524(b)(4) is amended by striking out "following" and all that follows through the period and inserting in lieu thereof "following the award of pension to the veteran as described in subsection (a)(1) of this section."

(b) Trial Work Period—Section 524 is amended—

(1) by redesignating subsections (c) and (d) as subsections (d) and (e), respectively; and

(2) by inserting after subsection (b) the following new subsection:

"(c) The pension being paid to a veteran who, while participating in a vocational training program under subsection (b) of this section, secures employment in the objective of the veteran's individualized written rehabilitation plan, or in a related field which requires reasonably developed skills and use of some or all of the training or services furnished the veteran under such plan, shall not be terminated by reason of either the veteran's capacity to engage in such employment or the income received from such employment (but only if veteran's annual income from the other sources would, taken alone, not result in the termination of the veteran's pension) unless the veteran maintains that employment for 12 consecutive months.".

SEC. 102. ACCEPTING ALTERNATE SECONDARY SCHOOL CREDENTIALS FOR MONTGOMERY GI BILL ELIGIBILITY.

(1) Section 1411(a)(2) is amended by striking out "(or an equivalency certificate)" and inserting in lieu thereof "(or the equivalent as determined by the Secretary concerned, pursuant to regulations prescribed by the Secretary)".

(2) Section 1412(a)(2) is amended by striking out "(or an equivalency certificate)" and inserting in lieu thereof "(or the equivalent as determined by the Secretary concerned, pursuant to regulations prescribed by the Secretary)".

(3) Section 2132(a)(2) of title 10, United States Code, is amended by striking out "(or an equivalency certificate)" and inserting in lieu thereof "(or the equivalent as determined by the Secretary concerned, pursuant to regulations prescribed by the Secretary)".

SEC. 103. ESTABLISHMENT OF DATE BY WHICH CERTAIN INDIVIDUALS MUST ELECT NOT TO PARTICIPATE IN THE MONTGOMERY GI BILL.

(a) Section 1411(c)(1) is amended by striking out "at the time" and inserting in lieu thereof "within 14 days after the date".

(b) Section 1412(d)(1) is amended by striking out "at the time" and inserting in lieu thereof "within 14 days after the date".

SEC. 104. PROVISION FOR PERMANENT PROGRAM OF INDEPENDENT LIVING SERVICES AND ASSISTANCE.

Section 1520 is amended—

(1) by striking out subsection (b);

(2) in subsection (a)—

(A) in paragraph (1)—

(i) by striking out "(1) During fiscal years 1982 through 1989, the" and inserting in lieu thereof "The";

(ii) by striking out "paragraph (7) of this subsection" and inserting in lieu thereof "subsection (f) of this section"; and

(iii) by striking out "paragraph (2) of this subsection" and inserting in lieu thereof "subsection (b) of this section";

(B) in paragraph (2), by striking out "and who is selected" and all that follows through "subsection";

(C) in paragraph (3), by striking out "paragraph (2) of this subsection" and inserting in lieu thereof "subsection (b) of this section";

(D) in paragraph (6) by striking out "of the fiscal years 1982 through 1989" and inserting in lieu thereof "fiscal year";

(E) in paragraph (7) by striking out "paragraph" and inserting in lieu thereof "subsection"; and

(F) by striking out paragraph (5) and redesignating paragraphs (2), (3), (4), (6) and (7) as subsections (b), (c), (d), (e) and (f), respectively.

SEC. 105. DELETION OF PROVISIONS FOR ADVANCED PAYMENT OF THE WORK-STUDY ALLOWANCE.

Section 1685(a) is amended by striking out the last sentence thereof.

SEC. 106. PROVISION FOR WORK-STUDY BENEFITS FOR SERVICE-DISABLED VETERANS.

(a) IN GENERAL.—Section 1685(b) is amended—

(1) in the first sentence by striking out "are pursuing" and all that follows through the period and inserting in lieu thereof "(1) are pursuing full-time programs of education or training under chapter 30, 32, or 34 of this title, (2) are pursuing programs of rehabilitation on at least a half-time basis under chapter 31 of this title (excluding programs where pursuit is based on limited work tolerance), or (3) have disabilities rated at 50 percent or more for purposes of chapter 11 of this title and are pursuing programs of education or training on at least a half-time basis under chapter 34 of this title."; and

(2) in the last sentence by striking out "full-time student" and inserting in lieu thereof "veteran-student as described in clause (1), (2), or (3) of this subsection".

(b) CLERICAL AMENDMENT.—Section 1685 is amended by striking out "per centum" each place it appears and inserting in lieu thereof "percent".

TITLE II—Administrative and Miscellaneous Provisions.

SEC. 201. ELIMINATION OF REHABILITATION SUBSISTENCE ALLOWANCE ADVANCE PAYMENT.

(a) IN GENERAL.—Section 1508 is amended by striking out subsection (i) in its entirety.

(b) Conforming Amendments.—Section 1780 is amended by—

(1) striking out in subsection (d)(1) "or subsistence";

(2) striking out in subsection (d)(2) "or subsistence allowance, as appropriate,"; and

(3) striking out in subsection (e) "or subsistence".

SEC. 202. ACCEPTING SCHOOL CERTIFICATION FOR RENEWAL OF EDUCATIONAL BENEFITS AFTER UNSATISFACTORY PROGRESS.

Section 1674 is amended by striking out clauses (1) and (2) and inserting in lieu thereof the following:

"(1) the veteran will be resuming enrollment at the same educational institution in the same program of education and the educational institution has both approved such veteran's reenrollment and certified it to the Department of Veterans Affairs; or

"(2) in the case of a proposed change of either educational institution or program of education by the veteran—

"(A) the cause of the unsatisfactory conduct or progress has been removed;

"(B) the program proposed to be pursued is suitable to the veteran's apptitudes, interests, and abilities; and

"(C) if a proposed change of program is involved, the change meets the requirements for approval under section 1791 of this title.".

SEC. 203. CLOCK-HOUR MEASUREMENT OF CERTAIN UNIT COURSES OR SUBJECTS CREDITABLE TOWARD A STANDARD COLLEGE DEGREE.

Section 1788(e) is amended to read as follows:

"(e)(1) For the purpose of measuring clock hours of attendance or net of instruction under clause (1) or (2), respectively, of subsection (a) of this section for a course—

(A) which is offered by an institution of higher learning, and

(B) for which the institution requires one or more unit courses or subjects for which credit is granted toward a standard college degree pursued in residence on a standard quarter- or semester-hour basis, the number of credit hours (semester or quarter hours) represented by such unit courses or subjects shall, during the semester, quarter, or other applicable portion of the academic year when pursued, be converted to equivalent clock hours, determined as prescribed in paragraph (2) of this subsection. Such equivalent clock hours then shall be combined with actual weekly clock hours of training concurrently pursued, if any, to determine the total clock hours of enrollment.

(2) For the purpose of determining the clock-hour equivalency described in paragraph (1) of this subsection, the total number of credit hours being pursued will be multipled by the factor resulting from dividing the number of clock hours which constitute full time under clause (1) or (2) of subsection (a) of this section, as appropriate, by the number of semester hours (or the equivalent thereof) which, under clause (4) of such subsection, constitutes a full-time institutional undergraduate course at such institution.".

SEC. 204. TECHNICAL AND CLERICAL AMENDMENTS.

Title 38 is amended as follows:

(1) Section 1434 is amended—

(A) in subsection (a)(1) by inserting "1780(f)," after "1780(c),";

(B) redesignating subsections (c) and (d) as subsections (d) and (e), respectively; and

(C) by inserting after subsection (b) the following new subsection:

"(c) Payment of educational assistance allowance in the case of an eligible individual pursuing a program of education under this chapter on less than a half-time basis shall be made in a lump-sum amount for the entire quarter, semester, or term not later than the last day of the month immediately following the month in which certification is received from the educational institution that such individual has enrolled in and is pursuing a program at such institution. Such lump-sum payment shall be computed at the rate determined under section 1432(b) of this title.".

(2) Section 1633 is amended by adding at the end the following new subsection:

"(d) For any month in which an individual fails to complete 120 hours of training, the entitlement otherwise chargeable under subsection (c) of this section shall be reduced in the same proportion as the monthly benefit payment payable is reduced under subsection (b) of this section.".

(3) Section 1790 is amended—

(A) in subsection (a)(2) by striking out "and prepayment"; and

(B) in subsection (b)(3)(A) by inserting "30," before "32".

---

SECTION-BY-SECTION ANALYSIS

SHORT TITLE; REFERENCES TO TITLE 38, UNITED STATES CODE

[NOTE.—The terminology in the draft bill reflects the conversion of the Veterans Administration to the Department of Veterans Affairs (VA) pursuant to Public Law 100-527. This bill assumes that appropriate technical and conforming amendments to title 38, United States Code, mandated by section 14 of Public Law 100-527 have been made.]

SECTION 1

Subsection (a) provides that the draft bill may be cited as the "Veterans' Educational Assistance Improvements Act of 1989."

Subsection (b) provides that, unless otherwise specified, whenever in the draft bill an amendment or repeal is expressed in terms of an amendment to, or repeal of, a section or other provision, the reference shall be considered to be made to a section or other provision of title 38, United States Code.

Subsection (c) sets forth the table of contents for the draft bill.

TITLE I—EDUCATIONAL ASSISTANCE PROGRAM IMPROVEMENTS

SECTION 101

This amendment would make two changes to the temporary program of vocational training for certain new pension recipients established under 38 U.S.C. § 524. First, it would make participation in the program completely voluntary by eliminating the requirement that veterans under age 50 who are awarded pension during the program period must participate in an evaluation to determine whether achievement of a vocational goal is reasonably feasible. Instead, any veteran awarded pension on or before January 31, 1992, the end of the program period, who desires to participate would simply apply for vocational training under the program. Second, the amendment would provide a trial work period of 12 consecutive months during which the participant's pension would not be terminated either by reason of his or her having the capacity to engage in suitable employment or by reason of the income earned therefrom.

These changes are designed to improve both program participation and results. Our experience in providing program evaluations has indicated that veterans over 50 who could participate in the program on a voluntary basis did so to a substantially greater degree than veterans under age 50 awarded pension during the program period who were required to participate in an evaluation. The cost of evaluations is by far the largest single cost in administering this program. Reduction of this expense by eliminating the mandatory requirement for evaluation in the under 50 group awarded pension during the program period will improve program effectiveness without in any way impairing veterans' access to services.

The addition of a trial work period would provide an additional incentive for veterans to elect to train and secure employment under this program. The veteran's pension would not be reduced unless he or she is employed for 12 consecutive months in an occupation consistent with the objective of the veteran's individualized written rehabilitation plan. This change would provide the veteran with a reasonable certainty that pension would not be reduced until his or her ability to maintain employment has been established.

SECTION 102

This section would amend the Montgomery GI Bill secondary school completion requirements (sections 1411(a)(2) and 1412(a)(2) of title 38 and section 2132(a)(2) of title 10) by eliminating the reference to an equivalency certificate. Instead, an individual would have to have certain alternate school credentials accepted by the Armed Forces, pursuant to regulations promulgated by the Secretary of the military department concerned.

The current law provides that to be considered eligible for the Montgomery GI Bill, an individual must have a secondary school diploma or an equivalency certificate. We believe that the secondary school requirement was intended to assist the military in obtaining high caliber personnel and, therefore, the requirement should conform to the standards acceptable to the Armed Forces.

SECTION 103

In order to establish a uniform period for all of the Armed Forces and to clarify a somewhat ambiguous provision in the current law, this section would amend sections 1411(c)(1) and 1412(d)(1) to authorize a period of 2 weeks after the date of the individual's initial entry on active duty within which he or she may elect not to participate in the chapter 30 Montgomery GI Bill program.

Under the provisions of chapter 30, an individual first entering the Armed Forces or first entering active duty on or after July 1, 1985, automatically becomes a participant unless he or she makes an affirmative election not to participate. However, these provisions do not contain clear statements as to how much time an individual actually has after entry on active duty to make the requisite election. This amendment supplies the specific time period for the election.

SECTION 104

This provision would amend section 1520 to provide that the program of independent living services for service-disabled veterans become a permanent part of chapter 31. Enactment of this proposal would enable se-

verely-disabled veterans for whom vocational rehabilitation is not currently feasible to live more independent lives.

Currently, the law provides for a program of independent living services only through September 30, 1989, and permits initiation of such programs by no more than 500 veterans in each fiscal year to that date. This amendment removes the September 30, 1989, termination date, but retains the 500 veteran cap on program initiations per fiscal year.

SECTION 105

This section would amend section 1685 of title 38, United States Code, by eliminating a provision in subsection (a) which requires the advance payment of a portion of the work-study allowance payable to an individual participating in the veteran-student services program authorized under that section.

Under current law, in return for a veteran's promise to perform a specified number of hours of work under a work-study agreement, an amount equal to 40 percent of the total payable under the agreement is paid to the veteran-student prior to the performance of any services. Remaining amounts become payable on an incremental basis once the individual has completed performance of the number of hours of work which formed the basis for the advance payment.

Overpayments in the work-study program totaled $543,291 during Fiscal Year 1987 creating liability for some 2,582 new debtors. In Fiscal Year 1988 overpayments equaled $447,785 with 2,170 new debtors. In many of these cases, the debtor dropped out of school so that administrative collection by offset is not feasible. Moreover, since the average work-study overpayment is relatively small, recovery through enforced collection generally is not cost-effective.

Enactment of this proposal would virtually eliminate accounts receivable in this program and would result in limited administrative cost savings for the Department; i.e., less than $100,000 in any fiscal year.

SECTION 106

This proposal would enable service-disabled veterans to be eligible for work-study benefits if they are pursuing training or attending school at a half-time or higher rate under chapter 31, or chapter 34 if the veteran's service-connected disability is rated at 50 percent or more disabling. The amendment would not apply to veterans under chapter 31 who have been determined to have limited work tolerance. These veterans are expected to pursue training to the extent their conditions permit. Thus, payment of subsistence allowance at the full-time rate recognizes that they are, in effect, pursuing a rehabilitation program on what is full time for them and providing work-study benefits in these cases would contradict the basis for payment of full-time subsistence allowance.

Currently, 38 U.S.C. § 1685(b) provides work-study eligibility for veteran-students who are pursuing only full-time programs of education or training under chapter 30, 31, 32, or 34 of this title. However, veterans frequently pursue training and education programs on less than a full-time basis because they must work part time to meet family responsibilities. The employment which is secured sometimes results in extremely difficult schedules which the disabled veteran, in particular, may find difficult to maintain. Amending the law to allow certain service-disabled veterans in less than full-time programs to use work-study benefits would provide an additional resource in developing a program which such veterans could successfully pursue.

TITLE II—ADMINISTRATIVE PROVISIONS

SECTION 201

This section would amend provisions of sections 1508 and 1780 of title 38 to eliminate the Secretary's authority to make advance payments of subsistence allowances under chapter 31.

Under current law, certain veterans who are eligible to receive educational assistance allowances under various VA programs, or rehabilitation subsistence allowances under chapter 31 of title 38, United States Code, may, upon request, be provided an advance payment equal to as much as 2 months' educational assistance allowance or subsistence allowance, respectively, prior to actual entry into a program of education or vocational rehabilitation. These advance payments are intended to assist veterans in paying a portion of tuition and fees which many schools require prior to the commencement of training and to meet living expenses during initial periods of training.

In view of the fact that the VA pays all of a chapter 31 participant's training costs, advance payment of subsistence allowance is not warranted. In addition, since chapter 31 participants are eligible to receive advances from the Revolving Fund under section 1512 of title 38, there is little need for the current statutory authorization for advance payments.

SECTION 202

The Secretary is permitted, under 38 U.S.C. § 1674, to resume payment of educational assistance allowance to an otherwise eligible veteran, following the termination of such allowance because of his or her unsatisfactory conduct or progress, if the Secretary finds that the cause of the problem has been removed and the program of education is suitable to the veteran's aptitudes, interests, and abilities.

This amendment would permit the VA to accept a school certification of reenrollment as showing that the cause of the veteran's unsatisfactory conduct or progress is removed and the program is suitable. The proposal's application would be limited to resumption of the same program at the same educational institution which reported the unsatisfactory progress.

Our experience has shown the Department's development of evidence for purposes of the required determination seldom provides any cogent information which would support a continued denial of benefits. Moreover, the development requirement adds substantially to the time it takes to process these claims to award benefits.

SECTION 203

This amendment would replace the current text of section 1788(e) with provisions for measuring such course enrollment by converting the credit hours being pursued to equivalent clock hours combining this number with the actual number of clock hours concurrently pursued, if any, to determine training time under section 1788(a)(1) or (2). This method, unlike the existing complex procedures of section 1788(e) which necessitate creation of an artificial measurement scale in each case, simply converts credit hours to equivalent clock hours, enabling measurement in the same unit expressed in section 1788(a)(1) or (2). Moreover, the Department has found that measurement under current law requires a far greater number of calculations than would be necessary under this amendment. Thus, the proposal would greatly simplify such measurement determinations and yield more readily understandable and consistent results.

Currently, section 1788(e) sets forth a method for determining full-time pursuit of a course not leading to a standard college degree which is offered by an institution of higher learning and for which the institution requires one or more unit courses of subjects creditable toward a standard college degree. This method provides for reducing the number of clock hours otherwise required for full-time study, under section 1788(a)(1) or (2), by the percentage which the number of credit hours (represented by such unit courses of subjects) being pursued is of the number of credits required for full time under section 1788(a)(4).

SECTION 204

(1) This subsection would amend section 1434(a) to except section 1780(f) from applicability to chapter 30 and would add a separate section of similar content but referencing chapter 30 rates.

Section 1434(a) currently incorporates by reference certain enumerated portions of chapter 36 which shall apply to the administration of the chapter 30 education benefits program. One such applicable provision, section 1780(f) of chapter 36, which deals with payment for less than half-time training, inappropriately authorizes rates which are inapplicable to chapter 30.

(2) This provision would amend section 1633 to provide for a proportionate reduction in chapter 32 entitlement in accordance with the reduction in monthly educational assistance allowance paid when a veteran pursuing an apprenticeship or other on-job training program under chapter 32 fails to work 120 hours in a month.

(3) This subsection makes two amendments to section 1790. First, it would amend section 1790(a)(2) which provides that the Secretary may disapprove educational institutions for the enrollment of eligible veterans or eligible persons when the institution would deny them the benefits of prepayment allowances. Since the VA no longer prepays education benefits, this amendment would delete reference to such payments.

Second, this section would amend section 1790(b)(3)(A) to add chapter 30 to the list of chapters enumerated therein.

Currently, section 1790(b)(3)(A) provides that the VA can suspend benefits if the school offering a course has violated one or more of the recordkeeping or reporting requirements of chapter 32, 34, 35, or 36. However, there is no express provision which would permit the VA to suspend benefits if an institution violated these same requirements under chapter 30. This results in the anomalous situation whereby the VA may suspend benefits under chapter 30 for violations of the recordkeeping or reporting requirements of other chapters but not of chapter 30 itself.

More importantly, the chapter 30 program, now a permanent program under the Montgomery GI Bill, is a major education benefits program which surely was intended to be embraced by a general provision for assuring proper payment of benefits by the VA.

VETERANS' ADMINISTRATION,
OFFICE OF THE ADMINISTRATOR OF
VETERANS AFFAIRS,
*Washington, DC, May 10, 1989.*

Hon. DAN QUAYLE,
*President of the Senate, Washington, DC.*

DEAR MR. PRESIDENT: There is transmitted herewith a draft bill "To amend title 10 and title 38, United States Code, to make certain improvements in the educational assistance programs for veterans and eligible persons, and for other purposes." I request that this measure be referred to the appropriate committe and promptly enacted.

This measure entitled the "Veterans' Educational Assistance Improvements Act of 1989," would make a number of amendments to the Veterans' Administration educational and vocational rehabilitation programs to facilitate the administration of the programs and make certain provisions more equitable.

Title I of the draft bill would make the pilot program of vocational training for certain pension recipients voluntary and provide participants a trial work period; amend the Montgomery GI Bill to broaden the secondary school credentialing requirements necessary for entitlement and authorize a period of 14 days after initial entry on active duty within which an individual may elect not to participate in the chapter 30 program; make permanent the program of independent living services for service-disabled veterans under chapter 31; and modify the title 38 work-study program by eliminating the authority to make advance payments and by making the program available to certain service-disabled veterans attending school on a half-time or greater basis.

Title II of the draft bill contains administrative provisions that would remove the VA's authority to make advance payments of chapter 31 rehabilitation subsistence allowances; permit the VA to accept a school's certification for renewal of educational benefits following termination for unsatisfactory conduct or progress; and streamline measurement of combined clock-hour, credit-hour course pursuit. Further, technical and clerical amendments to title 38 are included which would correct an erroneous chapter 30 reference to a chapter 36 provision for computing less than half-time training; conform the entitlement charge for on-job/apprenticeship training under chapter 32 when less than 120 hours are worked in a month; delete an outdated reference to prepayment allowances; and add chapter 30 to the list of chapters under which the VA can suspend benefits in certain situations.

The cost or savings implications of these proposals are estimated to be insignificant.

The Office of Management and Budget advises that there is no objection from the standpoint of the Administration's program to the submission of this legislative proposal to the Congress.

Sincerely yours,

EDWARD J. DERWINSKI,
*Secretary.*

---

By Mr. CRANSTON (by request):

S. 1004. A bill to amend title 38, United States Code, and other provisions of law, to improve the administration of veterans' health care benefits and personnel management in the Department of Veterans Affairs, and for other purposes; to the Committee on Veterans' Affairs.

ADMINISTRATION OF VETERANS HEALTH CARE PROGRAMS

Mr. CRANSTON. Mr. President, as chairman of the Veterans' Affairs Committee, I have today introduced, by request, S. 1004, a bill to amend title 38, United States Code, and other provisions of law, to improve the administration of veterans' health care benefits and personnel management in the Department of Veterans Affairs, and for other purposes. The Secretary of Veterans Affairs submitted this legislation by letter dated May 10, 1989, to the President of the Senate.

My introduction of this measure is in keeping with the policy which we have adopted of generally introducing—so that there will be specific bills to which my colleagues and others may direct their attention and comments—all administration-proposed draft legislation referred to the Veterans' Affairs Committee. Thus, reserve the right to support or oppose the provisions of, as well as any amendment to this legislation.

I do, however, feel a need to make one clarifying statement regarding section 7 of this legislation, which would amend section 4208 of title 38, United States Code, to provide that VA's Veterans' Canteen Service [VCS] is the exclusive agency for providing any retail or other vending operations in VA facilities. In the "Analysis of Proposed Bill" enclosed with the Secretary's transmittal, it is stated, "Since the Service was created in 1946, it has operated for more than 40 years without challenge as the exclusive means of providing any retail services in VA facilities * * *." However, it should be noted that, under the Randolph-Sheppard Act (20 U.S.C. 107 et seq.), the State of Minnesota has challenged the exclusiveness of VCS' retail rights and the matter is currently pending in arbitration. The Randolph-Sheppard Act generally provides for the authorization of blind individuals—with a preference for certain State-licensed blind persons—to operate vending facilities on Federal property.

Mr. President, I ask unanimous consent that the text of the bill be printed in the RECORD at this point, together with the May 10, 1989, transmittal and letter and enclosed analysis of the proposed bill.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

S. 1004

*Be it enacted by the Senate and the House of Representatives of the United States of America in Congress assembled,* That (a) Except as otherwise expressly provided, whenever in this Act an amendment is expressed in terms of an amendment to a section or other provision, the reference shall be considered to be made to a section or other provision of title 38, United States Code.

SEC. 2. Section 620(a)(2) is amended—

(a) by striking clause (A) and inserting in lieu thereof the following:

"(A) the amount equal to 45 percent of the cost of care furnished by the Department of Veterans Affairs in a general hospital under the direct jurisdiction of the Department (as such cost may be determined annually by the Secretary) in the State in which such institution is located;"

(b) by striking the period at the end of clause (B) and inserting "; or" in its place; and

(c) by inserting a new clause (C) as follows:

"(C) the amount equal to 50 percent of the cost of care furnished by a community general hospital under contract with the Department of Veterans' Affairs (as such cost may be determined annually by the Secretary) in Alaska or Hawaii."

SEC. 3. Section 628(a)(2) is amended by striking the word "found" and all that follows and inserting in lieu thereof "a participant in a vocational rehabilitation program as defined in section 1501(9) and is medically determined to have been in need of care or treatment to make possible such veteran's entrance into a rehabilitation program, or prevent interruption of a rehabilitation program, or hasten the return to a rehabilitation program which was interrupted because of such illness, injury, or dental condition; and".

SEC. 4. Section 4107(b)(2) is amended by striking the period at the end of the first sentence and inserting in lieu thereof the following:

"or is a physician or dentist serving in a comparable position in the Central Office of the Veterans Health Services and Research Administration."

SEC. 5. Section 4114(a)(3) is amended—

(a) by striking the penultimate sentence in paragraph (A) and inserting in lieu thereof the following:

"Temporary full-time appointments of persons who have successfully completed a full course of training as a physical therapist, practical/vocational nurse, occupational therapist or pharmacist in a recognized school for that occupation, approved by the Secretary, and who are pending registration/licensure in a State or certification by a national board recognized by the Secretary, shall not exceed two years."

(b) by inserting after the penultimate sentence in paragraph (C) the following:

"A student who has a temporary appointment under this paragraph and who is pursuing an academic program leading to a degree in physical therapy, occupational therapy or pharmacy approved by the Secretary may be reappointed for a period not to exceed the duration of such student's academic program."

SEC. 6. Section 4205 is amended—

(a) by striking the phrase "or other interest bearing accounts"; and

(b) by adding the following at the end:

"Money in the revolving fund not required for current disbursements shall be invested and reinvested by the Secretary of the Treasury in interest bearing obligations of the United States or in obligations guaranteed as to both principal and interest by the United States, taking into consideration current market yields on outstanding marketable obligations of the United States. The income on such investments shall be credited to and form a part of the Fund."

SEC. 7. Section 4208 is amended by deleting the old text and inserting in lieu thereof:

"Notwithstanding any other law, the Service shall be under the exclusive control and supervision of the Secretary, and shall: (1) function as an independent unit in the Department of Veterans' Affairs; (2) have exclusive control over all activities of the Service, including sales, procurement and supply, finance, including disbursements, and personnel management; and (3) have sole and exclusive authority to provide articles of merchandise and services, under this chapter, at any Department of Veterans' Affairs facility under the control or jurisdiction of the Secretary."

(b) The table of sections at the beginning of chapter 75, title 38, United States Code, relating to section 4208 is amended to read as follows:

"4208. Service to be independent unit and exclusive."

SEC. 8. Section 115 of Public Law 100-322 is amended—

(a) by striking "1989" in subsections (d) and (e) and inserting in lieu thereof "1992";

(b) by striking "1988" in subsection (e) and inserting in lieu thereof "1991"; and

(c) by striking subsection (f) in its entirety and redesignating subsection "(g)" as "(f)".

ANALYSIS OF PROPOSED BILL

Section 2 would amend section 620 to provide that in Alaska and Hawaii, those states without a VA general hospital, the per diem cost of community nursing home care purchased by VA will not exceed 50 percent of the cost of care purchased by VA in a community general hospital in that State. Currently, the per diem rate is limited to "45 percent of the cost of care furnished by the Veterans' Administration in a general hospital . . . or . . . 50 percent of such costs, if such higher amount is determined necessary by the Administrator." This has been interpreted to allow the 45 or 50 percent factor to be applied to a VA medical district average or a VA index hospital, if necessary, to purchase adequate care for veterans. The proposed amendment would rectify a problem in Alaska where, in light of increasing costs, the current formula threatens to limit VA's capability to obtain the care needed.

This provision would allow a higher general hospital index rate for Alaska and Hawaii, which would permit VA to establish a higher maximum community nursing home rate in those States and thereby enable the Department to purchase needed care. Enactment of this proposal would not have any significant cost impact.

Section 3 would amend 38 U.S.C. § 628 to clarify that VA has the authority to pay for emergency medical services for veterans participating in a vocational rehabilitation program under 38 U.S.C., Chapter 31, when the veteran cannot reasonably obtain medical care through VA or other Government facilities. Under existing law, VA may generally pay for the care of certain categories of veterans in private non-Federal facilities only when the care has been authorized in advance. Section 628 provides an exception to that rule for certain veterans when a medical emergency exists and a VA or other Government facility is not reasonably available at the time of the emergency. Among the veterans eligible for reimbursement of such emergency care are some, but not all veterans participating in a vocational rehabilitation program under Chapter 31. Specifically, section 628 applies if a veteran is found to be "(i) in need of vocational rehabilitation under Chapter 31 of this title and for whom an objective had been selected or (ii) pursuing a course of vocational rehabilitation training and is medically determined to have been in need of care or treatment to make possible such veteran's entrance into a course of training, or prevent interruption of a course of training, or hasten the return to a course of training which was interrupted because of such illness, injury, or dental condition."

Since section 628 was first enacted, changes have been made in the VA's vocational rehabilitation programs. For example, VA now conducts a program of independent living that does not necessarily involve a so-called "course of training" with a specific vocational goal. This proposal would authorize VA coverage of emergency care for a veteran in such a program by amending section 628 to include all veterans participating in a vocational rehabilitation program as that term is defined in 38 U.S.C. § 1501(9). This amendment is also intended to cover an individual who has just completed a course of training under the vocational rehabilitation program, but has not yet obtained employment. In that case, the individual is still a participant in the program, and VA would still be providing vocational rehabilitation services. The proposal would clarify that all participants in vocational rehabilitation programs are authorized emergency medical care if a VA or other Federal medical facility is not available to provide the needed care. Enactment of this provision would result in insignificant costs as we anticipate only a few cases would arise.

Section 4 of the draft bill would amend section 4107(b)(2) of title 38, United States Code, to authorize the Department of Veterans' Affairs to use the Director grade in the "Physician and Dentist Schedule" in section 4107(b)(1) for a physician or dentist position in the Central Office of the Department's Veterans Health Services and Research Administration which is comparable to the position of Director of a Department, medical center, domiciliary, or independent outpatient clinic.

Currently, section 4107(b)(2) restricts use of the Director grade to Directors of the Department's health-care facilities mentioned above. Therefore, only the Executive or Medical Director grades are available for Central Office physician and dentist positions, even though the Director grade (which is between the two other grades in pay) might be more appropriate. This proposal would allow relating the pay for these positions more closely with the level of responsibility and improve the administration of physician and dentist assignments and advancements.

Section 5 would amend 38 U.S.C. § 4114(a)(3) to authorize the appointment of graduate physical therapists, graduate practical/vocational nurses, graduate occupational therapists, and graduate pharmacists under 38 U.S.C. § 4114(a)(3)(A). Current provisions of 38 U.S.C. § 4104(3) provide for the appointment of licensed physical therapists, licensed practical or vocational nurses, pharmacists and occupational therapists. However, although not cited by position title, these personnel may also be appointed as medical support personnel under 38 U.S.C. § 4114(a)(3)A) for a period not to exceed one year pending receipt of licensure or certification.

The proposed amendment to 38 U.S.C. § 4114(a)(3)(A) would authorize the Department to appoint graduate physical therapists, graduate practical/vocational nurses, graduate occupational therapists and graduate pharmacists for more than one year. This authority would apply to graduates who have successfully completed a full course of training in a recognized school for that occupation, approved by the Secretary, and who also are awaiting licensure in a State or certification by a national board recognized by the Secretary.

By adding the categories of personnel listed above to those authorized for appointment for up to two years under section 4114(a)(3)(A), the proposed change would enable these personnel to obtain health benefits and life insurance. Current Office of Personnel Management regulations do not allow employees with temporary appointments of one year or less to receive these benefits. Graduate physical therapists, graduate practical/vocational nurses, graduate occupational therapists and graduate pharmacists appointed to VA health care facilities are employed with the expectation that they will be converted to a probationary appointment upon attainment of licensure or certification. Nearly all such appointees ultimately receive permanent appointments under 38 U.S.C. § 4104(3). However, until that time, they remain ineligible for health and life insurance benefits.

The proposed legislative change is expected to enhance the VA's ability to recruit new graduates and to compete successfully with private sector health care providers. In drafting the proposed amendment VA adopted language from a similar provision of 38 U.S.C. § 4114(a)(3)(A) which permits the appointment of graduate nurse technicians for a period not to exceed two years. No significant additional costs are expected to result from this proposed change.

38 U.S.C. § 4114(a)(3)(A) is further amended by adding a new sentence, preceding the last sentence in paragraph (C), which would permit the appointment of physical therapy, occupational therapy and pharmacy students as technicians beyond one year. Current provisions of 38 U.S.C. § 4114(a)(3)(A) restrict appointment of medical support personnel to one year. This authority can be used to appoint students who are enrolled in good standing at an accredited school in one of these occupations, but the one-year limitation terminates the appointment, in many cases, before the student receives his or her degree and thus fosters a drain of potential career personnel in these occupations for the VA.

The proposal would amend 38 U.S.C. § 4114 to allow VA health care facilities to reappoint physical therapy, occupational therapy and pharmacy students as technicians for a period not to exceed the duration of their academic program leading to a degree.

This proposal is patterned on existing authority under 38 U.S.C. § 4114(a)(3)(C) which permits VA to reappoint nursing students for a second year and would extend this opportunity for reappointment to physical therapy, occupational therapy and pharmacy students as well. This wording provides for reappointment after one year as opposed to extending the initial appointment period, thus allowing the period of initial appointment to serve as an opportunity for VA to assess the student's performance and potential. No additional costs are expected to result from this change.

Section 6 would amend chapter 75 of title 38, United States Code, to clarify that monies in the VCS revolving fund may be invested in Treasury securities. Current law (as amended by section 414 of Public Law 100-322) provides that designated amounts from the VCS revolving fund may be depos-

ited "in checking accounts or other interest-bearing accounts . . . ."

Prior to this amendment, the bulk of VCS monies were maintained in non-interest bearing Treasury accounts. With the enactment of Public Law 100-322, and after much discussion with officials of the Department of the Treasury, VCS officials began depositing funds in Treasury Direct accounts and purchasing "T-bills"; however, the investment options under such an arrangement are somewhat limited.

Other provisions of law are more specific, authorizing the Secretary of the Treasury to invest certain agency monies in interest-bearing obligations of the United States. (See, for example, 10 U.S.C. §§ 1461, 1467; 38 U.S.C. § 5228.) The legislative record strongly suggests that Congress intended to provide investment authority for VCS monies at least as broad as that afforded those other agencies' funds which may be invested in Treasury activities.

The legislative history indicates that Congress' purpose in enacting this provision was to enable VCS to maximize returns on its surplus monies. Notes from the Subcommittee hearings explain Congress' view that, "[p]rudent financial management calls for investment of funds which are not needed to meet current VCS demands . . . and that explicit authority to invest surplus is consistent with the goals and mission of the VCS."

The proposed revision which is intended to clarify this provision is patterned on existing investment authority and would serve to clarify VCS authority to invest in a variety of Treasury securities, including participation in the "Federal Investment Counseling Program." The new language directs that the Secretary of Treasury "shall invest and reinvest in interest bearing obligations" those funds designated by the VCS as surplus, thereby, facilitating the administration of VCS investment monies and allowing VCS to take advantage of Treasury expertise. Ultimately, the proposed revision will enable VCS to effectuate the goal set by Congress when initially amending § 4205, to foster investments which yield the highest return on surplus monies from the VCS revolving fund.

Section 7 would amend section 4208 of title 38, United States Code, to make it clear that the Veterans' Canteen Service, under the control and supervision of the Secretary, is the exclusive agency for providing any retail or other vending operations in VA facilities. Since the Service was created in 1946, it has operated for more than 40 years without challenge as the exclusive means of providing any retail services in VA facilities, particularly hospitals and homes, where the Secretary determined VCS services were needed. This provision would simply amend the VCS statute to explicitly provide what has long been at least implicit—that the Secretary has exclusive authority under the VCS law to provide merchandise and services, including vending machines, at any VA facility.

Section 8 would amend section 115 of Public Law 100-322 to extend for three years from September 30, 1989, to September 30, 1992, the VA's authority to provide community-based care for homeless chronically mentally ill veterans. Congress initially authorized VA to provide such care in Public Law 100-6. Public Law 100-322, enacted on May 20, 1988, repealed the program authorization established under Public Law 100-6 and specifically directed VA to conduct a pilot program for homeless chronically ill veterans, and established a September 30, 1989, expiration date for it. In addition, Section 115 of Public Law 100-322 directed that the Administrator of Veterans' Affairs submit a report on the pilot program to the authorizing committees by February 1, 1989, with recommendations as to whether the pilot program should be continued. As required, in January 1989 the Administrator reported to Congress on the program's success.

In the interim, Congress has enacted various provisions in support of VA's pilot program for the homeless. The "Urgent Relief for the Homeless Supplemental Appropriations Act of 1987" appropriated an additional $5 million for the program through September 30, 1988. Section 501 of Public Law 100-628, the Stewart B. McKinney Homeless Assistance Amendments Act of 1988, authorized additional funding for Fiscal Years 1989 and 1990. Despite these supplemental funding provisions, Congress did not extend the program's September 1989 expiration date. In light of continued congressional support (evidenced by the supplemental appropriations) and early evidence of the program's success, we recommend that the pilot program be extended for another three years. The draft bill would accomplish this and thus enable VA to gain additional data and assess the merits of the pilot program over a longer term. Extension of this pilot program would not entail any additional costs.

---

VETERANS' ADMINISTRATION, OFFICE OF THE ADMINISTRATOR OF VETERANS' AFFAIRS,
*Washington, DC,* May 10, 1989.

Hon. DAN QUAYLE,
*President of the Senate,*
*Washington, DC.*

DEAR MR. PRESIDENT: There in transmitted herewith a draft bill "To amend title 38, United States Code, and other provisions of law, to improve the administration of veterans' health care benefits and personnel management in the Department of Veterans' Affairs, and for other purposes." We request that it be referred to the appropriate committee for prompt consideration and enactment.

The enclosed draft bill would amend several provisions of law in an effort to enhance operations of the VA health care system by improving medical center personnel and management procedures, extending an expiring program targeted to assist the homeless and clarifying statutory language to facilitate the administration of veterans' health care benefits and the provisions of retail and vending services at VA facilities.

CONTRACT NURSING HOME CARE

Among its provisions, the draft bill would resolve what we believe may become a serious problem in those States without a general VA hospital (Alaska and Hawaii). Under existing law, the maximum per diem rate VA may pay for contract nursing home care is 45 percent of the cost of care in a VA general hospital or, where deemed necessary, 50 percent of that cost. With the increasing cost of nursing home care, the current formula threatens to limit VA's capability to obtain such needed care in Alaska, for example. We recommend that Congress amend the law to set maximum per diem rates in Alaska and Hawaii to a level pegged to rates in community general hospitals, as provided in our draft bill. With enactment of a higher general hospital index rate for Alaska and Hawaii, VA will be able to obtain the care needed for veterans in those States. Enactment of this proposal would not result in any significant cost increase to the Department.

FLEXIBILITY IN HIRING

Currently, section 4107(b)(2) of title 38, United States Code, prohibits the Veterans' Health Services and Research Administration (VHS&RA) in the Department of Veterans' Affairs from using the Director grade under the "Physician and Dentist Schedule" in section 4107(b)(1) for anyone other than the Director of a VA medical center or independent outpatient clinic. The pay for the Director grade is comparable to the General Schedule grade GS-16 ($67,038 for Step 1, effective January 1, 1989).

Because of this restriction, the VA is prevented from using the Director grade as an option mainly when it reassigns or promotes physicians or dentists to positions in the VA Central Office. Instead, we can generally only give these physicians or dentists either the Executive or Medical Director grade, unless the position is specified by statute. The Executive grade, which is generally given to Chiefs of Staff at medical centers, is between the General Schedule grades GS-15 and 16 ($61,900 for Step 1). The Medical Director grade is comparable to GS-17 ($76,990 for Step 1).

The draft bill would amend section 4107(b)(2) to authorize the Department to use the Director grade for Central Office physicians and dentists if the position is comparable to the positions of a medical center director.

We believe that there are Central Office physician and dentist positions with responsibilities, qualification requirements, and complexities that are comparable to those of a Director of a VA medical center. There could also be future positions in Central Office where the Director grade would be more appropriate than either the Executive or Medical Director grade. Providing the VA with the option to use the Director grade would allow us to more closely relate the pay for these positions with the level of their responsibilities.

The additional flexibility to use all three grades (Executive, Director, and Medical Director) would also improve administration or assessments and advancements of physicians and dentists to Central Office positions. This would particularly assist the Department in recruiting Chiefs of staff who are in the Executive grade.

There are no increased costs associated with this proposal. We believe that any cost savings that may arise from assigning physicians or dentists to the Director, rather than the Medical Director, grade would be minimal and speculative.

Another provision of the draft bill would expand the appointment authority under 38 U.S.C. § 4114. Section 5 of the draft bill would amend 38 U.S.C. § 4114(a)(3)(A) by authorizing VA to appoint graduate physical therapists, graduate practical/vocational nurses, graduate occupational therapists and graduate pharmacists for more than one year, subject to a maximum of two years, provided they have successfully completed a full course of training in a recognized school for that occupation, approved by the Secretary and are awaiting licensure in a State or certification by a national board recognized by the Secretary. In addition, the proposed change would permit VA to offer such graduates the opportunity to obtain health and life insurance. Under OPM regulations employees with temporary appointments of one year or less are ineligi-

ble for such benefits. This places VA at a serious disadvantage when competing against private institutions for this scarce pool of health care professionals. Private health care institutions typically offer such benefits to graduates when they are first employed. The proposed amendment would empower VA to compete more effectively with the private sector in this regard. No significant cost would arise from this marginal change in VA appointment authority.

Section 5 of the draft bill would also authorize VA to appoint physical therapy, occupational therapy and pharmacy students for a period not to exceed the duration of their academic program. Under the present authority, which limits temporary appointments to one year, many students are required to terminate employment before completing their academic training. Because at that juncture they have not yet obtained a degree, they are ineligible for appointment as probationary permanent employees. This interruption in the "internship" works against the possibility that promising students may work continuously with VA and ultimately become career VA health care providers. The opportunity to employ, observe, and identify promising students is thus less valuable under the current one year limit.

Under the draft bill, to qualify for reappointment these students must maintain good academic standing in a program approved by the Secretary leading to a degree in physical therapy, occupational therapy or pharmacy. With appropriate orientation and supervision, such students could be appointed as technicians and perform duties of increasing sophistication consistent with the level of training they have completed. Moreover, because the draft bill would enable more stable employment relationships with students during their training, it may make VA employment more attractive to the students. Thus, the proposed change would help VA meet current staffing needs in these occupations as well as enhance the Department's opportunity to recruit and retain promising students for career service. No significant cost increase would result from enactment of this provision.

EXTENSION OF HOMELESS CHRONICALLY MENTALLY ILL PILOT PROGRAM

In Public Law 100-6 Congress provided funding and authority for VA to develop a program to provide community-based psychiatric rsidential treatment for homeless chronically mentally ill veterans. That law transferred $5 million in FY 1987 funds to VA's medical care account for this program. Pursuant to Public Law 100-6, the VA established the Homeless Chronically Mentally Ill program (HCMI). In the summer of 1987, Congress enacted the "Urgent Relief for the Homeless Supplemental Appropriations Act of 1987" as part of Public Law 100-71. It provided additional spending authority by appropriating an additional $5 million for the HCMI program to be available through September 30, 1988. Section 115 of Public Law 100-322 enacted on May 20, 1988, repealed the program authorization established in Public Law 100-6 and specifically directed the conduct of an HCMI pilot program. Section 115 established a September 30, 1989, expiration for the pilot, but directed that the Administrator of Veterans' Affairs submit a report on the pilot program to the authorizing committees by February 1, 1989, to include a recommendation as to whether the pilot program should be continued.

On January 17, 1989, the Administrator provided Congress the report required by section 115, advising, in essence, that data collected demonstrated that the pilot program has been operated in a cost effective manner. Our experience with the program indicates that it has been very successful in reaching out to the target population, veterans who are both homeless and chronically mentally ill, and providing a wide range of services to this seriously ill population of veterans.

We note that in section 501 of Public Law 100-628, the Stewart B. McKinney Homeless Assistance Amendments Act of 1988, Congress in November 1988 authorized additional appropriations for each of Fiscal Years 1989 and 1990 of $30 million, of which $15 million is to be available for the HMCI program. Congress did not lift the program's September 30, 1989, "sunset" provision, however, and provided no evidence of an intent to impliedly repeal it. To the contrary, Congress also let stand the requirement in section 115 of Public Law 100-322 that the Administrator report on the Agency's experience with the program.

In view of the early evidence of the program's success, we recommend that it be extended for another three years to enable us to gain additional data and assess the merits over a longer term. We anticipate that the extension of this pilot program would entail no new costs.

CLARIFYING AMENDMENTS

This draft bill also includes a provision to clarify that the Veterans' Canteen Service (VCS) is the exclusive authority for providing retail or other vending operations in VA facilities.

In addition, we propose more specific wording of 38 U.S.C. § 4205, as amended by Public Law 100-322, to clarify that money in the VCS revolving fund not required for current disbursement is to be invested in Treasury securities. Finally, the draft bill would clarify our authority to pay for the medical costs of veterans participating in a VA-sponsored vocational rehabilitation program when those costs are incurred in a medical emergency, and a VA or other Federal health-care facility is unavailable to provide the needed care. Enactment of these provisions would not result in significant costs.

The Office of Management and Budget advises that there is no objection from the standpoint of the Administration's program to the submission of this legislative proposal to the Congress.

Sincerely yours,

EDWARD J. DERWINSKI,
*Secretary.*

---

By Mr. HARKIN (for himself, Mr. PRESSLER, Mr. SIMON, Mr. GRASSLEY, and Mr. DASCHLE):

S. 1005. A bill relating to the sale, purchase, or other acquisition of certain railroads; to the Committee on Commerce, Science, and Transportation.

REVIEW OF PROPOSED RAILROAD ACQUISITIONS

● Mr. HARKIN. Mr. President, today, Senators PRESSLER, SIMON, GRASSLEY, DASCHLE, and I are introducing legislation that would require the Interstate Commerce Commission to review proposed acquisitions of class I railroads if such acquisitions could potentially result in a reduction in service or in an increase in a railroad's debt. The legislation would not increase the jurisdiction of the ICC in regard to the purchase of shortline railroads.

Railroads are crucial to the movement of agricultural commodities, manufactured goods, coal and many other products. Their maintenance and continued operation at a proper level of service is essential for our national productivity.

The Nation's railroad and highway systems are the arteries and veins that facilitate commerce. The granting of large tracts of land to railroads in the 19th century represented the transfer of great wealth to an industry which was recognized as crucial to the development of our Nation. It was an important investment and it was key to the economic development of the country.

The Interstate Commerce Commission has the authority to prevent anticompetitive railroad mergers. It is incumbent upon ICC to consider proposed abandonment of trackage—even the possible abandonment of small segments on isolated branch lines that will affect only a few shippers—to determine whether that abandonment would jeopardize the public's interests.

However, according to a letter that a number of my Senate colleagues and I received yesterday from the ICC, the Commission feels that it may not have jurisdiction over the possible purchase of the CNW railroad by the Wall Street investment partnership, Japonica Partners. The ICC arrived at this conclusion after holding a hearing on this question on May 9. I must note that the position is not held unanimously by the five commissioners.

Commissioner J.J. Simmons III asserted—

> The majority's statement, that the Commission's chances of success in litigation resulting from any assertion of jurisdiction are "questionable," is apparently grounded in a disinclination to become involved. The Commission should not adopt this constricted interpretation of its responsibilities.

Commissioners Andre and Lamboley also made separate comments that the Commission may have jurisdiction over this issue depending on certain questions.

The possibility is very real that a Japonica leveraged buy-out could destroy the CNW. And, this type of a transaction could threaten other major railroads that serve wide areas of the country. I believe that we must ensure that the ICC oversee this type of transaction to protect national interests.

The Chicago and Northwestern operates track in Iowa, Minnesota, Wisconsin, Nebraska, South Dakota, Wyoming, Missouri, Illinois, and Michigan—nine States. The railroad is expected to operate 40 billion revenue ton miles this year. It receives a billion dollars in revenue. The CNW moved 270,000 carloads of grain in 1988 and

three quarters of that grain was corn or soybeans. The CNW transported 115 million tons of coal. The railroad is a major mover of steel, automobiles, auto parts, and all types of consumer goods. CNW employees are expected to work 16 million hours in 1989. The Federal Government has provided over $200 million in assistance to the railroad to improve the quality of its track.

In Iowa, the CNW operates 40 percent of the rail trackage in the State—1,945 miles. And, it moves about that same percentage of our corn and soybeans to market. Trains use much of the CNW trackage in Iowa as gathering lines for grain. These same lines are also crucial for a large number of manufacturers. If branch lines cease to operate or if service sharply deteriorates, the adverse economic impact on the State of Iowa would be tremendous. From both an Iowa and a national perspective, continued operation of the CNW railroad is crucial to the Nation's transportation system.

If the Japonica tender offer goes through, the CNW would accrue a significant amount of debt. CNW's present debt of $536 million would soar by an additional $615 million if this tender offer were finalized. Few people believe that the CNW would be able to continue with its track modernization program with that kind of an increase in debt. Under the railroad's current plans, $82 million is to be spent on track maintenance in future years. What would be the maintenance level with a doubling of the railroads debt? Wouldn't there be added pressure to sell various segments of the railroad with the increased debt load?

The result of the Japonica leveraged buy-out, in my view, is likely to be a series of abandonments and sales of significant segments of the railroad under the pressure of debt. I suspect that we will see deterioration of service that would lead to a decline in traffic. When traffic declines, the ICC will begin to hear that lines should be abandoned because operations are no longer profitable.

It would not be reasonable for the ICC to look only at such individual actions that are likely to result from a successful Japonica tender offer when they did not rule on the logic of the purchase itself.

The legislation we're introducing today would correct this problem. It would require that the ICC examine any proposed acquisition of a class I railroad in a leveraged buy-out scenario or in other scenarios if the transaction is likely to be destructive to the operation of a railroad.

Frankly, I developed this legislation because of my concern about possible immediate damage to a major railroad that is crucial to Iowa and the Midwest. However, I'm also troubled that railroads, by their nature, have a tendency to be takeover targets. Like farmland near cities, railroad property can often be worth far more as land than as a railroad. The owners may be able to make a killing. But, the national economy will suffer greatly.

I ask unanimous consent to submit for the RECORD an article that appeared in the weekend Washington Post which discusses the possibility that certain entities may be interested in purchasing Conrail, and I ask unanimous consent that the article be printed following my remarks. I am sure that there are many other potential railroad targets around the country.

I want the management of our Nation's railroads to be running the railroads instead of spending their time figuring out how to block unfriendly leveraged buy-outs or developing their own exotic financing schemes so management can buy a railroad from its stockholders.

I urge that the Senate consider and pass this legislation.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

IS CONRAIL ON THE TAKEOVER TRACK?—WITH STOCK CURB SET TO END, RAIL FIRM PREPARES FOR THE FUTURE

(By John Crudele)

Consolidated Rail Corp. has the best poison pill of any company around. The railroad has Congress forbidding anyone to buy even one-tenth of its shares.

But, alas, all good things come to an end, and Conrail is said to be preparing for the day next April when its congressional shield is removed.

"They don't specifically talk about fears of a takeover," says Andrew Geller, who follows Conrail for Philadelphia's Provident National Bank. "But they understand what might be out there after April."

Under the 1986 law that pieced together Conrail—a now-profitable freight carrier serving the Northeast—nobody was allowed to buy more than 10 percent of the company's stock. That prohibition ends next April. Geller says Conrail's management is painfully aware that it must get the company's stock price (around $36) higher if it is to avoid the risk of a takeover attempt. And he believes an increase in the company's $1.20 a share dividend is one thing Conrail will probably do in an effort to improve its stock price.

What else is Conrail doing? The scuttlebutt on Wall Street is that the company is keeping a very watchful eye for signs of anyone accumulating its stock.

D.F. King & Co., Conrail's proxy solicitation firm, is said to have been put on alert by the railroad for any signs of concentrated stock buying. Recent activity in Conrail's stock shows just how interested investors might be in the railroad once the takeover restraints are removed.

When Drexel Burnham Lambert analyst Linda Dunn issued a report on May 5 on Conrail's financial strength and the chances of a restructuring of the company, Conrail's stock climbed sharply on twice its normal trading volume. Dunn says that Conrail's financial prowess "could trigger either [its] restructuring or an outsider taking an interest."

How much is Conrail worth? Even though the rail line isn't the type of company that can be broken up, some analysts still think Conrail could command $55 a share in a buyout. But investors will have to wait until April Fools Day for even a chance to collect.●

● Mr. SIMON. Mr. President, I am pleased to join my friend from Iowa and our other distinguished colleagues as an original cosponsor of this important legislation. This bill will allow the Congress and the executive branch to be sure that the hostile takeover/leveraged buyout game will not wreak havoc on the Nation's rail transportation system. It does this by granting the Interstate Commerce Commission explicit jurisdiction over acquisitions of Class I railroads by a non-carrier.

A broad interpretation of the ICC's mandate might allow the agency to exert jurisdiction without a change in the law. Its recent reluctance to do so, however, in the matter of the ongoing hostile takeover attempt of CNW Corp., the parent company of the venerable Chicago and North Western Railroad, by Japonica Partners, Ltd., apparently requires some clear direction from Congress.

I have long been concerned that many hostile takeovers, mergers, and leveraged buyouts cause the disruption of local economies, unwarranted job losses, a dangerous buildup of corporate debt and a preoccupation with short-term profits at the expense of carefully considered investment in a longer-term future. This deal exhibits many of these traits and one other important characteristic.

The firm that Japonica has put in play doesn't process food, make tires or sell cosmetics—it provides rail freight and commuter passenger service crucial to the economic well-being of my home State of Illinois and eight other states in the Midwest and West. This aspect of the proposed transaction requires the special attention of an accountable body—in this case the Interstate Commerce Commission—that can protect the public interest.

We must be sure that any acquirer of a major railroad will continue to provide the markets it serves with dependable and efficient rail transportation service which meets the needs of shippers, consumers and rail passengers. Some important questions must be answered by any party who proposes to make such an acquisition, but particularly by a non-carrier.

The acquirer must be able to show that it possesses the expertise in the railroad business to continue to provide efficient service. It must describe its post-acquisition plans for the railroad in reasonable detail. Finally, the buyer must demonstrate that the financial structure of the transaction does not include a new debt load that

might threaten either the long-term viability of the carrier or rail transportation service in affected markets. A highly-leveraged deal might require the buyer to conduct an emergency auction of large chunks of the railroad's trackage or capital assets which could disrupt service and make it difficult for the railroad to survive a recession.

Mr. President, in my judgment, Japonica has thus far failed to meet this burden of proof.

In order to finance this transaction, Japonica proposes to add $768 million in long-term debt to the $427 million CNW already carries. About $141 million of the present debt load is in low-interest notes held by the Federal Railroad Administration. On an annualized basis, this amounts to $85 million in additional interest expenses. This figure is greater than CNW's earnings for any of the last 3 years.

To pay down this new $1.2 billion dollar debt load, Japonica says it will take cost-cutting measures, sell certain unspecified CNW real estate holdings, excess capital equipment and the road's Chicago area commuter service.

Japonica apparently has no real operating plan for CNW, only ideas. A full-blown operating plan will be devised after the transaction is completed.

This lack of specificity in Japonica's plans, coupled with the massive debt Japonica would add to CNW's balance sheet, could have grave consequences in the event of an economic downturn for the farmers, businesses and commuters CNW now serves.

As the ICC noted in a response to Senator HARKIN's inquiry on this transaction:

> The possibility that a combination of increased leverage, recession economics and a log jam in the formation [divestiture] of short-line operations might prompt cessation of service over otherwise operable properties is the most serious risk posed by this transaction.

I am concerned that this scenario is far more likely to be the operative one than that propounded by Japonica.

I have a special interest in the fate of the commuter rail service the CNW provides to the Chicago metropolitan area. Last year, I led the successful effort to pass emergency legislation extending the mandatory cooling-off period in CNW's negotiations with the Railway Brotherhoods in order that the 40,000 people who depend on those lines to get to their jobs could do so without interruption.

I think this transaction poses a far greater danger to Chicago's regional transportation system than the transitory threat of a strike. My old friend and colleague from Illinois and the author of the last mass transit authorization bill set out this serious flaw in Japonica's proposal in a letter to Alan Greenspan, the Chairman of the Federal Reserve Board, relating to the Japonica deal. Senator DIXON pointed out that Metra, the public entity that operates the CNW commuter lines, is heavily subsidized from Federal, State and local resources, but particularly by the Federal mass transit program.

He added that Metra, the only possible purchaser of the CNW commuter lines, would not be able to buy those lines from a Japonica-owned CNW without a significant infusion of new Federal money from the mass transit program. Senator DIXON stated that those funds will simply not be available. I think it is doubtful that State and local governments could make up the difference.

Japonica is counting on the tens of millions of dollars it would receive from the sale of the CNW commuter lines to significantly reduce the massive debt it caused CNW to incur. If Japonica can't sell those lines, we won't need an economic downturn to see a serious disruption in CNW's rail operations.

Mr. President, I think the need for this legislation is clear and I hope my colleagues will act quickly to give the ICC the authority it needs to preserve the integrity of the Nation's rail transportation system.●

---

By Mr. LEAHY (for himself and Mr. THURMOND):

S. 1006. A bill to encourage innovation and productivity, stimulate trade, and promote the competitiveness and technological leadership of the United States; to the Committee on the Judiciary.

NATIONAL COOPERATIVE RESEARCH ACT EXTENSION OF 1989

Mr. LEAHY. Mr. President, I am pleased to introduce the National Cooperative Research Act Extension of 1989. This legislation would promote the competitiveness, technological leadership, and economic growth of the United States by extending the National Cooperative Research Act of 1984—the 1984 Antitrust R&D Act—to permit joint manufacturing ventures as well as joint research and development ventures. This legislation will enable American firms to respond to the growing pressures generated by technology and international competition without risking harm to the competitive marketplace or the integrity of our antitrust laws.

I am pleased to be joined in this effort by my distinguished colleague from South Carolina, Senator THURMOND. We will be working together on this legislation during the coming months, as we have on many other bills in the past.

The need for firms to pool their resources and enter into joint manufacturing ventures is essential if American business is to remain competitive in the world marketplace. The high-definition television [HDTV] industry is just one example of yet another technology that may be lost to foreign competitors if American companies are unable to pool their manufacturing capabilities. The immense cost required to develop the HDTV technology and catch up with Japanese and European HDTV industries makes it very difficult for any one American firm to undertake the initiative. The cost of not pursuing the HDTV technology is enormous, however. HDTV technology potentially could create such a large demand for related components, such as semiconductor chips, that the failure to develop the technology could place U.S. high-technology companies at a severe competitive disadvantage. In addition, high definition display screens will become essential for more detailed and more accurate information in everything from the medical to the defense industries. This legislation will enable American companies to compete effectively and will help curb the erosion of the United States' industrial base.

Importantly, the legislation will enable small businesses and individual inventors to assist in the manufacturing of new technologies. Much of our national inventive dynamism is located in our small enterprises—particularly in the field of high technology. If they can maintain their small-unit creativity and yet join with other firms for R&D and manufacturing when a project is too big or costly or risky to do alone, the entire Nation will be the beneficiary.

Our foreign competitors do not labor under the same antitrust restrictions that confront American businesses. Their R&D and manufacturing muscle is unlimited, and their R&D and manufacturing ventures are formed on strictly pragmatic grounds: What is needed and what will work. Consequently, in many industries, such as videocassette recorders and HDTV, the Japanese and Europeans either have captured the market or are years ahead of the United States. As the world's largest consumer electronics market, we simply cannot afford to keep losing these key components of the electronics industry. We must stimulate rather than straitjacket American business.

The 1984 R&D Act has been very successful. In the last 5 years, companies have established nearly 100 joint research ventures, which are developing everything from chipmaking and steelmaking processes to superconductors. Sematch, the semiconductor industry's facility to develop superior chipmaking methods, has made significant advances in only 2 years and has charted a course to surpass Japan's chipmaking prowess by 1995.

The Council on Competitiveness, a group of 150 corporate CEO's, recently concluded, however, that America's

achilles heel is the failure to convert scientific discoveries into commercial products. Over and over again we find American innovations mass marketed by our key trade competitors.

It is time for Congress to help American firms jump from the petri dish to the product bin. That is what this bill is designed to do. It does so by making the logical extension to the 1984 act by allowing joint manufacturing and processing as well.

No one should fear that passage of this bill will weaken our antitrust laws. By extending rather than supplanting the 1984 R&D Act, this legislation retains the 1984 act's protections against antitrust violations. The Department of Justice and the Federal Trade Commission retain their authority to investigate the scope and structure of a joint R&D or manufacturing venture. The 1984 act's safeguards against price-fixing and market allocation arrangements are maintained, as are its notice provisions which I worked on with Senator THURMOND and others on the Judiciary Committee 5 years ago.

This legislation recognizes that the creativity, knowledge, and economic resources necessary to develop innovative technologies rarely will be limited to one firm. It removes a significant impediment to the creation of joint manufacturing and processing ventures. Companies will be able to pool both assets and risks. Projects previously too expensive for a single company to undertake may now be started. Programs that promise technological breakthroughs in medicine, engineering, and many other areas can now be initiated for the betterment of society.

Mr. President, I urge my colleagues to support this legislation and ask unanimous consent that the text of the legislation be printed in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 1006

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That this Act may be cited as the "National Cooperative Research Act Extension of 1989".

JOINT MANUFACTURING VENTURES

SEC. 2. The National Cooperative Research Act of 1984 (15 U.S.C. 4301 et seq.) is amended—

(1) in section 2(a)(6) by—

(A) inserting "or manufacturing" after "development" the first place it appears;

(B) redesigning subparagraphs (D) and (E) as subparagraphs (E) and (F), respectively;

(C) inserting the following new subparagraph between subparagraph (C) and subparagraph (E), as redesignated:

"(D) the manufacturing and processing of equipment and materials,";

(2)

(D) inserting "and manufacturing" after "research" in subparagraph (E); and

(E) inserting "(D), and (E)" after "(C)" in subparagraph (F), and inserting "and development or manufacturing," after "research," in the matter following subparagraph (F);

(2) in section 2(b) by—

(A) inserting "or manufacturing" after "development" the first place it appears;

(B) striking "conduct the research and development that is the" in paragraph (1) and inserting in lieu thereof "carry out the"; and

(C) inserting "or manufacturing" after "development" in subparagraph (3)(B);

(3) in section 3 by inserting "or manufacturing" after "development" the first place it appears, and by inserting "or product" the second place it appears;

(4) in section 4 by inserting "or manufacturing" after "development" each place it appears in subsections (a)(1), (b)(1), (c)(1), and (e);

(5) in section 5(a) by inserting "or manufacturing" after "development";

(6) in section 6 by inserting "OR MANUFACTURING" after "DEVELOPMENT" in the section heading;

(7) in section 6 by inserting "and any party to a joint manufacturing venture, acting on such venture's behalf, may, not later than 90 days after entering into a written agreement to form such venture or not later than 90 days after the date of enactment of the National Cooperation Research Act Extension of 1989, whichever is later," after "Act"; and

(8) in section 6 by inserting "or manufacturing" after "development" each place it appears in subsections (d)(2) and (e).

Mr. THURMOND. Mr. President, today we are introducing legislation to amend the National Cooperative Research Act of 1984 [NCRA] to extend its coverage to manufacturing joint ventures. It is our expectation that these amendments will enable American businesses to respond more effectively to scientific and technological advances and to improve their competitiveness in international markets. The National Cooperative Research Act, also known as the joint research and development bill, enjoyed broad support in 1984, and we believe that these proposed amendments will receive the same broad support.

Mr. President, competition in worldwide markets is strong and is getting stronger every year. American firms cannot afford to settle for less than the most advanced means of manufacturing if they are to be successful, not only in exporting their products, but also in retaining their positions in their markets right here at home. This means that they must make substantial investments in state-of-the-art facilities. Such investments, however, are often too costly for one firm to undertake. Joint manufacturing ventures may provide just the answer for firms which cannot make the needed investments in new production technology, but do not want to merge their entire operations to achieve the benefits that the venture can provide. Moreover, through the joint participation of two or more companies, firms may obtain eonomies of size or efficiencies in manufacturing that would otherwise not be available. Such benefits may make the difference between successful U.S. competition and conceding markets to more efficient foreign producers.

However, Mr. President, under the current antitrust damage system, the threat of private treble-damage actions, however ill-founded, may discourage firms in the same industry from entering into such ventures. The perception of serious antitrust risk may make firms hesitant to build joint facilities to exploit new technology.

Mr. President, in 1984 the Committee on the Judiciary was confronted with many of the same concerns regarding joint research and development of technology. At that time, the committee forwarded to the Congress a carefully crafted approach in the NCRA to encourage research and development. The NCRA has two major features: First, the NCRA guarantees that joint research and development ventures, if they are ever called into question under the antitrust laws, will be analyzed under the rule of reason standard so that the competitive benefits of such ventures may be considered; and, second, antitrust liability with respect to a joint venture disclosed to the Government under the NCRA is limited to actual damages plus prejudgment interest.

The NCRA has been very successful, Mr. President. It has removed a potential deterrent to procompetitive projects while leaving the antitrust laws in place as a safeguard against any possible anticompetitive conduct. It is my understanding that over 100 joint research and development ventures have been disclosed to the Department of Justice since the NCRA went into effect. Many of these joint efforts were, no doubt, encouraged by the reduction of potential antitrust damage liability.

Mr. President, this is a matter that calls for our prompt attention. The basic groundwork has already been laid in the crafting of the NCRA in 1984. We anticipate broad support for this important, narrowly tailored measure, and we urge that hearings be held at the first opportunity so that the Congress may enact this legislation without delay.

---

By Mr. CHAFEE (for himself and Mr. WILSON):

S. 1007. A bill to amend title 23, United States Code, regarding the reduction in apportionment of Federal-aid highway funds to certain States, and for other purposes; to the Committee on Environment and Public Works.

NATIONAL HIGHWAY FATALITY AND INJURY REDUCTION ACT

Mr. CHAFEE. Mr. President, today I am introducing the National Highway

Fatality and Injury Reduction Act of 1989.

The purpose of my legislation is simple and twofold: It seeks to save lives and reduce the injuries that result from car and motorcycle crashes. In addition, it seeks to decrease the staggering health care costs borne by our society because of highway crashes.

In order to achieve this goal, this legislation gives each State that does not have a safety belt law and a universal motorcycle helmet law, 3 years to pass such a law. A State which is not in compliance will lose 5 percent of its highway construction funds the first year it is not in compliance and 10 percent each year thereafter. This bill also provides $95 million in grants out of the Highway Trust Fund to States with safety belt and helmet laws that meet certain criteria for education and enforcement activities. An additional $5 million is made available to the National Highway Traffic Safety Administration [NHTSA] to assist the States in these activities.

In 1988, approximately 47,000 people were killed on our highways. This would be the equivalent of a major airplane crash killing 28 people every single day of the year. Approximately 4 million people were injured last year on our highways. Every 10 minutes someone dies in a traffic accident and every 8 seconds someone is injured. If you live to be 75 years old, the odds are you will experience on the average 5 police reported traffic accidents, and you will have a 10-percent chance of suffering a serious injury.

If we choose to do nothing more about highway safety, over 60,000 people will die every year by the year 2000 and over 85,000 will die every year by the year 2020 assuming the fatality rate stays the same and the number of miles driven increases at the projected rate. Injuries will nearly double as well by 2020.

Motor vehicle crashes are the leading cause of death for people from 1 to 44 years of age. Road trauma produces more paraplegics and quadriplegics each year in the United States than all other causes combined and it is a leading cause of new cases of epilepsy.

One of the major Federal responsibilities in the 1990's during the post-Interstate era must be the reduction of fatalities and injuries on our Nation's highway system. Over 2.5 million people have been killed on our highways since the beginning of the automobile, more Americans than were killed in all the wars our country has been involved in since that time. And many, many millions more have been injured. This is a tragedy, and it is one of the largest public health problems our country is facing today.

This is also an economic burden we cannot afford at the Federal, State or local level. Motor vehicle injuries and fatalities occurring in 1986 accounted for at least $29.5 billion in present and future costs. Included in this total are $16.4 billion for lost productivity, $4.1 billion for medical costs, and $9 billion for insurance administration, legal and other costs. This does not include $27.4 billion in property damage. Based on the cost of $29.5 billion, the injuries and fatalities that could have been avoided in 1987 in those States that did not have motorcycle and safety belt usage laws would have resulted in a total present and future cost savings of $675 million. There is a growing body of evidence that many of the costs of motor vehicle injuries are being borne by the public.

Mr. President, the evidence is clear that the use of safety belts and helmets saves lives and reduces the severity of injuries. Through research done by NHTSA and others, models have been developed that show that safety belts reduce the risk of being killed by about 45 percent, and motorcycle helmets reduce it by about 29 percent.

Safety belts have saved 15,200 lives from 1983 through 1988. More than 10,300 of those have been credited directly to safety-belt use laws. If all front seat occupants had worn seat belts, it is estimated that 15,000 lives would have been saved in 1987.

Motorcycle helmets saved an estimated 4,645 lives from 1982 to 1987. If all motorcyclists had worn helmets during this time, approximately 9,030 lives would have been saved.

And helmets and safety belts have saved tens of thousands of people from serious injuries.

A study done in North Carolina after it enacted a safety belt law in 1985 indicated that a reduction of approximately 1,100 severe or fatal injuries per year can be attributed to the safety belt law in North Carolina.

Texas' experience shows that after its helmet law was repealed in 1977 the number of fatalities and injuries increased dramatically. Texas recently passed a motorcycle helmet law.

Mr. President, safety belt and motorcycle helmet laws increase usage.

Over 30 countries have passed mandatory safety-belt use laws. The United States is virtually the only developed nation that has not passed national safety belt legislation. Other countries report a dramatic increase in use after a safety belt law is passed. In Canada belt use increased from 30 percent to 76 percent after a national law was passed. After England passed a law, belt use increased from 37 percent to 93 percent.

New York was the first State to pass a safety belt use law in 1984. Approximately a year after the first safety belt law was passed, national usage rose to 27 percent, compared to 13 percent in 1984. Today it is 46 percent nationwide. Much of that increase is due to the safety belt use laws passed by 33 States and the District of Columbia. NHTSA estimates show that in States with safety belt use laws, 52 percent buckle up while only 37 percent do so in States without laws.

The effect of motorcycle helmet laws on usage is even more dramatic. In 1984, helmet use rates for areas with mandatory laws were over 98 percent for all riders. In locations with no or limited use laws, the rates were 51.3 percent for drivers and 34.8 percent for passengers. Twenty-two States, the District of Columbia and Puerto Rico now have universal motorcycle laws. An additional 23 States require helmets under a specified age, usually 18. One State requires passengers to wear helmets.

Between 1966 and 1975 when helmet laws were enacted, the motorcycle fatality rate per 10,000 motorcycles fell from about 13 to less than 7. But from 1976 to 1979 during which time 27 States repealed or weakened their helmet laws, the death rate rose from 7 to about 10 persons for every 10,000 motorcycles.

Mr. President, the cost of not using safety belts and helmets is very high. The loss of life and the effect of serious injury is tragic enough, but in addition, look at the costs that are being borne by the public through rising medical costs, motor vehicle and health insurance premiums, public assistance programs for medical care and long-term rehabilitation, and Social Security survivor benefits. Of the leading causes of death, road-related trauma is second only to cancer in economic burden.

Michigan experienced an 11.6-percent decrease in injuries the first 6 months after it passed a safety belt law. There was also a significant reduction in the rate of fatalities for front seat occupants during this time. The annual injury cost savings for Michigan is over $40 million, and over $85 million was saved annually as a result of the reduction in fatalities.

A study of accident claims paid by League General Insurance Co. in Michigan showed that after Michigan's mandatory safety belt law was in place, injury claims in 1987 dropped 25 percent over the previous year and 15 percent since the law took effect in July 1985.

In an example of who increasingly is paying medical costs, a study of 105 motorcycle trauma patients seen during 1 year at the Harborview Medical Center in Seattle showed that 63.4 percent of the initial medical care costs were paid for by public funds. None of the victims were receiving public assistance prior to the accident but became eligible because of anticipated long hospital stays.

Data on Texas' experience analyzed by the Texas Department of Health and the Department of Public Safety

shows that unhelmeted riders averaged twice as many days in the hospital as helmeted riders and the average hospital charge for unhelmeted cyclists was nearly 2.5 times greater than for helmeted cyclists. Forty-one percent of the unhelmeted cyclists, compared to 27 percent of the helmeted cyclists, had no hospital insurance.

Finally, Mr. President, this is not an individual liberty issue. Driving on our highways is a privilege, not a right. Every level of government has a responsibility to see that the road system is designed as safely as possible, and that those who use it do so as safely as possible.

The constitutionality of motorcycle helmet and safety belt laws have been upheld by the courts. A Massachusetts lower court opinion upheld by the Supreme Court make the argument well:

While we agree with plaintiff that the act's only realistic purpose is the prevention of head injuries incurred in motorcycle mishaps, we cannot agree that the consequences of such injuries are limited to the individual who sustains the injury . . . The public has an interest in minimizing the resources directly involved. From the moment of the injury, society picks the person up off the highway; delivers him to a municipal hospital and municipal doctors; provides him with unemployment compensation if, after recovery, he cannot replace his lost job, and, if the injury causes permanent disability, may assume the responsibility for his and his family's subsistance. We do not understand a state of mind that permits plaintiff to think that only he himself is concerned.—Simon vs. Sargent.

It is time to take action. Education programs are crucial. Enforcement of these laws is absolutely necessary and increases their effectiveness. Additional funding would benefit the State's efforts. But I am convinced having safety belt and helmet laws is by far the most effective way to save lives and reduce injuries.

Many States provide exemptions from safety belt laws for certain vehicles such as pickup trucks. While this legislation does not require States to make changes in their safety belt laws, it is my hope that they will consider reviewing their laws to provide this protection for everyone.

But the first step is to have a safety belt and motorcycle helmet law passed in every State. While highway construction sanctions are not the most popular mechanism, they are clearly the most effective. Our experience with the helmet law is a good example. After the safety standards were passed in the 1966 Highway Safety Act, all but three States passed effective helmet laws. When Congress prohibited the Department of Transportation from imposing sanctions in 1976, 26 States had repealed their laws by 1978 and as a result many people have been killed and seriously injured because people were given the message that they did not have to wear a helmet.

Training motor vehicle and motorcycle drivers is very important and must be emphasized as well. But no matter how good the training is, or how experienced the driver, there will always be crashes and in that moment when a crash occurs, it is the safety belt and the helmet which have the best chance of saving your life.

Mr. President, I hope my colleagues will join with me in supporting this legislation.

Mr. President, I ask unanimous consent that the following documents be placed in the RECORD following my statement: The text of the bill; a summary of the National Highway Fatality and Injury Reduction Act of 1989. A list of the organizations which support this legislation.

Summaries of:

The Economic Cost to Society of Motor Vehicle Accidents, 1986 Addendum, NHTSA.

A Model for Estimating the Economic Savings from Increased Safety Belt Use, NHTSA.

A Model for Estimating the Economic Savings from Increased Motorcycle Helmet Use, NHTSA.

The following studies:

The Cost of Treating Head Injured Unhelmeted Motocyclists in Texas.

Impact of the Re-Enactment of Motorcycle Helmet Law in Louisiana.

Prospective Study of the Effect of Safety Belts on Morbidity and Health Care Costs in Motor-Vehicle Accidents, Elizabeth Mueller Orsay, et al.

The Public Cost of Motorcycle Trauma, Frederick P. Rivara, et al.

The following letters:

Dr. William H. Hollinshead, medical director, Divisions of Family Health, Department of Health, State of Rhode Island.

Edward J. Walsh, chief coordinator, Governor's Office on Highway Safety, Department of Transportation, State of Rhode Island.

Jane Mattson, Jane Mattson Associates, Inc.

M.J. Hannigan, commissioner, Department of California Highway Patrol.

The executive summary of "A Statewide Survey of Public Opinion on the Proposed Mandatory Safety Belt Legislation."

Testimony presented to the California Senate Transportation Committee.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

S. 1007

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. This Act may be cited as the "National Highway Fatality and Injury Reduction Act of 1989."

SEC. 2. Chapter 1 of title 23, United States Code, is amended by adding at the end thereof the following new sections:

"Sec. 159. Motorcycle Helmets and Safety Belts.

"(a)(1) The Secretary shall withhold 5 per centum of the amount required to be apportioned to any State under each of sections 104(b)(1), 104(b)(2), 104(b)(5), and 104(b)(6) of this title on the first day of fiscal year 1992, if it is lawful in that State for any person:

"(A) to operate or ride a motorcycle without wearing a motorcycle helmet;

"(B) to occupy a front seating position in a passenger car without using a safety belt or child safety restraint while the vehicle is in forward motion; or

"(C) to act both as described in (A) and as described in (B).

"(a)(2) The Secretary shall withhold 10 per centum of the amount required to be apportioned to any State under each of sections 104(b)(1), 104(b)(2), 104(b)(5), and 104(b)(6) of this title on the first day of each fiscal year succeeding fiscal year 1992, if it is lawful in that State for any person:

"(A) to operate or ride a motorcycle without wearing a motorcycle helmet;

"(B) to occupy a front seating position in a passenger car without using a safety belt or child safety restraint while the vehicle is in forward motion; or

"(C) to act both as described in (A) and as described in (B).

"(b)(1) Any funds withheld under this section from apportionment to any State on or before September 30, 1993, shall remain available to such State as follows:

"(A) If such funds would have been apportioned under section 104(b)(5)(A) of this title but for this section, such funds shall remain available until the end of the fiscal year for which such funds are authorized to be appropriated.

"(B) If such funds would have been apportioned under section 104(b)(5)(B) of this title but for this section, such funds shall remain available until the end of the fiscal year for which such funds are authorized to be appropriated.

"(C) If such funds would have been apportioned under section 104(b)(1), 104(b)(2), or 104(b)(6) of this title but for this section, such funds shall remain available until the end of the third fiscal year following the fiscal year for which such funds are authorized to be appropriated.

"(b)(2) If, before the last day of the period for which funds withheld under this section from apportionment are to remain available for apportionment to a State under paragraph (1), the State makes effective a law which is in compliance with subsection (a), the Secretary shall on the day following the effective date of such law apportion to such State the funds remaining available to such State that had been withheld under the subsection.

"(b)(3) Any funds apportioned pursuant to paragraph (2) shall remain available for expenditure as follows:

"(A) Funds apportioned under section 104(b)(5)(A) of this title shall remain available until the end of the fiscal year succeeding the fiscal year in which such funds are so apportioned.

"(B) Funds apportioned under section 104(b)(5)(B) of this title shall remain available until the end of the second fiscal year succeeding the fiscal year in which such funds are so apportioned.

"(C) Funds apportioned under section 104(b)(1), 104(b)(2), or 104(b)(6) of this title shall remain available until the end of the third fiscal year succeeding the fiscal year in which such funds are so apportioned.

29-059 O-90-26 (Pt. 7)

Sums not obligated at the end of such period shall lapse or, in the case of funds apportioned under section 104(b)(5) of this title, shall lapse and be made available by the Secretary for projects in accordance with section 118 of this title.

"(b)(4) If, at the end of the period for which funds withheld under subsection (a) of this section from apportionment are available for apportionment to a State under paragraph (1), the State has not made effective a law which is in compliance with the applicable subsection, such funds shall lapse or, in the case of funds withheld from apportionment under section 104(b)(5) of this title, such funds shall be made available by the Secretary for projects in accordance with section 118 of this title.

"(b)(5) No funds withheld under this section from apportionment to any State after September 30, 1994, shall be available for apportionment to such State.

"SEC. 160. Motorcycle Helmet and Safety Belt Incentive Grant Program.

"(a) Subject to the provisions of this section, the Secretary shall make grants to those States which adopt and implement effective programs to increase traffic safety by ensuring that persons riding on motorcycles wear helmets and receive adequate rider training and that persons riding in other motor vehicles not only use safety belts and child safety restraints but use them correctly. Such grants may only be used by recipient States to implement and enforce such programs.

"(b) No grant may be made to a State under this section in any fiscal year unless the State enters into such agreements with the Secretary as the Secretary may require to ensure that such State will maintain its aggregate expenditures from all other sources for motorcycle safety programs, safety belt programs and child passenger safety programs at or above the average level of such expenditures in its two fiscal years preceding the date of enactment of this section.

"(c) No State may receive grants under this section in more than three fiscal years. In any fiscal year, the Federal share payable for any grant under this section shall not exceed 50 per centum of the cost of implementing and enforcing the programs under the grant.

"(d) Subject to subsection (c), the amount of a grant made under this subsection to any State which is eligible for a grant under subsection (e)(1) shall equal 30 per centum of the amount apportioned to the State for fiscal year 1989 under section 402 of this title.

"(e)(1) A State is eligible for a first-year grant if the State—

"(A) requires each person occupying a front seating position in a passenger car to use a safety belt or child safety restraint correctly;

"(B) requires each person riding on a motorcycle to wear a motorcycle helmet;

"(C) provides for a comprehensive community-based program to educate the public about motorcycle safety and safety belt and child safety restraint use, involving public health and education agencies, hospitals, and related organizations;

"(D) provides for a statewide police training program on the enforcement of helmet use requirements and safety belt and child safety restraint use requirements; and

"(E) provides for the monitoring of helmet use and safety belt use rates by methods that provide a measure of statewide usage.

"(2) A State is eligible for a second-year grant if the State—

"(A) meets the requirements of subsection (e)(1);

"(B) achieves a helmet use rate of 75 per cent and a safety belt use rate for front seat occupants of 50 percent.

"(3) A State is eligible for a third-year grant if the State—

"(A) meets the requirements of subsection (e)(1); and

"(B) achieves a helmet use rate of 85 per cent and a safety belt use rate for front seat occupants of 70 per cent.

"(f) There is authorized to be appropriated to carry out this section $25,000,000 for fiscal year 1991 and $35,000,000 per fiscal year for each of fiscal years 1992 and 1993, all out of the Highway Account of the Highway Trust Fund. Such sums shall remain available until expended. Approval by the Secretary of a grant with funds authorized by this subsection shall establish a contractual obligation of the United States for the payment of such grant."

SEC. 3. There is authorized to be appropriated to carry out public education and information activities in support of State and community motorcycle safety and safety belt and child safety restraint use programs $5,000,000 for fiscal year 1990, out of the Highway Account of the Highway Trust Fund. Such sums shall remain available until expended. Approval by the Secretary of Transportation of the payment of such sums shall establish a contractual obligation of the United States to pay such sums.

SEC. 4. The Secretary of Transportation may issue regulations to implement section 411 of title 23, United States Code.

---

SUMMARY OF THE NATIONAL HIGHWAY FATALITY AND INJURY REDUCTION ACT OF 1989

Section 1 is the short title.

Section 2 provides that any State which does not have in place a safety belt law for persons in the front seat of a passenger car, and a motorcycle helmet law by September 30, 1991, (three years after the date of enactment of this legislation) will lose five percent of its Interstate, Interstate 4R, Primary, Secondary and Urban highway apportionments.

Failure to pass a safety belt and helmet law will result in the withholding of 10 percent of a State's highway apportionments in each year following fiscal year 1992.

States which comply with this law by September 30, 1994 will have all apportionments returned which have not lapsed. Any apportionments withheld on or after October 1, 1994 will not be returned.

Section 2 creates a three-year incentive grant program to implement and enforce helmet and safety belt laws. Grants cannot exceed a 50 percent Federal match and will not be more than 30 percent of a State's FY 1989 402 apportionment.

A State is eligible for a first year grant if it:

(1) has a safety belt law for front seat passengers in passenger cars;

(2) has a universal motorcycle helment law;

(3) has a comprehensive community-based program to educate the public about motorcycle safety, safety belt use and child safety restraint use;

(4) has a monitoring system to determine statewide helmet and safety belt use.

A State is eligible for a second-year grant by meeting the additional requirement of achieving a helmet use rate of 75 percent and a safety belt use rate of 50 percent.

A State is eligible for a third-year grant by achieving a helmet use rate of 85 percent and a safety belt use rate of 70 percent.

This section provides $25 million in fiscal year 1991 and $35 million for each of fiscal years 1992 and 1993 out of the Highway Trust Fund for the grant program.

Section 3 provides $5 million out of the Trust Fund to NHTSA for public education and information programs in support of State and community motorcycle safety, safety belt, and child safety restraint use programs.

---

ORGANIZATIONS WHO SUPPORT THE CONCEPT OF THE NATIONAL HIGHWAY FATALITY AND INJURY REDUCTION ACT OF 1989

American Academy of Orthopaedic Surgeons.
American Academy of Pediatircs.
American Association of Critical-Care Nurses.
American Coalition for Traffic Safety, Inc.
American College of Emergency Physicians.
American College of Preventive Medicine.
American College of Surgeons.
American Medical Association.
American Nurses' Association.
American Public Health Association.
American Trauma Society.
Association of Operating Room Nurses.
Association of State and Territorial Health Officials.
Center for Injury Prevention, San Francisco.
Child Welfare League.
Epilepsy Foundation of America.
Massachusette Head Injury Association.
Massachusetts Seat Belt Coalition.
Motorcycle Industry Council.
Motor Vehicle Manufacturers Association.
National Council on the Handicapped.
National Head Injury Foundation.
National Safety Council.
Rhode Island Association for Retarded Citizens.
Rhode Island Chapter, National Head Injury Foundation.
Rhode Island Safety Belt Coalition, Inc.
Snell Memorial Foundation.
Students Against Drunk Driving.
West Virginia Head Injury Foundation.
West Virginia Traffic Safety Now, Inc.

---

[From the Office of Plans and Policy, National Highway Traffic Safety Administration, Sept. 1987]

THE ECONOMIC COST TO SOCIETY OF MOTOR VEHICLE ACCIDENTS—1986 ADDENDUM

NHTSA estimates that the total economic cost to society of motor vehicle accidents was $74.2 billion in 1986. Included in this loss are medical costs, productivity losses, property damage, legal and court costs, insurance administration, emergency service costs, coroner and medical examiner costs, public assistance administration and government programs. These costs resulted from traffic accidents which caused over 46,000 deaths, 3.4 million injuries, and 45 million damaged vehicles. Tables 1 through 5 summarize economic costs by injury level and cost category.

Roughly $59.7 billion of the overall cost represents losses that could be reduced in a roughly proportionate manner if traffic accidents, injuries, and fatalities were to decrease. The remaining portion, totalling $14.5 billion, represents costs which are relatively fixed, i.e., that will not change in direct response to foreseeable changes in

the accident or injury rate. These costs include primarily insurance underwriting costs, which are the administrative costs of writing and maintaining insurance policies, and the cost of government agencies that were established to improve vehicle or highway safety.

The largest source of loss is property damage, which accounts for roughly $27.4 billion or 37 percent of the total cost. The high incidence of accidents that involve no personal injury (over 90 percent of all accidents) is responsible for this result.

Insurance expense is the second highest contribution to overall costs, totalling $20.9 billion and accounting for 28 percent of total cost. However, a substantial part of total insurance expense, roughly $14.2 billion, is a relatively fixed expense associated with insurance underwriting. The variable portion of insurance administrative expense totals $6.7 billion and represents only 11 percent of total economic costs that could be expected to vary with changes in the accident rate.

Among injury related costs, productivity losses account for $16.4 billion or over 22 percent of all costs while legal and court costs and medical costs each account for about $4 billion or roughly 6 percent of total costs.

Note that these cost estimates do not include any allowance for pain and suffering or value of life. They therefore only represent one portion—the monetarily tangible economic costs—of the total cost that is incurred by members of society due to motor vehicle accidents.

Note also that this updated estimate should not be directly compared to previous estimates. Changes in the basis for determining incidence makes comparison between this and previous cost estimates inappropriate for determining trends.

---

A MODEL FOR ESTIMATING THE ECONOMIC SAVINGS FROM INCREASED SAFETY BELT USE

1. INTRODUCTION

Safety belt usage is by far the most important step that vehicle occupants can take to protect themselves in the event of a crash. It has been estimated that wearing these devices increases a person's chance of surviving a crash by 45 percent, and of avoiding a serious injury by 50 percent. Unfortunately, only about 42 percent of all automobile occupants currently use their safety belts. This failure of nearly 60 percent of automobile occupants to use their belts results in approximately 8,700 additional deaths and 120,000 moderate to critical injuries each year. An additional 2,600 persons die and 31,000 are injured unnecessarily in light trucks and vans because of low belt usage. These needless deaths and injuries (those that could be prevented by proper belt use) cost society an estimated $6 billion annually in medical costs, lost productivity, and other injury-related expenses.

These costs, many of which are ultimately borne by state welfare and assistance programs, could be significantly reduced if safety belt usage were to increase. This report describes a method whereby individual states can estimate the deaths and injuries that could be prevented and the economic cost savings that could result if they take measures which increase safety belt use. This method basically involves a three step process: first, determining the incidence of death and injury now experienced in the state; second, determining the potential safety improvement through increased belt usage in the particular state; and thirdly, combining the potential safety benefits with their associated economic costs. The resulting estimates should provide a reasonable "order of magnitude" indicator of safety and economic benefits that could result from increased safety belt use. They should not, however, be characterized as a precise prediction of these savings.

---

A MODEL FOR ESTIMATING THE ECONOMIC SAVINGS FROM INCREASED MOTORCYCLE HELMET USE

I. INTRODUCTION

This paper provides a methodology that can be used with state specific crash injury data to estimate the safety and economic benefits that would result from taking measures which increase motorcycle helmet usage. In 1986, over 4,500 motorcycle riders were killed and roughly 170,000 were injured in crashes on our nation's highways. The loss of life and bodily injury resulting from these crashes is a major cause of personal grief and economic hardship for the immediate victims as well as their families and friends.

Motorcycles are the most hazardous form of motor vehicle transportation. While representing only 3 percent of all registered vehicles and accounting for only 0.5 percent of all vehicle miles traveled (VMT), motorcycle occupants make up nearly 13 percent of all occupant traffic fatalities. More than 80 percent of all motorcycle crashes result in injury or death to the motorcyclist. This increased fatality and injury rate is due to both a higher incidence of crash involvement and a higher risk of injury in the event of a crash. Motorcycles obviously lack many features found on most other vehicles such as safety belts and enclosed compartments which restrain and protect occupants in the event of a crash. In addition, motorcyclists suffer far more ejections—one of the more serious injury causing events during a vehicle crash.

Helmet usage is by far the most important step that motorcycle riders can take to protect themselves in the event of a crash. It has been estimated that wearing a helmet can prevent over 60 percent of all serious and fatal injuries to the head region, which accounts for roughly 40 percent of all serious injuries. This added protection increases a person's chance of surviving a crash by 27 percent, and of avoiding a serious injury by 13 percent. Unfortunately, only about 59 percent of all motorcycle riders currently wear helmets. This failure of over 40 percent of motorcycle riders to use a helmet results in approximately 700 additional deaths, 3,600 moderate to critical injuries and 3,300 minor injuries each year. These needless deaths and injuries (those that could be prevented by helmet use) cost society an estimated $300 million annually in medical costs, lost productivity, and other injury-related expenses.

These costs, many of which are ultimately borne by state welfare and assistance programs, could be significantly reduced if motorcycle helmet usage were to increase. This report describes a method whereby individual states can estimate the economic cost savings that could result if they take measures which increase helmet use. This method basically involves a three step process: first, the determination of the incidence of death and injury now experienced in the state; second, determining the potential for improvement through increased helmet usage in the particular state; and third, combining the potential safety benefits with their associated economic costs.

The resulting estimate should provide a reasonable "order of magnitude" indicator of safety and economic benefits that could result from increased motorcycle helmet use. It should not, however, be characterized as a precise prediction of these savings.

---

THE COSTS OF TREATING HEAD INJURED UNHELMETED MOTORCYCLISTS IN TEXAS

[June 1987—November 1988]

INJURY COSTS

Preliminary statistics indicate that 2,204 motorcyclists received a non-fatal head injury in Texas between June 1987 and November 1988. Of those whose helmet status is known (2173), 1,874 (86%) were unhelmeted.

In Texas, hospital and physician costs can be conservatively estimated at $17,172 per initial hospitalization for a head injured unhelmeted motorcyclist. Thus, the costs for initial treatment of these 1,874 can be conservatively estimated at over $32 million.

Of the unhelmeted motorcyclists who received a head injury during this time period, an estimated 3% (56) were discharged to a rehabilitation center or nursing home for continuing medical care. Estimating a daily charge of $400 per patient, charges would total $22,400 per day, or $672,000 every month for the 56 receiving care.

In a study by the Texas Department of Public Safety, in cooperation with the Texas Department of Health, involving 763 motorcycle patients in 18 hospitals across the state, 59% of the unhelmeted motorcycle accident patients did not have health insurance. Thus, a large percentage of initial medical costs is borne by the public sector and eventually by insurance rate payers.

FATALITY COSTS

Preliminary statistics indicate that there were 462 motorcycle fatalities in Texas between June 1987 and November 1988.

365 (80%) of those who died were unhelmeted.

Lost earnings of 365 persons (mostly males), whose estimated average age is 25 years, can be estimated to be more than $511 million at an expected average lifetime annual earnings of $35,053 per person.

Other costs associated with these fatalities have not been included.

Source Notes: Preliminary motorcycle injury and death statistics provided by the Department of Public Safety statistical division.

Calculations involving costs are based on assumptions and data from a variety of sources. For clarification or further information, contact David Zane, Texas Department of Health.

---

[From the National Highway Traffic Safety Administration, Dec. 1984]

IMPACT OF THE REENACTMENT OF THE MOTORCYCLE HELMET LAW IN LOUISIANA

SECTION IV—SUMMARY AND CONCLUSIONS

The repeal of the mandatory Louisiana helmet law and subsequent re-enactment provided the basis for systematic study and comparison of injury types and severity, fatalities, and costs associated with safety helmet use.

The study incorporated the time frames of June-September, 1981 (during the post-repeal period) and June-September 1982, subsequent to the re-enactment of the helmet law. Geographic study locations included Lake Charles, Baton Rouge, and New Orleans. Additionally, fatalities were stud-

ied for the entire state for both calendar years.

The Louisiana Highway Safety Commission provided general motorcycle accident data for both study years. This information was used as a data base in tracking motorcycle accidents and victims from the time of occurrence to final patient disposition.

Roadside observations were conducted to ascertain levels of compliance with the law. The mean use rate was 95.70%, which compares favorably with results from similar studies conducted in South Dakota (99.6%) and Kansas (99.7%) during periods of enactment of motorcycle helmet usage laws.

With respect to age and helmet use, it was found that younger riders involved in accidents in 1981 did not demonstrate a higher helmet usage rate than older riders involved in similar accidents, even though the repeal of the law did not exempt the under age 19 group from wearing safety helmets. This fact indicates the helmet laws aimed at younger riders are not directed toward an age group with decreased usage rates in accidents.

In both study years, data indicated that about 93% of drivers were male. Among all drivers, safety helmet usage increased from 46% in 1981 to a documented 72% (an observed 95.7%) in 1982. These data were abstracted from state accident reports and apply only to injury accidents—as noted previously, observational studies indicated a 95.70% compliance. This difference in usage rates suggests that non-helmeted riders experience a greater frequency of accidents than the motorcyle rider population-at-large.

As observed in roadside studies, not all helmeted riders used eye protection. The mean safety helmet usage among observed drivers was 95.6%, while the mean use of eye protection was 88.53%. Passenger use of eye protection was somewhat lower at 70.22%.

In terms of fatally injured motorcyclists, there was a significant decrease of 30% from 1981 to 1982, or a total of 40 fewer deaths in spite of a 5.9% increase in motorcycle registrations. Death certificates were located for 198 of the fatally injured cyclists in 1981 and 1982. The most common injury cited as the primary cause of death was head injury (55%).

It was also shown that whereas fatal head injuries occurred 2.2 times more often than fatal injuries before the law was reinstated, they occurred only as often as other injuries in 1982. Findings were just as dramatic in non-fatal accidents. Of 135 cases studied in-depth, 27% were head/face injuries classified as most severe in 1981, with only 8.7% noted as such in 1982. In terms of first, second, and third most severely injured body regions, head injuries decreased from 14% in 1981 to 10% in 1982 of total injuries. Combined data for both years demonstrate a rate of 285.71 head injuries per 1,000 helmeted injured riders as compared to 634.92 for non-helmeted motorcyclists. At AIS Level 3, head injuries increased by 500%, from a rate of 15.9 per thousand helmeted riders to 95.2 per thousand non-helmeted riders. AIS Level 4 was also significant at a 100% increase in the non-helmeted riders. AIS Levels 5 and 6 were significant at 100% and 1200% increases respectively in injury rates per thousand non-helmeted riders.

Financial impact of the re-enactment of the mandatory helmet law was also investigated. The average cost per accident decreased 48.61% from 1981 and 1982 with re-enactment of the helmet statute.

Dramatic differences were found in lengths of hospital stay between helmeted and non-helmeted riders in both study years. For 1981-1982, the combined average length of hospital stay for helmeted riders was 0.71 days while the average LOS for non-helmeted riders was 3.75 days. Such dramatic differences reinforce the effectiveness of mandatory helmet laws in decreasing severity of injuries.

Reduction of costs in 1982 was significant in all areas. While the reduction in property damages is not immediately traced to cause, the reduction in medical costs is clearly a function of reduction in the nature and severity of injuries, and thus, the length of stay and the amount of medical resources utilized. Length of stay declined 58.6% from 1981 to 1982, a statistically significant difference.

BIBLOGRAPHY

American Association of Automotive Medicine. *The Abbreviated Injury Scale.* Morton Grove, Ill: AAAM, 1980.

Baker, Susan, et al. "The Injury Severity Score: A Method for Describing Patients With Mutiple Injuries and Evaluating Emergency Care, *The Journal of Trauma*, vol. 14, No. 3, 1974.

Dart, Olin, The Effect of Modifying Louisiana's Motorcycle Helmet Law, *Louisiana Highway Safety Commission*, April, 1980.

Impact of the Repeal of the Kansas Mandatory Motorcycle Helmet Law. The University of Kansas, College of Health Sciences. DOT-HS-804-018. Final Report, January, 1979.

Impact of Motorcycle Helmet Law Repeal in South Dakota. Human Factors Laboratory, University of South Dakota. Final Report, January, 1979. DOT-HS-803-996.

---

PROSPECTIVE STUDY OF THE EFFECT OF SAFETY BELTS ON MORBIDITY AND HEALTH CARE COSTS IN MOTOR-VEHICLE ACCIDENTS

(By Elizabeth Mueller Orsay, MD; Timothy L. Turnbull, MD; Mary Dunne, MD; John A. Barrett, MD; Patricia Langenberg, PhD; Charles P. Orsay, MD)

To assess the impact of safety belt use on the extent of injuries sustained in motor-vehicle accidents and the incurred health care costs, 1364 patients were prospectively evaluated at four Chicago-area hospitals. Of these, 791 (58%) were wearing a safety belt whereas 573 (42%) were not. The mean injury severity score for safety belt wearers was $1.8 \pm 0.07$ vs $4.51 \pm 0.31$ in those not wearing a safety belt. Only 6.8 of safety belt wearers required admission vs 19.2% of those not wearing a safety belt. Restrained occupants incurred mean charges of $534 ± $67 compared with $1583 ± $201 in unrestrained occupants. Thus, safety belt wearers had a 60.1% reduction in severity of injury, a 64.6% decrease in hospital admissions, and a 66.3% decline in hospital charges. Our findings demonstrate the significant societal burden of nonuse of safety belts in terms of morbidity and the cost of medical care.

Trauma resulting from motor-vehicle accidents (MVAs) represents a major challenge to our health care delivery system and a significant societal burden Motor-vehicle accidents are the leading cause of death in Americans aged 5 to 34 years and the seventh leading cause of death overall.[1] In 1982, an estimated 3.2 million people were injured in MVAs, of whom approximately 1.4 million were treated in emergency departments and 350,000 required hospitalization.[2] As a result of MVA-associated injuries, 1.3 million years of potential life before age 65 years were lost in 1984.[3] The overall economic loss to the United States attributable to MVAs in 1980 has been estimated to be $57.2 billion.[4]

The Department of Transportation postulates that universal use of safety belts would reduce MVA-related fatalities by 50% and injuries by 65%.[5] Previous studies, based on police reports[6] or National Highway Traffic Safety Administration records,[7] report a reduction of serious injury of belted front-seat occupants of 43% to 52%[6] and a decline in fatalities of 43%[7] To our knowledge, no prospective studies based on medical data have specifically attempted to assess the efficacy with which safety belt use may prevent injury from motor-vehicular trauma. We undertook the following prospective study to assess the effect of safety belt use on the extent of injuries sustained during MVAs as well as the economic impact of their use.

MATERIALS AND METHODS

During the period of Jan. 1 to July 1, 1986, data were collected on patients who presented after an MVA to the emergency department or trauma unit of four Chicago-area hospitals. Two of these hospitals (Mercy Hospital and Medical Center of Illinois Masonic Medical Center, Chicago) were urban community hospitals, one was a public inner-city hospital (Cook County Hospital, Chicago), and the fourth was a large suburban community hospital (Lutheran General Hospital, Park Ridge, Ill). These four hospitals were selected because they cover a wide geographic area within Cook County and a wide range of socioeconomic groups. In addition, the selected hospitals receive patients from a large assortment of urban crash settings, including expressways (high speeds) and city streets (lower speeds). Patients involved in MVAs that occurred in rural areas were not included.

All patients who presented with complaints referable to an MVA that had taken place within the previous 24 hours were eligible for inclusion. Pedestrians, bicyclists, motorcyclists, bus passengers, and those in trucks with more than two axles were excluded. Each weekday, the logs of each emergency department or trauma unit were reviewed in an attempt to identify any missed motor-vehicle injury cases. Cases thus identified were resubmitted to the examining physician with the medical record for completion and inclusions in the study.

Initial data were collected prospectively for all study subjects by the examining physician. The physician administered a structured questionnaire that included the following data: (1) determination of safety belt usage, (2) position of subject in vehicle, (3) mechanism of injury (front-end, rear-end, or broadside collision), (4) posted speed limit at location of MVA, (5) mode of transport to hospital, and (6) final disposition (discharge, transfer to another facility, admission to hospital, or death in emergency department). The examining physician also noted on the questionnaire if there was evidence of alcohol use, ie, clinical intoxication, a smell of alcohol on the breath, or an alcohol level. The data were then analyzed as yes/no variables. Alcohol levels obtained for legal use were sent to state laboratories; the

---

Footnotes at end of article.

results were not made available for the purposes of this study and therefore are not included. For all subjective data collected, independent confirmation was sought from paramedics, police, or others whenever possible.

The medical records (emergency and inpatient, if applicable) of all subjects were subsequently reviewed by a member of the research team. Additional collected data included the time of registration, nature of injuries, and payment status. An injury severity score (ISS) was then calculated based on the *Abbreviated Injury Scale Manual* (1985 edition).[8] A numerical score (1 to 5) is assigned to the severity of injury in each region; the squares of the three highest scores are then summated to obtain the ISS. Financial records were analyzed to determine the total hospital (excluding physician fees) and emergency department charges generated as a direct result of the MVA for each subject. The costs of consultants, admitting physicians, rehospitalizations, and rehabilitation were not included.

Study subjects were divided into two groups (restrained and unrestrained by safety belts) for the purposes of data analysis. Preliminary power calculations were made for an alpha of 0.05 and a power of 0.90 to detect a difference in ISS score of at least 0.5. The principal statistical test used were $t$ tests for comparisons of means of continuous variables and $x^2$ tests for drawing inferences concerning proportions. Analyses of covariance and logistic regression analyses were performed to compare safety belt users with nonusers, controlling for possible confounding variables. The SAS statistical package on an IBM mainframe at the University of Illinois at Chicago was used to perform the analyses.

## RESULTS

A total of 1364 patients were entered into the study. The mean age of the patients was 33.03±0.42 years (mean ±SEM); 52.5% were men, 63.6% were drivers, 24.6% were front-seat passengers, and 11.3% were back-seat passengers. There was no significant difference noted in the month patients sere seen (January through June), but there was a difference noted in the time they were registered; 37.1% were registered from 7 AM to 3 PM, 42.1% from 3 to 11 PM, and 20.8% from 11 PM to 7 AM (P>.001).

Seven hundred ninety-one patients (58%) claimed to be wearing safety belts, and 573 (42%) did not. Of those wearing safety belts, 603 (76.2%) were wearing a shoulder harness and lap belt, 121 (15.3%) were wearing a lap belt only, and in 67 (8.5%) the safety belt type was not known. Differences were noted between the two groups with respect to age, sex, and reported mechanism of injury. Safety belt wearers were slightly older, more often female, and more likely to be involved in a rear-end collision. In addition, safety belt users were less likely to have used alcohol and less likely to require transport by ambulance. The groups were similar with respect to the posted speed limit where the accident occurred (Table 1).

TABLE 1.—CHARACTERISTICS OF SAFETY BELT WEARERS VERSUS NONWEARERS

| Characteristic | Safety belts | | P [1] |
|---|---|---|---|
| | Yes (n=791) | No (n=573) | |
| Mean ± SEM age, y | 35±0.5 | 31.9±0.7 | 0.004 |
| Male (percent) | 49.7 | 55.8 | .028 |

TABLE 1.—CHARACTERISTICS OF SAFETY BELT WEARERS VERSUS NONWEARERS—Continued

| Characteristic | Safety belts | | P [1] |
|---|---|---|---|
| | Yes (n=791) | No (n=573) | |
| Reported mechanism of injury (percent): | | | |
| Rear-end collision | 40.8 | 26.2 | |
| Front-end collision | 24.1 | 37.6 | |
| Struck broadside (passenger) | 20.0 | 20.5 | .001 |
| Struck broadside (driver) | 12.8 | 9.4 | |
| Other | 1.2 | 1.9 | |
| Unknown | 1.2 | 4.4 | |
| Alcohol use (percent) | 5.6 | 19.5 | .0001 |
| Ambulance transport (percent) | 36.4 | 57.6 | .0001 |
| Posted speed limit (mph) (percent): | | | |
| <30 | 40.5 | 39.6 | |
| 30–45 | 39.6 | 35.1 | |
| ≧55 | 8.5 | 8.6 | NS |
| Unknown | 11.5 | 16.8 | |

[1] Percentages were compared by the Pearson $x^2$ test. Means were compared by the two-tailed t test. NS indicates not significant.

## SEVERITY OF INJURY

The mean ISS for safety belt wearers was 1.8±0.07 as opposed to 4.51±0.31 for those not wearing safety belts ($P<.001$). Patients who had worn safety belts, whether they were drivers front-seat passengers, or back-seat passengers, fared significantly better than their unrestrained counterparts.

When the reported mechanism of injury was evaluated, striking differences in ISS were noted between safety belt users and nonusers in front-end collisions (2.15±0.18 vs 6.12±0.64, $P<.001$). Benefit was also provided by safety belts in broadside collisions, where restrained occupants had an average ISS of 2.01±0.14 as opposed to 3.6±0.34 for unrestrained occupants ($P<.001$). Smaller but significant differences in ISS were noted between the groups in rear-end collisions. Safety belt wearers had a mean ISS of 1.38±0.06 vs 2.47±0.14 for nonusers ($P<.001$).

Admission to the hospital may be another indication of severity of injury. A significantly greater number of unrestrained subjects required admission (including those who died in the emergency department). Only 54 (6.8%) of the total 791 safety belt wearers required admission. However, 110 (19.2%) of the 573 patients who did not wear safety belts required admission ($P<.001$). Thus, two thirds of patients who required hospital admission were not wearing safety belts at the time of injury. Significant differences in ISS between the restrained and unrestrained groups remained in both the admitted and discharged groups. Regardless of admission status, unrestrained occupants utilized significantly more hospital days than restrained occupants (1.2±0.2 days vs 0.4±0.08 days, $P<.001$).

When only the most severely injured patients are considered, ie, those with an ISS of 12 or greater, again, the overwhelming majority were unrestrained. Thirty-six (81.8%) were not wearing safety belts; eight (18.2%) were ($P<.001$). There were five deaths during this study, all among patients who did not wear safety belts.

Multivariate methods, including analysis of covariance and logistic regression, were used to assess the independent effect of safety belt usage on ISS scores, controlling for other variables. Since age, alcohol use, and type of accident were observed to be associated with safety belt use and also may be associated with the severity and cost of injury, they were assumed to be possible confounding variables. The posted speed limit was also included. Although there were sex differences in safety belt usage, there is no reason to believe that ISSs or costs should differ by sex, other factors being equal. Therefore, analyses of covariance were carried out comparing the ISSs of safety belt users and nonusers, with age in years, alcohol usage (yes or no), and type of accident (entered as dummy variables; front-end collision, rear-end collision, or other) as covariates. Results (Table 2) indicate that unrestrained patients had an ISS that was two points higher on average, even when all the confounding variables were controlled for. Alcohol users scored one point higher on average, as did patients who were involved in a front-end collision. Those in a rear-end collision had somewhat lower scores on average. Scores averaged higher with increasing age and slightly higher for a posted speed limit of 30 to 45 mph. Mean ISSs for restrained and unrestrained subjects were adjusted for differing values of the covariates in the two groups; safety belt wearers were observed to have a significantly lower adjusted mean ISS than nonwearers ($P=.0001$).

Logistic regression analysis was used to assess the association of safety belt use with severe injury, defined as an ISS of 12 or greater. Proportions of restrained and unrestrained subjects with severe injury were compared, using alcohol use and type of collision as covariates. Results (Table 3) indicate that the odds of severe injury were 4.8 times greater for nonusers of safety belts when other significant variables were controlled for. The odds ratio for front-end collisions was similarly large, while alcohol usage was not independently associated with severe injury. Since age was entered as a continuous variable, an odds ratio is not available. However, the proportion of patients with severe injury increased significantly with increasing age.

TABLE 2.—COMPARISON OF SAFETY BELT USERS AND NONUSERS ON INJURY SEVERITY SCORE AND COST [1]

| Variable | Injury severity score [2] | | Cost [3] | |
|---|---|---|---|---|
| | Coefficient | P | Coefficient | P |
| Safety belt nonuse | 1.88 | 0.0005 | 596.2 | 0.0005 |
| Alcohol use | 1.13 | .0016 | 730.1 | .007 |
| Front-end collision | 0.79 | .0039 | 583.0 | .005 |
| Rear-end collision | −0.71 | .0048 | −381.7 | .047 |
| Posted speed limit, mph: | | | | |
| 30–45 | 0.74 | .001 | 470.2 | .0006 |
| >55 | 0.51 | .81 | 394.8 | .17 |
| Age, y | 0.032 | .0001 | 22.7 | .0001 |

[1] Analysis of covariance.
[2] Adjusted mean±SD injury severity score was 2.42±0.23 for safety belt users and 4.30±0.22 for nonusers ($P=.0001$).
[3] Adjusted mean±SD cost was $912.80±$172.90 for safety belt users and $1508.90±$179.60 for nonusers ($P=.0005$).

## HEALTH CARE COSTS

Significant differences were also found in the health care costs of safety belt users and nonusers. Unrestrained occupants incurred mean charges of $1583±$201, nearly three times the charges for restrained occupants ($534±$67, $P<.001$; Fig 1, right).

When the patient's position in the vehicle was evaluated, nonwearers consistently incurred higher charges than safety belt wearers (Fig 2, right). This difference reached statistical significance in drivers and front-seat passengers only. However, the number of back-seat passengers for statistical comparison was small (N=158).

Patients who did not wear safety belts who required hospital admission demonstrated a trend toward higher charges (Fig 3, right; $7250±$851 vs $5300±$603, $P=.076$), though the sample size was small (N=162). However, in patients who were dis-

charged or transferred from the emergency department, a significant difference was demonstrated, with restrained occupants incurring average charges of $175±$5 vs $228±$8 for unrestrained occupants ($P<.001$). This represents a 23.3% reduction in charges for safety belt wearers (Fig 3, right).

TABLE 3.—LOGISTIC REGRESSION RESULTS COMPARING SAFETY BELT USERS AND NONUSERS BY INJURY SEVERITY SCORE

| Variable | Injury severity score>12 | | |
|---|---|---|---|
| | Odds ratio | 95 percent confidence interval | > |
| Safety belt use | 4.94 | 2.03–12.02 | 0.0004 |
| Front-end collision | 4.74 | 2.10–10.66 | .0002 |
| Alcohol use | 1.59 | 0.68–3.74 | .29 |
| Posted speed limit, mph: | | | |
| 30–45 | 1.94 | 0.91–4.15 | .09 |
| >55 | 1.43 | 0.37–5.58 | .60 |
| Age (20-year difference) | 2.01 | 1.35–2.99 | .006 |

Evaluation of payment status showed that the majority of unrestrained passengers either had no payment (49.2%) or were receiving governmental assistance (5% public aid, 3% Medicare). Of safety belt wearers, 57% had private insurance or were enrolled in a health maintenance organization, and 3% were covered by workman's compensation ($P<.001$, Fig 4).

Multivariate analyses were also conducted to assess the independent effect of safety belt use on health care costs, controlling for the covariates age, type of collision, posted speed limit, and alcohol usage (Table 2). The adjusted mean costs differed by about $600 ($P=.0008$); alcohol users incurred charges approximately $700 higher on average. Costs were higher in front-end collisions, lower in rear-end collisions, higher at 30 to 45 mph, and increased with the age of the patient.

COMMENT

This study suggests that safety belts provide a significant benefit in reducing injury and health care costs. We demonstrated a 60.1% reduction in severity of injury (51% after adjusting for other variables), a 64.6% decrease in hospital admissions, and a 66.3% decline in hospital charges (49% for adjusted means) in safety belt wearers. To our knowledge, this is the first study evaluating the efficacy of safety belt use in the United States based on medical data. By utilizing the ISS system, an objective assessment can be made of the number and severity of injuries in relation to safety belt use. Previous studies[6] and government reports[9] used police reports in assessment of injury. In this system, the police officer assigns the accident victim an injury score of A, B, C, or K (severe, moderate, minor, or fatal injury). Obviously, data obtained by this system are of questionable reliability. In addition, this study is unique in that it also assessed the hospital charges associated with the care of the injured motorist.

Actual hospital and emergency department charges were used to estimate health care costs in this analysis. These are conservative estimates, in that direct charges generated by pre-hospital emergency services, rehospitalizations, and rehabilitation were not included. Furthermore, indirect costs resulting from time lost from work, increased insurance premiums, and lost productivity of those who die or are permanently disabled by MVAs were not measured. Inclusion of these costs may have resulted in even greater differences in cost estimates. The cost to care for patients who required hospitalization was higher for those who did not wear safety belts, though statistical significance was not reached (Fig. 3, right). However, the sample size in this subgroup was small, suggesting a beta error. Larger sample sizes may demonstrate a statistically significant difference.

The four hospitals participating in the study were geographically scattered throughout Cook County to include a variety of roadways (highways and urban and suburban roads). Only rural roads were not represented. Baker et al,[10] however, stated that mortality from MVAs may be highest in areas of low population density; this suggests that we omitted from our sample roads responsible for high mortality from MVAs. The months of January through June were chosen to cover a variety of road conditions in winter, spring, and summer in Chicago. In addition, the four hospitals admit patients from a wide variety of socioeconomic groups, with an assortment of vehicles and driving habits.

Throughout this study, we relied on patient reporting and/or paramedic reporting of safety belt use. The actual safety belt use rate in Illinois at the time of the study was 36%.[9] Actual safety belt use may be appreciably different than reported, as it may be impossible to obtain physical evidence of safety belt use. Paramedics were asked to verify the presence or absence of restraint use at the scene. However, the accident victims were often out of their vehicles when the ambulance arrived. In only 23 of the 618 cases with patients transported to the hospital by ambulance was there disagreement on safety belt usage between paramedics and patients. If we assume, however, that restraint use is only overreported, ie, unrestrained patients stated that they were wearing a safety belt and not vice versa, then there would be an even greater benefit in reducing injury and cost if the true incidence were known.

It should be noted that only those patients who presented to the hospital following an MVA were included. Patients who did not present to the hospital, who presented over 24 hours following injury, or who went directly to the morgue were not included. In Cook County, paramedics must transport all seriously (or fatally) injured MVA victims to a hospital unless the patient has dependent lividity, rigor mortis, or decapitation, all unlikely events in traffic accidents. It is therefore unlikely that any fatalities were not included in the study due to direct transport to a morgue. The number of uninjured motorists who did not present to a hospital is unknown and is not available through the Department of Transportation.

Studies conducted in other countries, many of which assessed the effects of safety belt legislation, also demonstrate the benefit of safety belt use.[11-22] Henderson and Wood[11] reported a 25% decrease in predicted deaths in the year following safety belt legislation in New South Wales, Australia. In an evaluation of the Swedish experience, Mellbring et al[12] reported a reduction in the number of MVA victims admitted to hospitals following legislation despite a 40% increase in reported MVAs. In England, a retrospective study comparing the 12 months preceding and following the enactment of safety belt use legislation revealed a mean ISS of 4.94 before and 2.8 after the law. A 42% reduction in the number of front-seat occupants who required hospital admission and a 27% decline in the number of deaths following introduction of the law was reported.

In the United States, New York was the first state to pass a mandatory-use safety belt law. In the first nine months after the law was enforced, MVA fatalities decreased by 17%, resulting in the lowest highway fatality rate (per 100 million miles driven) in several decades.[3] In Illinois, where safety belt legislation took effect in July 1985, an estimated 55 to 60 lives were saved and 8000 serious injuries were prevented in the first year following enactment.[9] Nationwide, the National Highway Traffic Safety Administration reported that safety belt usage of fatally injured MVA victims was about half the usage of those whose injuries were less incapacitating.[23] Unrestrained occupants were 40% more likely to be injured in an MVA and twice as likely to require hospitalization as restrained occupants.[24]

Compulsory safety belt use legislation appears to be the most effective agent in increasing safety belt usage. Usage rates increased from just under 40% to 95% in England,[14] from 20% to 80% in Sweden,[12] from 15% to 90% in Australia,[15] and from 21% to 47% in New York state[25] after such legislation. Insurance incentives[26] and mass-media campaigns[27] have been ineffective in altering the rate of safety belt usage. Other efforts to promote safety belt usage, including safety belt pledge cards, incentive plans, and "awareness" programs have met with variable success.[28]

Mandatory safety belt use legislation has been a controversial topic in the United States. To date, 33 states and the District of Columbia have enacted such legislation, while two additional states had safety belt laws and later repealed them (Massachusetts and Nebraska). Worldwide, over 30 countries have passed mandatory-use laws. The United States is virtually the only developed nation that has not passed national safety belt legislation.[29]

The Department of Transportation estimated the cost to society of injuries sustained in MVAs at about $15.3 billion in 1980.[4] Our results indicate a 66.3% decreased cost attributed to safety belt use. If this reduction is applied to the estimated $15.3 billion, universal safety belt usage would save $10.1 billion each year. In our era of rising health care costs, the safety belt may be a very efficient mechanism for saving lives and reducing costs.

Society bears the burden of MVAs, not only in direct health costs but also in lost productivity of workers (indirect costs). There were over 11 million lost workdays for survivors of MVAs in 1985.[24] The administrative and overhead cost of motor-vehicle and health insurance premiums totaled nearly $13.8 billion in 1980.[4] Furthermore, in 1980, the federal government spent an estimated $7.5 billion and state and local governments spent an estimated $3.4 billion for MVA-associated expenses.[4]

This study analyzed automobile safety belt use and subsequent health care costs. Our data suggest that, in an urban setting, safety belt utilization was associated with decreased severity of injury from motor-vehicle trauma and reduced the medical care costs of injured motorists. This analysis in combination with existing evidence supports a more aggressive national posture toward safety belt usage for the benefit of both the individual and the American people.

This study was supported in part by the Illinois Coalition for Safety Belt Use, Springfield, Ill.

We thank Dorothy Bissell and Elizabeth Springer for their help in manuscript preparation. We are also grateful for the contributions made by the resident and attending staffs of the University of Illinois Affiliated Hospitals Emergency Medicine Residency and the University of Illinois Surgery Residency, without whose cooperation and efforts this study could not have been accomplished.

FOOTNOTES

[1] Sleet DA: Motor vehicle trauma and safety belt use in the context of public health priorities. *J Trauma* 1987;27:695-702.

[2] Committee on Trauma Research: *Injury in America.* Washington, DC, National Research Council and the Institute of Medicine, 1985.

[3] Seat belt use: United States. *MMWR* 1986;35:310-304.

[4] *The Economic Cost to Society of Motor Vehicle Accidents,* US Dept of Transportation publication (HS) 806-342. National Highway Traffic Safety Administration, 1985.

[5] *The Profit in Safety Belts: Guidelines for Conducting Employers Safety Belt Workshops,* US Dept of Transportation publication (HS) 806-713. National Highway Traffic Safety Administration, 1985.

[6] Campbell BJ: Safety belt injury reduction related to crash severity and front seated positions. *J Trauma* 1987;27:733-739.

[7] Evans L: Fatality risk reduction from safety belt use. *J Trauma* 1987;27:746-749.

[8] Committee on Injury Scaling: *The Abbreviated Injury Scale,* 1985 revision. Arlington Heights, Ill, American Association for Automotive Medicine, 1985.

[9] Sidhu CSL: *An Assessment of the First Year of Illinois' Seat Belt Law (July 1985-June 1986).* Springfield, Ill, Division of Traffic Safety, Illinois Department of Transportation, 1987.

[10] Baker SP, Whitfield RA, O'Neill B: Geographic variations in mortality from motor-vehicle crashes. *N Eng J Med* 1987;316:1384-1387.

[11] Henderson M, Wood R: Compulsory wearing of seat belts in New South Wales, Australia: An evaluation of its effect on vehicle occupant deaths in the first year. *Med J Aust* 1973;2:797-801.

[12] Mellbring G, Dahlin S, Lindblad B: The hospital experience of seat belt legislation in the county of Skaraborg, Sweden. *Injury* 1981;12:506-509.

[13] Christian MS: Morbidity and mortality of car occupants: Comparative survey over 24 months. *Br Med J* 1984;289:1525-1526.

[14] Avery JG: The overall assessment of the medical effects of seat-belt legislation in the United Kingdom. *Arch Emerg Med* 1985;2:232-233.

[15] McDermott FT, Hough DE: Reduction in road fatalities and injuries after legislation for compulsory wearing of seat belts: Experience in Victoria and the rest of Australia. *Br J Surg* 1979;66:581-521.

[16] Pye G, Waters EA: Effect of seat belt legislation on injuries in road traffic accidents in Nottingham. *Br Med J* 1984;288:756-757.

[17] Dreghorn CR: The effect of seat belt legislation on a district general hospital. *Injury* 1985;16:415-418.

[18] Freedman LS: Initial assessment of the effect of the compulsory use of seat belts on car occupants' injuries, and the trauma department work-load. *Injury* 1984;16:60-62.

[19] Allen MJ, Barnes MR, Bodiwala GG: The effect of seat belt legislation on injuries sustained by car occupants. *Injuries* 1985;16:471-476.

[20] Trinca GW, Dooley BJ: The effects of mandatory seat belt wearing on the mortality and pattern of injury of car occupants involved in motor vehicle crashes in Victoria. *Med J Aust* 1975;1:675-678.

[21] Tolonen J, Kiviluoto O, Santavirta S, et al: The effects of vehicle mass speed and safety belt wearing on the causes of death in road traffic accidents. *Ann Chir Gynaecol* 1984;73:14-20.

[22] Newman RJ: A prospective evaluation of the protective effect of car seatbelts. *J Trauma* 1986;26:561-563.

[23] *Fatality Trends: Seat Belts,* US Dept of Transportation publication 13. National Highway Traffic Safety Administration, 1986.

[24] *National Accident Sampling System: 1985: A Report on Traffic Accidents and Injuries in the United States,* US Dept of Transportation publication (HS) 807-074. National Highway Traffic Safety Administration, 1987.

[25] Pace BW, Thailer R, Kwiatkowski TG: Nwe York state mandatory seatbelt use law: Patterns of seatbelt use before and after legislation. *J Trauma* 1986;26:1031-1033.

[26] Robertson LS: Insurance incentives and seat belt use. *Am J Public Health* 1984;74:1157-1158.

[27] Robertson LS: Behavioral and environmental interventions for reducing motor vehicle trauma. *Annu Rev Public Health* 1986;7:13-34.

[28] Cope JG, Grossnickle WF: An evaluation of three corporate strategies for safety belt use promotion. *Accid Anal Prev* 1986;18:243-251.

[29] *How Thousands of Lives Can Be Saved: An Examination of Safety Belt Effectiveness.* Washington, DC, Highway Users Federation and the Automotive Safety Foundation, 1985.

---

THE PUBLIC COST OF MOTORCYCLE TRAUMA

(By Frederick P. Rivara, MD, MPH; Barbara G. Dicker, MA; Abraham B. Bergman, MD; Ralph Dacey, MD; Clifford Herman, MD)

Despite the effectiveness of motorcycle helmet legislation, many states have repealed these laws during the last decade. Aspects often neglected by policymakers are who pays for the care of these victims and how much of this cost is subsidized by public funds. To determine the extent of this subsidy, we studied the cost of care of 105 motorcyclists hospitalized at a major trauma center during a 12-month period. Total direct costs for these 105 patients, followed up for a mean of 20 months, were more than $2.7 million, with an average of $25,764 per patient. Only 60 percent of the direct costs were accounted for by the initial hospital care; 23 percent of costs were for rehabilitation care or readmission for treatment of acute problems. The majority (63.4 percent) of care was paid for by public funds, with Medicaid accounting for more than half of all charges.) (*JAMA* 1988; 260:221-223)

Motorcycle trauma is an important cause of mortality and morbidity in the United States.[1] In 1985, four thousand four hundred twenty-three motorcyclists were killed, accounting for nearly one of every ten motor vehicle fatalities.[2] For every motorcyclist killed there are about 90 others who require medical care for the treatment of their injuries.[3] Well known to health professionals are the facts that most deaths and serious disabilities are due to head injuries,[4] that helmets significantly reduce the chances of death and disability,[5-7] and that compulsory helmet laws appreciably increase the proportion of helmeted motorcycle riders.[6] This knowledge led Congress in 1966 to enact legislation to withhold federal funds for highway construction from states without compulsory motorcycle helmet laws. The result was that by 1975 forty-seven states required all motorcyclists to use helmets, leading to a striking diminution in mortality rates.[6] Reacting to strong pressure from motorcycle rider groups, in 1976 Congress withdrew the authority of the Department of Transportation to withhold highway funds from noncompliant states. Twenty-six states promptly repealed or weakened their helmet laws.[8] These actions were associated with a 44 percent increase in motorcycle fatalities nationally between 1976 and 1979.[6]

In dealing with this issue, policy makers have tended to neglect an important aspect of motorcycle trauma: who pays for the costs of care.[9] Several studies have shown that a high proportion of motorcyclists lack insurance to cover the costs of their medical care, resulting in heavy subsidization by taxpayers.[6,10-12] These studies, however, have only considered the immediate period of hospitalization and have not explored subsequent costs for rehabilitation and home care, costs for support of dependents when an injured head of the household is not able to work, or indirect costs from lost productivity. We therefore examined all costs generated by injured motorcyclists treated at a major trauma center during a one-year period.

METHODS

Harborview Medical Center (HMC), Seattle, is the only level I trauma center serving the four-state area of Washington, Alaska, Idaho, and Montana. As a level I trauma center, HMC has resources available around the clock to care for any type of trauma emergency, including appropriate medical specialists, support services, and immediate operating room availability. Approximately 80% of the admissions are from King County (population, 1.4 million); an additional 20% are from the rest of the region. All injured motorcyclists admitted for care during 1985 were identified through the Harborview Trauma Registry, a computerized listing of all trauma admissions. Injury Severity Scores (ISSs) were calculated from the Abbreviated Injury Scale-1980 [13] using the method of Baker et al.[14] The Glasgow Coma Score (GCS) was calculated by the treating physician as described by Teasdale and Jennett.[15]

Direct costs of care were determined as those incurred by the study group during the follow-up period (mean, 20 months). Although there is a distinction between costs and charges,[16] payer-specific charges were used as a proxy for costs of care. Hospital charges and source of payment for the acute-care hospitalization, rehospitalization at HMC, or rehabilitation care at HMC were obtained from the hospital billing office. Costs for hospital care constitute 93% to 94% of charges. Charges for professional fees were obtained froim the billing office of the Harborview physician group practice. For patients who received rehabilitation care elsewhere, after consent was obtained the patient's family, treating physician, and treating facility were contacted to determine charges for care on discharge from HMC. Finally, a search by state personnel

[1] Footnotes at end of article.

was made of records for use of funds from Aid to Families of Dependent Children, Supplemental Security Income, the Division of Vocational Rehabilitation, and Medical Assistance (Medicaid) by the injured motorcyclists during the follow-up period. With the assurance that only aggregate data would be used, the study was approved by the institutional review board of the University of Washington.

Indirect costs were estimated using the human capital approach outlined by Rice et al [17] for a subset of the study population in whom the time lost from work as a result of the injury was known. Costs were based on age- and sex-specific national estimates of mean annual earnings in 1980. The estimates take into account the 1980 employment rates published by the US Bureau of the Census and described by Rice et al.[17] Earnings include the value of housekeeping services for women not in the labor force and for employed men and women. For individuals with fatal or totaly incapacitating injuries, indirect costs were estimated as the expected lifetime earnings for age and sex, discounted at the conservative rate of 6%.

RESULTS

One hundred eleven motorcyclists were treated for injuries at HMC during 1985. Medical records were unavailable for four patients, leaving 107 for review.

TABLE 1.—*Selected characteristics of motorcyclists admitted to Harborview Medical Center during 1985*

| *Characteristic* | *No. of motorcyclists (N = 107)* |
|---|---|
| Sex: | |
| Male | 91 |
| Female | 16 |
| Mean age, Y | 28.6 |
| Injury Severity score: | |
| <14 | 52 |
| 14–25 | 39 |
| 25 + | 16 |
| Glasgow Coma Score: | |
| <9 (severe) | 17 |
| 9–13 (moderate) | 11 |
| 13–15 (mild) | 72 |
| Unknown | 7 |
| Mean length of stay, d | 19.6 |
| Outcome: | |
| Death | 7 |
| Persistent vegetative state/severe disability | 18 |
| Moderate disability/good recovery | 82 |

TABLE 2.—COMPONENTS OF DIRECT COSTS

| Type of cost | No. of motorcyclists | Total cost | Average cost | Percent of total |
|---|---|---|---|---|
| Acute-care hospitalization: | | | | |
| Initial inpatient | 105 | $1637217 | $15,592 | 60.5 |
| Readmission | 26 | 123,650 | 4,756 | 4.8 |
| Rehabilitation: | | | | |
| Harborview Medical Center | 8 | 190,977 | 23,872 | 7.0 |
| Other inpatient rehabilitation | 9 | 309,211 | 34,357 | 11.4 |
| Nonhospital charges: | | | | |
| Skilled nursing care | 5 | 41,099 | 8,220 | 1.5 |
| Physician fees | 105 | 360,621 | 3,434 | 13.3 |
| AFDC/SSI [1] | 4 | 12,972 | 3,243 | 0.5 |
| Vocational retraining | 3 | 5,832 | 1,944 | .2 |
| Equipment | 11 | 16,875 | 1,534 | .6 |
| Transportation | 14 | 4,942 | 353 | .2 |
| Home health care | 4 | 1,847 | 462 | .07 |
| Total | 105 | 2,705,244 | 25,764 | 100 |

[1] AFDC indicates Aid to Families With Dependent Children; and SSI, Supplemental Security Income.

PATIENT PROFILES

Characteristics of the injured cyclists are shown in Table 1. The majority of patients were men, with a mean age of 28.6 years. The mean length of stay was 19.6 days (range, one to 258 days). Nearly half of the patients (49%) had an ISS less than 15 while 15% had an ISS greater than 25. There were 61 patients (57%) with head injuries; in 33 patients these were mild, with a GCS between 13 and 15. Eleven patients had moderate head injuries, with a GCS between 9 and 12; head injuries were severe, with a GCS less than 9, in 17 patients. There were seven deaths; 18 patients were severely disabled or in a persistent vegetative state on discharge from the hospital.

DIRECT COSTS

Complete financial information was available on 105 patients (Table 2). Total direct costs for these 105 patients, followed up for a mean of 20 months, were more than $2.7 million, or an average of $25 764 per patient. Sixty percent of these costs were accounted for by charges for initial hospital care. Rehabilitation care accounted for an additional $500 188, or 18.4% of the total direct costs. Twenty-two patients had 26 readmissions for treatment of acutecare problems related to the initial injury, generating an additional $123 650 (4.6% of total) in charges. Non-hospital-related charges accounted for only 1% of all direct costs. The three patients with the most severe injuries accounted for 18% of the total direct costs; patients with severe head injuries had costs almost fivefold higher than those with moderate or minor head trauma.

TABLE 3.—SOURCES OF PAYMENT (N=105)

| Source | Charges | Percent of total charges |
|---|---|---|
| Medicaid | $1,522,090 | 56.3 |
| Other state/public funds | 192,171 | 7.1 |
| Federal AFDC/SSI [1] | 12,972 | |
| Division of vocational rehabilitation | 5,832 | |
| Military health care | 60,060 | |
| State reimbursement for indigent care | 113,307 | |
| Commercial | 595,165 | 22.0 |
| Self-pay | 19,086 | 0.7 |
| Other/unknown | 367,732 | 13.9 |
| Total | 2,705,244 | 100.0 |

[1] AFDC indicates Aid to Families with Dependent Children; and SSI, Supplemental Security Income.

SOURCES OF PAYMENT

The majority (63.4%) of care of injured motorcyclists was paid for by public funds in one form or another, with Medicaid payments accounting for slightly more than half of all charges (Table 3). None of the victims were receiving public assistance prior to being injured. The patients qualified instead for the "medically indigent" category of Medicaid after admission in anticipation of a long hospital stay because of their serious injuries, resulting in $113,307 in charges reimbursed by the state. Injury-related disability also resulted in direct transfer of payments to three patients with Supplemental Security Income funds and to the dependents of two patients with funds from Aid to Families With Dependent Children. Three patients received state support for vocational rehabilitation training. Finally, one patient received part of his treatment in the military health care system. Commercial insurance plans accounted for 22% of charges, while less than 1% of charges were paid directly by the injured motorcyclist or his family.

TABLE 4.—HARBORVIEW MEDICAL CENTER (HMC) CHARGES AND INJURY SEVERITY

| Injury severity score (No. of motorcyclists) | HMC charge | Average charge |
|---|---|---|
| 1–8 (27) | $123,189 | $4,563 |
| 9–15 (35) | 387,812 | 11,080 |
| 16–24 (26) | 561,751 | 21,606 |
| 25–34 (13) | 506,747 | 38,981 |
| 35–49 (3) | 365,322 | 121,744 |
| 50+ (1) | 6,928 | 6,928 |
| Total (105) | 1,951,749 | |

DIRECT COSTS AND INJURY SEVERITY

As expected, average costs for care were directly related to injury severity (Table 4). More than half (59%) of the patients had injuries with ISSs of 15 or less. These patients, however, accounted for only 26.2% of acute-care hospital costs. There were 39 patients (37%) who had ISSs between 16 and 34; these patients accounted for 54.7% of acute-care hospital costs. The three patients with the most severe injuries (ISSs between 35 and 49) had an average direct cost of $121,744 and accounted for 18.7% of hospital costs. The patient with the most severe injuries generated a relatively small hospital charge because he died soon after admission.

The direct costs of care also varied directly with the severity of the head injury (Table 5). Patients with a GCS less than 9 had 4.7-fold higher average costs than did those with scores of 9 or more.

TABLE 5.—HARBORVIEW MEDICAL CENTER CHARGES AND GLASGOW COMA SCORE

| Glasgow coma score (No. of motorcyclists) | Total charge | Average charge |
|---|---|---|
| <9 (16) | $750,976 | $46,936 |
| >9 (84) | 835,727 | 9,949 |
| Unknown (5) | 365,145 | 73,029 |
| Total (105) | 1,951,848 | |

INDIRECT COSTS

The indirect costs, representing the value of lost output because of cessation or reduction of productivity caused by death or disability are shown in Table 6. The average losses from fatal injuries are somewhat low because of the inclusion of one 71-year-old man. This individual was an unusual motorcycle fatality by virtue of his age. Only 1.9% of patients with motorcycle injuries were 65 years of age or older and only 0.5% of motorcycle trauma victims dying in the United States in 1985 were aged 65 years or older.[2] If this individual is excluded, the average indirect cost from fatal injuries is $410,850.

Indirect costs were based on employment data available from 44 individuals at the mean follow-up time of 20 months. These represent minimal estimates of the lost productivity for the entire group. The total direct and indirect costs are thus conservatively estimated at more than $7.1 million.

TABLE 6.—INDIRECT COSTS FROM LOST PRODUCTIVITY

| Cause of cost | No. of motorcyclists | Productivity losses | |
|---|---|---|---|
| | | Total | Average |
| Mortality | 7 | $2,477,768 | $353,967 |
| Morbidity | 44 | 1,924,335 | 43,735 |
| Total | 51 | 4,402,103 | |

COMMENT

At this urban level I regional trauma center, 64% of the total direct costs for motorcycle trauma victims in 1985 were paid by public funds. The study is consistent with prior studies. Acute-care hospital charges at the Massachusetts General Hospital from 1982 to 1983 for injured motorcyclists averaged $15,114.[11] The authors found that 46% of their 47 patients had no medical insurance. A study of charges for orthopedic injuries to motorcyclists in a level I trauma center in California found that 82.3% were paid from public funds.[10]

In addition to supporting these previous findings, our study extends them by examining charges for care beyond the initial hospitalization and by estimating the indirect costs of the motorcycle injuries. Follow-up care, rehabilitation care, and physician services accounted for an additional $1 million, or 39.5% of total charges. Because many insurance policies do not cover long-term rehabilitation or nursing home needs and because they provide limited coverage of outpatient expenses, most of these additional charges are paid by public funds.

Although indirect costs accrue mainly to the individual who is injured, they do reflect a societal cost. Society is not only deprived of the individual's contributions, but it may need to provide support to him or his family as well. The indirect costs arrived at in this study are not precise. They may be overestimated because they are based on age- and sex-specific national estimates of annual mean earnings. Since a disproportionate share of the sample lacked health insurance coverage, these individuals may have had jobs with below-average wages. On the other hand, the indirect costs are underestimates of the total since they are based on follow-up data from only a portion of the total group.

As a regional center attracting the most seriously injured patients, our population may not be representative of all motorcycle injury victims. However, these cost estimates, even if only representative of one region, are alarming.

There are many approaches that could be used to decrease the public cost of motorcycle trauma. One relatively easily implemented solution would be to require helmets. Although we did not compare helmeted and unhelmeted motorcycle riders, other studies have shown that motorcycle helmets are clearly effective in decreasing the severity of head injuries and in lowering the rate of fatal injuries. One study that compared the risk of death in a motorcycle crash of an unhelmeted rider with that of a helmeted rider on the same motorcycle found that the unhelmeted rider had a 27% greater chance of dying.[7] Other studies have documented that states with an enforced helmet law maintain a compliance rate of more than 90% while in states without such a law helmet usage remains at the 50% level.[18] Decreasing head injuries through a mandatory helmet law would therefore be expected to significantly reduce the costs of care.

The impact of the cost of motorcycle injuries on society was perhaps best expressed 16 years ago by a Massachusetts court:[19]

We cannot agree that the consequences of such (motorcycle) injuries are limited to the individual who sustains the injury. From the moment of injury, society picks the person up off the highway; delivers him to a municipal hospital and municipal doctors; provides him with unemployment compensation if, after recovery, he cannot replace his lost job, and, if the injury causes permanent disability, may assume the responsibility for his and his family's subsistence.

This study was supported by contract 6500-53379 from the Washington State Department of Social and Health Services, grant CCRO-02570-01 from the Centers for Disease Control, and contract N00014-84-C-0725 from the Office of Naval Research.

We would like to thank Susan Pilcher, RN, of the Harborview Trauma Registry for identifying the patients; Linda Carbone, Mike Matthews, and Mary Ann Olmstead for providing the hospital and physician charges; and the Washington State Department of Social and Health Services for providing the follow-up financial information.

REFERENCES

[1] Baker SP, O'Neill B, Karpf RS: *The Injury Fact Book.* Lexington, Mass, Lexington Books, 1984, pp 259-264.

[2] *Fatal Accident Reporting System—1985.* US Dept of Transportation publication (DOT) HS 807-071. National Highway Traffic Safety Administration, 1987.

[3] Barancik JI, Chatterjee BF, Greene-Cradden YC, et al: Motor vehicle trauma in Northeastern Ohio: I. Incidence and outcome by age, sex, and road-use category. *Am J Epidemiol* 1986;123:846-861.

[4] Kraus JF, Riggins RS, Franti CE: Some epidemiologic features of motorcycle collision injuries: II. Factors associated with severity of injuries. *Am J Epidemiol* 1975;102:99-109.

[5] *The Effect of Helmet Law Repeal on Motorcycle Fatalities,* US Dept of Transportation publication (DOT) HS 807-605. National Highway Traffic Safety Administration, 1986.

[6] National Highway Traffic Safety Administration: *A Report to Congress on the Effect of Motorcycle Helmet Use Law Repeal: A Case for Helmet Use.* US Dept of Transportation, 1980.

[7] Evans, L, Frick MC: *Helmet Effectiveness in Preventing Motorcycle Driver and Passenger Fatalities,* publication (GMR-5602). Warren, Mich, General Motors Research Lab, 1986.

[8] Russo PK: Easy rider-hard facts: Motorcycle helmet laws. *N Engl J Med* 1989;299:1074-1076.

[9] Watson GS, Zador PL, Wilks A: Helmet use, helmet use laws, and motorcycle fatalities. *Am J Public Health* 1981;71:297-300.

[10] Bray T, Szabo R, Timmerman L, et al: Cost of orthopedic injuries sustained in motorcycle accidents. *JAMA* 1985;254:2452-2453.

[11] Bach BR, Wyman ET: Financial charges of hospitalized motorcyclists at the Massachusetts General Hospital. *J Trauma* 1986;26:343-347.

[12] Trunkey DD: Helmets for motorcyclists. *West J Med* 1981;135:136.

[13] Joint Committee on Injury Scaling: *The Abbreviated Injury Scale (AIS),* revised. Arlington Heights, Ill, American Association for Automotive Medicine, 1980.

[14] Baker SP, O'Neill B, Haddon W, et al: The Injury Severity Score: A method for describing patients with multiple injuries and evaluating emergency care. *J Trauma* 1974;14:187-196.

[15] Teasdale G, Jennett B: Assessment of outcome and impaired consciousness: A practical scale. *Lancet* 1974;2:81-84.

[16] Finkler SA: The distinction between costs and charges. *Ann Intern Med* 1982;96:102-109.

[17] Rice DP, Hodgson TA, Kopstein AN: The economic cost of illness: A replication and update. *Health Care Financ Rev* 1985;7:61-80.

[18] McSwain NE, Willey AB: *Impact of the Reenactment of the Motorcycle Helmet Law in Louisiana,* US Dept of Transportation publication (DOT) HS 806-760. National Highway Traffic Safety Administration, 1984.

[19] *Simon v Sargent,* 346 F Supp 277, 279 (D Mass 1972), *affirmed,* 409 US 1020 (1972).

---

DEPARTMENT OF HEALTH,
*Providence, RI, May 12, 1989.*

Hon. JOHN H. CHAFEE,
*The U.S. Senate, Dirksen Senate Office Building, Washington, DC.*

DEAR SENATOR CHAFEE: I am writing both as a physician and as Director of a Family Health Program with enthusiastic support for your proposed bill on seat belt and motorcycle helmet laws. Statistics and experience speak for themselves; injuries from use of motor vehicles is the most important cause of deaths and serious disabilities among children and young adults. Judged in terms of lost opportunity, productivity, and human suffering, these injuries may be our most important health problem. They're certainly a huge cost, both to families and to public finances.

We have proven by actual experience that both mandated helmet and seat belt use greatly reduces serious injuries. I have no doubt that the proposed legislation would quickly lead to state action, as we had in the early seventies. All of us concerned about the prevention of death and disability, especially among the young people of this country, applaud this proposal to mandate simple, direct preventive measures.

If we can assist you in any way with the data on injuries in Rhode Island or in the New England region, please do not hesitate to call.

Sincerely yours,

WILLIAM H. HOLLINSHEAD, M.D.,
*Medical Director,*
*Divisions of Family Health.*

---

RHODE ISLAND MEDICAL SOCIETY,
*Providence, RI, May 15, 1989.*

Hon. JOHN H. CHAFEE,
*U.S. Senator, Dirksen Senate Office Building, Washington, DC.*

DEAR SENATOR CHAFEE: The purpose of this letter is to express the support of the Rhode Island Medical Society for your legislation requiring states to enact mandatory motorcycle helmet and automobile safety belt laws, or risk losing a portion of their federal highway funds.

Numerous scientific studies have clearly demonstrated the efficacy of both motorcycle helmets and automobile safety belts in saving lives and reducing the severity of traumatic injury to operators and passengers.

In addition to reducing the number of deaths and reducing serious injuries, passage of this legislation would mitigate the spiraling costs of medical care. A recent study in the Journal of the American Medical Association revealed that the vast majority of motorcyclists are medically uninsured. Thus, the cost of their hospitalization and rehabilitation is indirectly underwritten by taxpayers and the insured.

In short, the passage of these measures would save countless lives, prevent serious bodily injuries and reduce the expensive medical costs associated with traumatic injury. The Rhode Island Medical Society commends you for this initiative, and urges your colleagues in the Senate to join you to secure its passage.

Sincerely,

BOYD P. KING, M.D.,
*President.*

---

DEPARTMENT OF TRANSPORTATION,
GOVERNOR'S OFFICE ON HIGHWAY SAFETY,
*Providence, RI, April 24, 1989.*

Senator JOHN H. CHAFEE,
*U.S. Senate, Dirksen Senate Office Building, Washington, DC.*

DEAR SENATOR: After reading your proposed legislative draft, I want to applaud your idea of a mandatory helmet law and seat belt law. Withholding up to 10% of a state's Federal-aid highway construction funds will definitely force the states to enact these measures, which, I feel, are long overdue.

As you are aware, we have not been able to pass a seat belt law in the Rhode Island House for the last eight years. We were, however, the second state to pass a Child Restraint Law, which was raised in 1987 to include youngsters up to age thirteen.

Your idea of an incentive program to provide funds for education and for the enforcement of these laws is excellent. May I suggest that the law should require belting of front and back seat passengers. Also of real importance is the fact that 5 million dollars in Fiscal Year 1990 is not enough money to allocate. Under your present formula Rhode Island would receive only $25,000 to educate the public, too low a figure to be effective statewide.

The grant procedure is too stringent. If you are serious about a national helmet and seat belt law, then make the offer more attractice to the states by not making the eligibility requirements so difficult to meet.

Also there is a certain ambigiuty in my mind concerning the community-based program. Does the measure call for a program in each of the thirty-nine communities in Rhode Island?

I hope that I have been of some assistance to you in reviewing this bill and wish you success in enacting this legislation.

Sincerely,

EDWARD J. WALSH,
*Chief Coordinator.*

---

JANE MATTSON ASSOCIATES, INC.,
*King of Prussia, PA, April 10, 1989.*

JOHN H. CHAFEE,
*Ranking Minority Member, Committee on Environment and Public Works, U.S. Senate, Washington, DC.*

DEAR SENATOR CHAFEE: I applaud and support your concern for highway safety outline in your letter of March 29, 1989, and would be pleased to provide assistance any way possible.

Most of my work involves catastrophic medical case management. Over 50% of my cases are with persons with traumatic brain injury. I am asked to provide cost estimates to insurance companies on almost every case. Additionally, I testify as an expert providing expected lifetime costs, based on the individual case situation. Several years ago I developed ideal models of care and costs for those with traumatic brain injury for a very large HMO. I am also a Ph.D. candidate at the Heller School of Brandeis in health policy. Most interesting, in my course on public policy we just did mock testimony, and one of the topics was seat belt legislation.

I am aware that over two million people have survived motorcycle and automobile accidents. Much of my work is in Texas and Massachusetts which have repealed respectively helmet and seat belt laws.

Although I work with individual cases, when you add up the number of people whose lives have been irrevocably altered by these kinds of accidents since 1980, we are most assuredly in excess of 600,000 people. For the purposes of clarity, I have broken down the level of functioning into five areas:

*(1) Persistent Vegetative State.*—Those who start out in coma and remain in a persistent vegetative state, requiring maintenance care for the remainder of their lives. (Very few families can maintain them and most of these reside after awhile in special units in nursing homes. Those with only Medicaid and no funds have worsening levels of care.)

*(2) Extremely Severe Dependency.*—Those people spend a great deal of time in an ICU unit and still more in a rehab hospital. They need extensive services for many years. Most of these will need total care for the remainder of their lives, and most run out of health insurance funds, relying only on Medicaid and Medicare.

*(3) Moderate Dependency.*—Mostly severe behavioral problems. These people spend one to three years in ICU units and rehab hospitals. They still require caregiving in many areas and cannot generally function without supervision once released.

*(4) Behavioral Dependency.*—These people spend time in ICU units then several months in rehab hospitals. They generally bounce from program to program, and often wind up in institutions or on the streets. Most of them wind up with only Medicare and Medicaid funding.

*(5) "Walking Wounded."*—These are people whose time in hospitals vary from almost no time to a few months. They generally require a minimum of services but generally have a difficult time being productive for the rest of their lives.

It is impossible to determine exact breakdown or functional levels of persons with traumatic brain injury. Suffice it to say, however, that the following statistics would be true:

(1) 5,000 persons per year—persistent vegetative state

(2) 15,000 remain severely disabled

(3) 30,000 remain moderately disabled

(4) 8,000 have severe behavioral problems

(5) 14,000 walking wounded

Note:—There are still others who have head injuries and accidents who could fit into the last category, but have few, if any, initial costs.

My best estimate is that 50% of those with severe head injury start out with some form of commercial insurance, either Blue Cross/Blue Shield, HMO or a PPO. Another 15-20% might be Medicaid eligible. The remainder have no coverage at all. By the third year, 85% have no coverage; 60% of these might draw on Medicare/Medicaid.

The attached table, Hypothetical Needs/Cost for 1989, is a reasonable estimate of traumatic head injury costs today in the United States. The staggering needs/cost of $61 billion certainly would be mitigated with improved highway safety laws. Additionally, the taxpayer would find relief in reduced Medicare and Medicaid funding requirements. The above cost considerations do not speak of the family grief and hardships, as well as the loss of income that are part and parcel in head injury.

Of the almost 70,000 who are injured annually, 50,000 will never be productive again. The average profile for a person with traumatic brain injury is an age 27 male. We can look at the figures for lost wages in a number of ways. Each year there is approximately $1 billion lost in wages from these people. If we look at the years preceding 1989, we are probably talking about $10 billion in lost wages and at least $4 billion in Social Security Disability Income funds.

These figures have been adjusted for those states that have passed seat belt laws. With mandatory seat belt and helmet laws, the real change in costs among those with moderate and severe disabilities, as well as those who remain in a vegetative state would be enormous. If all states were to uphold these laws, it is believed that the real cost to the taxpayer might be cut by approximately 40%.

Sincerely,

JANE MATTSON,
*OTR/L, CRC, CIRS.*

Enclosure.

*Hypothetical needs/cost for 1989*

| | Millions |
|---|---|
| I. Persistent vegetative state: | |
| 5,000 first year at $250,000/year | $1,250 |
| 45,000 at $100,000/year maintenance | 4,500 |
| (Assume 50 percent cost reduction at 75 percent Medicare/Medicaid = $2,156,000,000/year.) | |
| II. Severely disabled injury: | |
| 15,000 first year at $320,000/year | 4,800 |
| 140,000 severe survivors at $150,000/year maintenance | 21,000 |
| (Assume 50 percent cost reduction at 75 percent Medicare/Medicaid = $9,675,000,000/year.) | |
| III. Moderate injury: | |
| 30,000 first year at $250,000/year | 7,500 |
| 60,000 ongoing maintenance at $180,000/year | 10,800 |
| 180,000 minimum maintenance at $50,000/year | 9,000 |
| (Assume 50 percent cost reduction at 75 percent Medicare/Medicaid = $10,237,000,000/year.) | |
| IV. Behavioral problems: | |
| 8,000 first year at $200,000/year | 1,600 |
| 24,000 ongoing maintenance service at $180,000/year | 4,320 |
| 40,000 minimum maintenance at $50,000/year | 2,000 |
| (Assume 50 percent cost reduction at 75 percent Medicare/Medicaid = $2,970,000,000/year.) | |
| V. Walking wounded: | |
| 14,000 first year at $100,000/year | 1,400 |
| 112,000 maintenance at $10,000/year | 1,120 |
| (Assume 50 percent cost reduction at 75 percent Medicare/Medicaid = $945,000,000/year.) | |
| Total annual estimated needs/cost | 61,865 |
| Total annual Medicare/Medicaid | 25,983 |

---

DEPARTMENT OF CALIFORNIA
HIGHWAY PATROL,
*Sacramento, CA, March 8, 1989.*

Mr. ANDREW MCGUIRE,
*Executive Director, Mary Martin Trauma Center, San Francisco, CA.*

DEAR MR. MCGUIRE: The Governor asked me to respond to your letter about California Highway Patrol motorcycle officers wearing helmets.

Since January, 1975, CHP motorcycle officers have driven more than 13 years and 80,819,309 miles without a fatality. We attribute this zero fatality rate to two important factors: training and helmet use. The CHP's fatality rate contrasts sharply with the 1986 national fatality rate for motorcycle riders of 36 deaths for each 100 million miles driven, as estimated by the National Federal Highway Administration.

The CHP has always trained its motorcycle officers. However, in 1968 we redesigned our motorcycle training program, placing more emphasis on defensive driving techniques that help officers avoid accidents. In the mid-1970s, the Department further enhanced its motorcycle training efforts by developing an intensive three-day program in which officers participate every two years. In addition, officers must receive eight hours of training every quarter at their local offices.

The CHP began using motorcycle helmets October 1, 1956. Since that time, CHP motorcycle officers have been required to wear helmets while operating Departmental motorcycles as a condition of their employment with the CHP. The before and after fatality rate results of wearing motorcycle helmets and participating in intensive training programs are shown below:

| | Number Fatalities | Number of Miles Driven | Rate of Fatalities |
|---|---|---|---|
| 1. Pre-Helmet (1/1/29–10/1/56) | 47 | 112,563,488 | 41.75 |
| 2. Post-helmet (10/1/56–12/31/88) | 23 | 219,571,669 | 10.47 |
| 3. Post-helmet/intensified training (1/6/75–12/31/88) | 0 | 80,819,309 | 0 |

[1] Rate of fatalities for each 100,000,000 miles driven.

As motorcycle helmet safety technology improved over the years, the CHP purchased newer, safer helmets. Since 1970, it has been CHP policy to replace motorcycle helmets every five years to take advantage of new technology as well as to assure that helmets do not deteriorate because of age. All current CHP motorcycle helmets meet the 1985 Snell Foundation standards, which meet and exceed both the American National Standards Institute (ANSI Z90) and Department of Transportation (DOT-218) standards. The Snell Foundation is a nonprofit organization that developed the first helmet tests and established performance standards for helmets.

It also has been, and continues to be, CHP policy to replace any officer's helmet that has been impacted, even though it may have sustained no visible damage. The crushable liner of the helmet is designed for single impact protection and the integrity of the protection system of a helmet worn by a CHP officer must be fully maintained.

I have given you this rather lengthy history of the CHP's motorcycle officer training program and helmet use to substantiate my answer to your question—yes, CHP motorcycle officers should wear helmets; they must also be trained. The combination of training and helmet use has greatly reduced the fatal and injury accidents incurred by our motor officers.

I trust that this information has been helpful. I appreciate this opportunity to explain the life-saving effect helmets have had in the CHP. Please let me know if I can be of further assistance.

Sincerely,

M.J. HANNIGAN,
*Commissioner.*

---

A STATEWIDE SURVEY OF PUBLIC OPINION ON THE PROPOSED MANDATORY SAFETY BELT LEGISLATION, MARCH 29, 1989

EXECUTIVE SUMMARY

*Methodology*

A survey of 403 Rhode Islanders was conducted to determine attitudes towards safety belt and the mandatory safety belt law. Respondents were contacted through random digit dialing techniques. Sex and region were controlled for and call back procedures were utilized to minimize the likelihood of the sampling containing a disproportionate number of people more likely to be home.

*Sample*

A description of the sample is as follows:

Sex: Males, 48.4 percent; Females, 51.6 percent.

Region:

Blackstone Valley—23.3 percent, Burrilville, N. Smithfield, Smithfield, Woonsocket, Cumberland, Lincoln, Central Falls, Pawtucket.

Providence—17.6 percent.

Suburbs—23.3 percent, Cranston, Warwick, E. Greenwich, W. Warwick, Johnston, N. Providence.

East Bay—19.1 percent, includes Newport, Middletown, Portsmouth, Jameston, East Providence, Barrington, Bristol, Warren, Tiverton, Little Compton.

Southern R.I—9.7 percent, Exeter, No. Kingstown, So. Kinstown, Hopkinton, Richmond, Westerly, Charlestown, Narragansett, Block Island.

West—6.9 percent.

Age: 18-24, 14.9 percent; 25-34, 28.0 percent; 35-44, 23.6 percent; 45-59, 15.9 percent; 60 plus, 17 percent.

SUMMARY OF FINDINGS

How do Rhode Islanders feel about mandatory safety belt laws?

71.7% of all respondents favor mandatory safety belt laws (42.4% favor them strongly).

Who is more/less likely to favor mandatory safety belt laws?

The heavier the use, the more likely they are to favor mandatory safety belt laws. However, those indicating light usage while driving are split on the issue (47.9% favor, 48.7% oppose).

East Bay and South County residents are more likely to favor (79.2 and 76.9 respectively)

A higher percentage of women favor the law (76.4%—66%)

Those driving more than 20,000 miles per year are less likely to favor the law (64.3% favor)

Those who think safety belts are only somewhat effective, as opposed to very effective are less likely to favor the law (Very: 81.4% favor, somewhat: 64.4%)

More than 80% of those in the 45-54 and 60-64 age categories favor the law, while the least support comes from the 30-34 age group (64.3% favor) and the 40-44 age group (65.2% favor)

Respondents with 2 or more children are more likely to favor mandatory laws (roughly 80%)

Why do people oppose mandatory safety belt laws?

For all respondents, the strongest reason to oppose was the enforcement issue: 44.9% said it was a strong reason and 16.9% somewhat of a reason.

While respondents considered violation of rights to be a strong reason or somewhat of a reason for opposing mandatory seat belt laws, well over half of these people still favor such laws.

What are the effects of various arguments on mandatory safety belt laws?

The argument that non-usage of safety belts raises insurance rates was the strongest argument in persuading opponents of the law to be more inclined to favor it. Overall, 72% said that they would be much more or somewhat more likely to support mandatory safety belt laws based on that argument. Of those opposed to such a law, 36.5% said they would be much more or somewhat more likely to support the law if it affected the rates of health insurance costs. 60.6% said it made no difference.

When told safety belt laws were effective in increasing usage 81.7% of those opposed said it makes no difference and only 16.3% were much more or somewhat more likely to support (only 1.9% much more likely) mandatory seat belts laws

When told there were less deaths and injuries in states with laws, 63.8% said the argument made no difference, while 30.8% said they were much more or somewhat more likely to support the law.

The fact the Massachusetts repealed its mandatory safety belt law had little effect on respondents' opinions regarding a Rhode Island law.

The fact that 31 other states have a mandatory safety belt law made no difference to 89.4% of those opposing the law.

What effect will a mandatory law have on safety belt usage?

Overall, 78.2% said they would wear a safety belt always or most of the time (59.1% always) if a mandatory safety belt law existed.

Almost half of those opposing the law said they would wear a safety belt always or most of the time if such a law existed.

How strictly should laws be enforced?

Of all respondents, 79.9% felt the law, if passed, should be very or somewhat strictly enforced (very—47.5%). Those favoring the law favored stricter enforcement (90.3% very of somewhat with 54% very) and those opposed less strict (53.8% very or somewhat with 31.7% very).

Are safety belts needed with air bags?

41.2% felt they were needed, 14.4% responded no, while 44.4% did not know.

---

INTERIM HEARING OF THE SENATE TRANSPORTATION COMMITTEE, NOVEMBER 9, 1987, STATE CAPITOL, SACRAMENTO, CA,. ON MOTORCYCLE HELMET USE

Committee members: Wadie P. Deddeh, Chairman; Marian Bergeson, Robert G. Beverly, Jim Ellis, V. Ch., Cecil Green, Gary Hart, Quentin L. Kopp, Rebecca, Q. Morgan, Dan McCorquodale, Alan Robins, Newton R. Russell, John Seymour, Rose Ann Vuich.

Committee staff: Mehdi Morshed, Staff Director; Steven J. Schnaidt, Senior Consultant, Jone D. McCarthy, Committee Secretary. Reported by: Evelyn Mizak, Shorthand Reporter.

Chairman DEDDEH. Thank you very much.

Our next two witnesses are from the Motorcycle Safety Foundation, Mr. Peter Fassnacht and Dave Clark.

Mr. FASSNACHT. Thank you, Mr. Chairman and Committee Members. My name is Peter Fassnacht, and I am the Vice President of the Motorcycle Safety Foundation.

I might point out that I am an active motorcyclist, as is my wife and most of our friends.

I have with me today Mr. David Clark, who's our Director of Research. And we would both like to offer you some comments about the research observations that we have monitored and the issues relating to the subject at hand.

By way of background, the Motorcycle Safety Foundation is a national not-for-profit organization. Our national resource offices are located in Costa Mesa, California.

Our purpose is to improve the safety of motorcyclists on the nation's streets and highways. Our staff are active in the development and promotion of rider training programs that train in excess of 75,000 motorcyclists each year. They work in conjunction with various state government agencies to research and develop ways to implement effective operator licensing tests. They conduct program-related research, public awareness campaigns for motorists and motorcyclists alike.

This safety interest extends to the California citizens who operate some 700-plus thousand motorcycles registered in this State.

I'd like to provide to you some vital information that will contribute to your understanding of the use of helmets, but first I'd like to express policy concerning helmet use that is our Foundation's position.

The Motorcycle Safety Foundation and its member companies strongly recommend the use of a Department of Transportation (DOT) approved helmet—and from this point on, whenever I refer to helmets, we refer to an approved helmet. They do need to meet certain minimum standards—at all times when riding a motorcycle, scooter or moped.

Accident analyses show that head and neck injuries account for a majority of serious and fatal injuries to motorcyclists. Research also shows that, with few exceptions, head and neck injuries are reduced by the proper wearing of an approved helmet.

Adopting a law requiring helmet usage has been shown to raise the 40-50 percent voluntary helmet use level to that of over 90 percent. While the safety and economic benefits of such laws are obvious, the Board of Trustees of the Motorcycle Safety Foundation believes any decision to mandate a helmet usage should be made by the citizens and the Legislators of each State.

However, the Motorcycle Safety Foundation, in its commitment to programs to reduce accidents and injuries, will not oppose the mandatory use of helmets if the Legislature determines it is in the best interests of the State. Further, we will continue to require the use of helmets for all instructors and students participating in Motorcycle Safety Foundation courses and activities at recognizing training sites.

Helmet use, along with rider education, operator licensing and public awareness to prevent accidents from occurring, is an important component of a comprehensive motorcycle safety program. The Motorcycle Safety Foundation is committed to these programs and will continue to cooperate as an information resource with parties involved in motorcycle safety issues.

On the subject of any offsetting or disadvantages in the use of helmets, I'd like to offer some additional comments.

As you may have become aware, the mandatory use of helmets has generated considerable opposition. I do not wish to address the social issues of lawmaking; however, I feel it is necessary to address the misinformation spread by helmet and mandatory use law opponents.

These folks often try to make you believe that helmets cause neck injuries; they impair hearing; or they constrain vision, or cause overheating. These points are simply not supported in fact.

Without a doubt, not having a helmet in a crash or collision situation is far worse than having one, and most importantly, the simple truth is that no one has the ability to predict when they're going to be involved in a crash or collision. The logic is quite obvious, that wearing a helmet at all times is the most prudent approach. They can happen any time, some would say especially when you least expect it.

The primary cause of neck injuries, with or without a helmet, is the crash or collision that the unfortunate motorcyclist is involved in. And while we heard a great deal about the relative risks of the individuals involved in motorcycling, the most typical or dominating crash experience is one where an automobile driver somehow violates the path of the motorcyclist and causes the collision. So, the relative risk of the individual involved may be of little point when the cause of the accident may in fact be beyond the immediate control of the rider.

Helmets do reduce the sound level to the rider; however, they do this to all sounds. It's important for us to understand this, because it's a factor that you hear very often. In order for a rider to take advantage of sound to avoid collisions, that sound has to be louder than the other sounds around him. Just as I can hear you in this room, it's because your sounds are louder than the ambient sounds of the air conditioning, or the rumbling of the audience present.

If it is, as are the sounds here, you can hear it. Helmets do moderate or reduce the sound somewhat, but it does it to all sounds.

Helmets can reduce wind noise, which can be of significant benefit, and wind noise is a significant distracter to the driving task. So on the point of hearing, I'd like to say if you can hear it, you'll be able to hear it, and that helmets can reduce the wind noise that will permit you to hear some of those sounds around you that may or may not help you.

It's also very important to point out that research in motorcycle accident causes has not identified one instance where hearing something would have provided that rider with any kind of an advantage in having to deal with that collision or avoid that collision. Simply put, if you can hear the cause of the accident that's about to occur, it's too late. A helmeted rider can hear more than the insulated cars with stereos blaring, in any case.

The important point is that vision dominates the rider collision information gathering system. Most accidents that occur, occur with situations that occur or that develop immediately in front of the rider, which is well within their visual field. Which raises the issue of vision.

Helmets do not restrict a rider's ability to see, especially those situations most critical to the rider developing in front of him.

While it is true that helmets intrude slightly into the complete human visual field, they do so to protect the head regions, the vital face and temple regions, not to do anything other than that.

Senator RUSSELL. Question.

You're saying that the helmets do impair peripheral vision?

Mr. FASSNACHT. I'm saying that humans have the ability in their peripheral field, to see a very wide region. In some helmets, those that meet approvals, that can be in the immediate or the far reaching of the peripheral field. They can do that. They do that in order to protect that region of your face that is right adjacent to your eyes.

Senator RUSSELL. I thought we heard this morning that they are required to not protrude beyond the 4:00 o'clock area, which would be behind them in 180 degree peripheral vision.

Mr. FASSNACHT. That's true, but in terms of the maximum or the field that people are able to see, it does extend quite wide. It's very close to the limits of human vision.

Senator RUSSELL. With some slight reduction in peripheral vision.

Mr. FASSNACHT. I think a more important point, though, and this is very important to the traffic safety issue relating to whether or not a helmet intrudes into that field, is that they don't prevent the rider from moving his eyes. You are allowed to turn your eyes from one side to another, and more importantly, you are allowed to turn your head, as you would in your automobile, scanning mirrors, checking over your shoulder for other traffic. That's a task that's demanded of all of our drivers and should not be unexpected in a motorcyclist.

One of the issues raised is that of overheating, and another fact is that helmets do not cause overheating. When it's uncomfortably hot outside, it's uncomfortably hot, whether or not you're wearing a helmet, riding a motorcycle, or driving a car, walking down the street.

A recent study done by Bob Carpenter in "Road Rider" magazine, a respected editor who has a great deal of—intense respect for truth in motorcycling, shows quite clearly that while surface temperatures on a motorcycle helmet can get quite hot in the hot sun, and I quote:

"Temperatures inside a properly fitting helmet rarely rise more than one or two degrees above normal body temperatures."

And that helmet interior temperature tends to stabilize at or near body temperature even when it's colder, and it can be much colder, outside. So in most helmets, there is a beneficial heatrelated effect. The potential in those helmets can moderate against the potentially fatal effects of hypothermia, whose early stages are very much like alcohol intoxication.

We have with us today a video tape program prepared by Professor Hurt and his research staff at the University of Southern California as a part of their major research study done earlier this decade. It addresses the issues relating to helmet effectiveness, and it reviews specific case studies showing similar situations, riders under similar conditions, going to their destinations and being involved in similar crashes, one rider being without the benefit of a helmet, and the other being with the benefit of a helmet. It identifies quite clearly the positive effect that that has shown.

In the interests of time, I'm not able to show this film to you. However, I will submit it to the Committee. I urge you to review this privately or in your post-hearing considerations.

I also have with me for your review a Motorcycle Information Kit, published by and distributed by the Motorcycle Industry Council, who we work closely with, who incidentally are in favor of mandatory helmet use laws.

I'd like to now turn this portion of our presentation over to our Director of Research, Mr. Dave Clark.

Senator RUSSELL. May I just ask a question?

Would you share with us your training in statistical analysis?

Mr. CLARK. Certainly.

I have my Bachelor's Degree in mathematics, and my Master's Degree is in business administration, and I have an emphasis in quantitative methods and marketing.

Senator RUSSELL. Thank you.

Mr. CLARK. It is the Motorcycle Safety Foundation's belief that there are no significant disbenefits associated with helmet use. The major USC study, "Motorcycle Accidents Cause Factors and Identification of Countermeasures", provides strong evidence to this fact, and no substantial research has come to MSF's attention to the alternative.

While the research by Dr. J.P. Goldstein attests that helmet use increases the severity of neck injuries past a critical impact velocity to the helmet, based upon my experience and statistical work, I feel that the

technical problems are so great in this study that the results cannot be relied upon. These technical problems include very small and incomplete sample base, nonindependent variables, and based upon comments from Professor Harry Hurt, faulty equations and definitions within the report.

Furthermore, Leonard Evans and Michael Frick, representing the General Motors Research Laboratories, have reported major problems in this study within a recent helmet effectiveness study.

We have provided for your review a much more detailed evaluation of Dr. Goldstein's study.

Chairman DEDDEH. Excuse me.

Is the art of sampling and studying samples, and so on, is that an abstract, undisputable science? Or could you have two studies coming to different conclusions? Is that a possibility?

Mr. CLARK. I think that as far as sample sizes, that's a pretty definite science.

Chairman DEDDEH. It's the size.

Mr. CLARK. Right.

Chairman DEDDEH. You take 100 people here, but is it not true that within the science, even medicine, that you could have two physicians, or three or four, and they'll give you two, three or four different diagnoses of what the problem is with some person, or finding? Is that not a possibility.

Mr. CLARK. Well, perhaps to some extent, but I think that, for example, in this particular situation, there is only about 50 sample sizes that they were based upon, and I think that most statisticians would say that that would be a very, very small example to make a large involved study with.

Chairman DEDDEH. Is it possible for Dr. Goldstein to take Professor Hurt's findings and say they are flawed? Is that a possibility?

Mr. CLARK. Yeah, I mean, it's possible that they could find limitations in it.

Chairman DEDDEH. Sure.

Mr. CLARK. Sure.

Chairman DEDDEH. So then, what I am trying to get from you is that while I respect what Dr. Hurt's findings are, I have no reason personally to doubt Goldstein's findings, too, unless I am biased in favor of Hurt, or I am biased against Goldstein.

Mr. FASSNACHT. Independent of a bias for the results, a review of the research by our staff uncovered a considerable number of methodological flaws that caused us great concern, especially a study that has this kind of opportunity for impact that would be used for public policy making purposes.

I would feel uncomfortable with leaving you with the notion that it's simply a matter of professional opinion. There's large numbers of very respectable researchers now who do not feel at all comfortable with the methodology used by Dr. Goldstein in his economic research.

Senator RUSSELL. Are they comfortable with Professor Hurt's——

Mr. FASSNACHT. Yes, indeed. Recognizing that in just about any form of research undertaken, including today's research opportunity, that there will be limitations.

Chairman DEDDEH. That's fair. Go ahead.

Mr. CLARK. All right.

At this point, I'd like to also provide you statistics related to motorcycle use among the states, and the use and effectiveness of helmets; specifically how do accident, injury, and fatality rates vary among states with and without helmet laws. Can any differences among states be attributed primarily to the existence or nonexistence of a helmet requirement, or are there other factors which also could account for the variations?

Based upon our current reports from the Motorcycle Safety Foundation's annual survey of states, there were 5,023,780 registered motorcycles in the U.S. in 1986. And based upon our current information as of May, '87, there were 19 states, plus the District of Columbia, with full helmet laws. And this applies to all operators, whether they have high risk or low risk, and it's required for both operators and passengers.

These 19 states, plus District of Columbia, account for 35 percent of the '86 motorcycle registrations. Also, there are 26 states, including California, which have partial helmet laws, such as for minors only. And these 26 states account for 53 percent of motorcycle registrations. And finally, there are 5 states with no helmet laws at all, and they account for 12 percent of the motorcycle registrations.

A comparison of accidents, fatalities and registrations for states with full mandatory helmet laws versus states with partial or no helmet laws during 1985 and '86 provides some evidence as to the effectiveness of helmet laws. The most important indication of helmet law effectiveness from these statistics would be fatalities per 100 accidents. In 1986, fatalities per 100 accidents were 15.7 percent less in helmet law states than in non-helmet law states. In 1985, fatalities per 100 accidents were 7.6 percent less in helmet law states than non-helmet law states.

Fatalities per 100 accidents is by far the more important indicator than some of the others that you might use, such as accidents per 10,000 registrations or fatalities per 10,000 registrations, since the primary helpfulness of a helmet is to reduce the severity of an accident once it has occurred, rather than to prevent an accident from occurring.

There are various other factors that enter into the comparability of statistics between states, one being a difference in reporting policiies. These include differing property damage thresholds, various definitions of motorcycles for reporting accidents and registrations, and some estimated figures required for states not having the requested statistics.

Another important factor that can enter into differences in statistics includes differing traffic densities. If you have different traffic patterns and road conditions, it can affect the likelihood of severe motorcycle accidents between states as well as such things as helmet laws.

Due to these additional factors, one should not rely solely on comparisons between state statistics. One should also evaluate the results of many other research studies that are available concerning helmet effectiveness.

I'd like to bring to your attention a few of these other studies that we think are very interesting and provide strong evidence as to the effectiveness——

Chairman DEDDEH. I've got three more witnesses, and I've got 30 minutes.

Mr. CLARK. Okay.

One is called "Helmet Effectiveness in Preventing Motorcycle Driver and Passenger Fatalities", and it was written by Leonard Evans and Michael Frick of the Operating Systems Research Department for the General Motors Research Laboratories. It was written on October 30th, 1986. And they, in this report, they found that helmet effectiveness in preventing fatalities to motorcycle drivers and passengers was determined by applying what they call a double pair comparison method to the Fatal Accident Reporting System, or the FARS data, for 1975 through 1984. Motorcycles with a driver and passengers, at least one of whom was killed, were used. The method focuses on two occupants: a subject occupant and an other occupant. The probabilities of a fatality to the subject occupant——

Senator RUSSELL. Mr. Chairman.

Perhaps you could summarize the report rather than tell us the details of how they got to it.

Mr. CLARK. All right.

Chairman DEDDEH. Most of it has been stated by some other witnesses really.

Senator RUSSELL. Yes. Just give us the bottom line.

Mr. CLARK. Okay.

They found that helmets are 27, plus or minus 9, percent effective in preventing fatalities to motorcycle riders. Putting it a little more simply, this study indicates that over one-quarter of motorcyclists killed without wearing helmets would still be alive had they been wearing helmets.

A second study by the same authors, same organization, is called, "Motorcyclist Fatalities and the Repeal of Mandatory Helmet Wearing Laws." And in their study, they found that after repeal, motorcyclist fatalities increased more in the states which repealed their laws that in those that did not in 24 out of 26 cases, with the average effect being 25 percent, plus or minus 6 percent. And they concluded that the repeals of mandatory helmet wearing laws for motorcyclists were followed by substantial increases in motorcycle fatalities.

Furthermore, we have many—there's many other studies that have been done by individuals—many other studies have been done by individual states providing evidence as far as the effectiveness of helmet laws. Examples are Arizona, Minnesota and Wisconsin concerning the effects of the repeal of helmet laws in their states, and Louisiana concerning the effect of re-enactment of the helmet law.

Chairman DEDDEH. Mr. Ouellet gave us that information.

Do you have something new to add, because this is all in this report.

Mr. FASSNACHT. We just have one area concerning the ability of helmets to meet federal impact standards, if that's of interest.

We can skip to that——

Mr. CLARK. All right, fine.

I'd like to provide a few results from the Hurt Report as far as the ability of helmets to meet——

Mr. FASSNACHT. I suspect you've got that from Jim Ouellet.

Mr. CLARK. All right, then we'll go on to the last part, which has to do with the low cost versus more expensive models.

Based upon an interview of Dr. Jim Newman, who has done extensive helmet testing for the Bio engineering firm, Bio Kinetics and Associates, in Canada, there is very little difference in helmets in their protection abilities. In fact, on a 1-10 scale, he rated the cheapest helmet at 8, and the most expensive at 9.

Furthermore, similar views were expressed by Jim Ouellet and Dave Thom of the USC Traffic Safety Center.

Chairman DEDDEH. We've heard that before.

Mr. FASSNACHT. We have summaries of the research cited in our presentation, and I'm prepared for a review by the Senators.

Chairman DEDDEH. We'll take them as part of the record.

Senator RUSSELL. Are you leaving the video tape?

Mr. FASSNACHT. Yes, we are.

Chairman DEDDEH. Thank you, gentleman, very much. Whatever documents you have, you leave them with us for the record. Thank you.

---

By Mr. DURENBERGER (for himself, Mr. BURDICK, and Mrs. KASSEBAUM):

S.J. Res. 131. Joint resolution to designate November 1989 as "National Diabetes Month"; to the Committee on the Judiciary.

NATIONAL DIABETES MONTH

● Mr. DURENBERGER. Mr. President, I am pleased to introduce today with my colleague Senator BURDICK, Senate Joint Resolution 131 to designate November 1989 as "National Diabetes Month."

Since 1982, a joint resolution declaring November as "National Diabetes Month" has been passed by Congress and signed into law by the President. I have had the privilege of sponsoring this resolution for 6 of the last 7 years. Thanks to the dedication and support of the American Diabetes Association and its State affiliates, which use this resolution to help focus public attention on the significance of diabetes research and education, we have been able to help spread an important message about diabetes throughout the Nation.

Approximately 11 million people in America have diabetes, and many others have been touched by a family member, neighbor, or friend who has the disease. Only 6 million of those 11 million Americans know they have the disease, and it is for this reason the National Diabetes Month resolution is so important. These individuals must be identified and given the health care they need.

Diabetes cost the United States $20.4 billion annually in direct and indirect medical expenses, disability payments, lost productivity, and absenteeism. It is a leading cause of death in this country and the leading cause of new blindness in which over 5,000 people go blind every year. In addition, diabetes is the primary cause of nontraumatic foot and leg amputations, as well as kidney disease.

Minorities—especially native Americans, Hispanic Americans, and black Americans—face an increased risk of diabetes. For example, nearly 50 percent of the population in some Pima Indian tribes have the disease. Diabetes is one-third more prevalent in the black population than in the general population.

However, we can improve these statistics and reduce the human and economic cost of diabetes. How? Diabetes is unique among chronic diseases and disorders in that careful self-monitoring by the patient with diabetes can avoid the development of some of the most serious complications. Proper diet, exercise, and medication are essential to minimize these complications through the active and informed participation of the patient with diabetes.

As you may know, one of the leading State affiliates of the American Diabetes Association is located in my home State of Minnesota. Through their work, I have seen what a State affiliate can do for people with diabetes by fostering public awareness and education. Three Minnesota institutions—the University of Minnesota, the Mayo Clinic, and the International Diabetes Center—are leading centers for diabetes research. I am very proud that the ADA Minnesota affiliate and these three research facilities have contributed so much to the Nation and the State in the field of diabetes research.

The National Diabetes Month resolution can help increase public awareness and understanding of diabetes. This in turn can increase public support for diabetes research, help develop better methods of diagnosing and treating the disease, and help the 6 million undiagnosed people with diabetes in this country seek the proper medical attention they so urgently need.

Mr. President, I urge my colleagues to support this important resolution. I ask unanimous consent that the text of the joint resolution be printed in the RECORD.

There being no objection, the joint resolution was ordered to be printed in the RECORD, as follows:

S.J. RES. 131

Whereas diabetes is a leading cause of death by disease in the United States;

Whereas diabetes affects over 11 million Americans, of whom almost 6,000,000 are not aware of their illness;

Whereas diabetes costs the Nation $20,400,000,000 annually in health care costs, disability payments, and increased mortality due to diabetes;

Whereas up to 85 percent of all cases of noninsulin dependent diabetes may be prevented through greater public understanding, awareness, and education;

Whereas diabetes is particularly prevalent among Black Americans, Hispanic Americans, Native Americans, and women; and

Whereas diabetes is a leading cause of new blindness, kidney disease, heart disease, strokes, birth defects, and foot and leg amputations, all of which can be reduced by better public understanding and awareness of diabetes; now, therefore be it

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,* that the month of November 1989 is designated as "National Diabetes Month." The President is authorized and requested to issue a proclamation calling upon the people of the United States to observe that month with appropriate ceremonies and activities.●

---

By Mr. SASSER (for himself, Mr. STEVENS, AND Mr. WILSON):

S.J. Res. 132. Joint resolution designating September 1 through 30, 1989, as "National Alcohol and Drug Treatment Month"; to the Committee on the Judiciary.

NATIONAL ALCOHOL AND DRUG TREATMENT MONTH

● Mr. SASSER. Mr. President, I rise today to introduce a joint resolution designating the month of September 1989 as "National Alcohol and Drug Treatment Month." This joint resolution is cosponsored by my colleagues from Alaska [Mr. STEVENS], Florida [Mr. GRAHAM], and California [Mr. WILSON].

The designation of this special month will encourage a focus on the positive contributions alcohol and other drug abuse treatment services provide in assisting those suffering from alcoholism and other drug addiction to recover and rebuild their lives. Treatment serves as the bridge from dependence to independence from alcohol and other drugs.

Because alcohol and other drug abuse are complex problems involving biological, psychological, and social factors, a variety of approaches are needed to break their grip on our society. Aggressive law enforcement can limit the availability of illicit drugs. Workplace programs and drug testing can motivate occasional users who have not responded to other approaches. A national alcohol and drug abuse strategy can control the impact on society of these severe cases and reduce the demand for illicit drugs.

Dependence on alcohol or other drugs is a chronic disease. A 1985 National Household Survey on Drug Abuse showed that approximately 23 million Americans currently use illicit drugs. Of these, more than 6.5 million people are severely dependent on heroin, other opiates, amphetamines, and cocaine. The majority of these persons cease to function in legitimate social roles and often engage in criminal behavior as part of their drug-using lifestyle. This group accounts for the bulk of the social and economic problems commonly associated with drug abuse and provides a continuing market for the illicit drug distribution system.

In addition, more than one-third of U.S. families are affected by alcoholism and an estimated 10 million Americans are problem drinkers or alcoholics. And alcohol abuse during pregnancy is one of the leading causes of mental retardation in infants and is the only preventable cause.

Acquired Immunodeficiency Syndrome [AIDS] has added a new urgency to the need to address the Nation's critical intravenous [IV] drug abuse problems. Because shared needles can transmit the AIDS virus, IV drug users constitute a growing percentage of the pediatric AIDS cases are related to IV drug use by one or both parents of the infant. Drug abuse treatment can reduce the rate of spread of AIDS to

minimize the tragedy of lives lost and the immense national economic costs.

Alcohol and other drug abuse treatment provides an effective means toward independence from substance dependence and is a necessary element in solving the problems associated with drug and alcohol abuse. Treatment can reduce criminality, as well as increase stable employment, progress in schools, healthy relationships, higher self-esteem and overall improvement in general health.

A broad coalition of constituency groups in the alcohol and drug field are urging the support of National Alcohol and Drug Treatment Month.

LIST OF GROUPS

Alcohol and Drug Problems Association of America.

American Academy of Pediatrics.

American Council for Drug Education.

American Medical Society on Alcoholism and Other Treatment Dependencies.

American Hospital Association.

American Psychological Association.

American Public Health Association.

Americans for Substance Abuse Prevention and Treatment.

American Youth Work Center.

Association of Labor-Management Administrators and Consultants on Alcoholism.

Center for Science in the Public Interest.

Children of Alcoholics Foundation, Inc.

Committee on Problems of Drug Dependence.

Families in Action Drug Information Center.

Health and Medical Council of Washington.

Legal Action Center.

National Association of Alcohol and Drug Abuse Counselors.

National Association of Addiction Treatment Providers.

National Association of Black Substance Abuse Workers, Inc.

National Association of State Alcohol and Drug Abuse Directors.

National Black Alcoholism Council.

National Council on Alcoholism.

Northeast Methadone Coalition.

Therapeutic Communities of America, Inc.

Mr. President, I urge my colleagues to support National Alcohol and Drug Treatment Month and help call attention to the positive contributions that substance abuse treatment can make to our Nation's efforts to decrease the demand for drug and alcohol. I ask unanimous consent that the text of the joint resolution be printed in the CONGRESSIONAL RECORD.

There being no objection, the joint resolution was ordered to be printed in the RECORD, as follows:

S.J. RES. 132

Whereas alcohol and other drug abuse and dependence are major public health problems that are preventable and treatable;

Whereas the economic costs to society of alcohol and drug abuse in 1983 alone were over $176,000,000,000;

Whereas alcohol and drug abuse treatment provides an effective means toward independence from substance dependence and is a necessary element in solving the problems associated with alcohol and other drug abuse;

Whereas more than one-third of the families of the Nation are affected by alcoholism and an estimated 10,000,000 Americans are problem drinkers or alcoholics;

Whereas alcohol abuse during pregnancy is one of the leading causes in the Nation of mental retardation in infants and is the only preventable cause;

Whereas over 70 percent of the pediatric acquired immunodeficiency syndrome cases are related to intravenous drug use by one or both parents of the infant;

Whereas drug abuse treatment is an effective way of preventing the spread of AIDS among intravenous drug abusers;

Whereas alcoholism and drug dependence are illnesses requiring prevention, treatment, and rehabilitation through the assistance and cooperation of a broad range of Federal, State, and local health, law enforcement, and social service agencies, families, employers, employees, and organizations concerned about alcohol and other drug abuse; and

Whereas despite our national policy goal of making treatment available to all who request it, the existence of waiting lists highlights the need to increase the availability and quality of alcohol and other drug treatment services: Now, therefore, be it

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,* That September 1 through 30, 1989 is designated "National Alcohol and Drug Treatment Month", and the President is authorized and requested to issue a proclamation calling upon the people of the United States to observe that month with appropriate ceremonies and activities.●

---

By Mr. SPECTER (for himself and Ms. MIKULSKI):

S.J. Res. 133. Joint resolution designating October 1989 as "National Domestic Violence Awareness Month"; to the Committee on the Judiciary.

NATIONAL DOMESTIC VIOLENCE AWARENESS MONTH

Mr. SPECTER. Mr. President, today I am introducing a joint resolution to designate October 1989 as "National Domestic Violence Awareness Month." This resolution is the successor of Senate Joint Resolution 371, which I introduced in the 100th Congress. I am joined in this effort by my colleague from Maryland, Senator MIKULSKI.

According to the U.S. Department of Justice, 95 percent of all assaults on spouses or ex-spouses from 1973 to 1977 were committed by males. In 1984, U.S. Surgeon General C. Everett Koop reported that domestic violence is the single largest cause of injury to women in the United States.

Domestic violence affects urban and rural women of all racial, social, religious, ethnic, and economic groups, and of all ages, physical abilities, and lifestyles. Therefore, it is fitting that we focus attention on the growing national tragedy of domestic violence, and demonstrate our support for those individuals and organizations working to address it.

Mr. President, the incidence of domestic violence nationwide is staggering. According to the National Coalition Against Domestic Violence, over 50 percent of all married women experience some form of physical abuse in their relationships. But the violence does not end there. A 1984 independent study by Ms. Lenore Walker, author of "The Battered Woman Syndrome," found that 53 percent of abusive husbands beat their children as well as their wives, and that this violence is frequently repeated. During 1986, the National Coalition members provided shelter to more than 311,000 women and children from their unsafe homes.

In my own State of Pennsylvania, the incidence of domestic violence is especially acute. Between July 1987 and June 1988, hotlines throughout the Commonwealth handled 128,362 abuse-related calls. The Pennsylvania Coalition Against Domestic Violence, headquartered in Harrisburg, PA, operates 39 shelters, 8 counseling centers and safehomes, and 12 hotlines throughout the Commonwealth. The Pennsylvania Coalition reports that during their 1987-88 fiscal year these facilities provided services to 63,197 persons, 51,239 of whom were victims of domestic abuse. The coalition members also provided 396,629 hours of counseling to victims and their children, and 147,424 shelter days to 17,409 battered individuals.

Statistics show that there is a growing need for such facilities. The Pennsylvania Coalition reported an 11-percent increase in the number of shelter recipients and a 7.9-percent increase in the number of counseling recipients during the 1987-88 fiscal year. The total number of victims seeking aid is expected to continue to increase. To address this need, the coalition plans to open three new shelters to serve Allegheny, Butler, and Huntingdon Counties in Pennsylvania.

Unfortunately, despite these extensive efforts, existing shelters are as yet unable to meet the needs of all the victims. The Pennsylvania Coalition reported that in fiscal year 1987-88, shelters were forced to turn away 8,639 women and children—an increase of 19.5 percent over the previous year's rejection rate. According to national statistics provided by the National Coalition Against Domestic Violence, for every woman sheltered, two women in need of shelter must be turned away due to lack of space.

Mr. President, I long have been concerned about the devastating effects of domestic violence on American families. As the former district attorney of Philadelphia, I have witnessed firsthand the tragic consequences of domestic abuse cases. Accordingly, I commend the efforts of the Pennsylvania Coalition Against Domestic Violence, the National Coalition Against Domestic Violence, the National Network for Victims of Sexual Assault, and similar

organizations that take such an active role in combating domestic abuse.

Mr. President, I ask unanimous consent that the joint resolution be printed in the RECORD.

There being no objection, the joint resolution was ordered to be printed in the RECORD, as follows:

S.J. RES. 133

Whereas it is estimated that a woman is battered every fifteen seconds in America;

Whereas domestic violence is the single largest cause of injury to women in the United States, affecting three million to four million women;

Whereas urban and rural women of all racial, social, religious, ethnic, and economic groups, and of all ages, physical abilities, and lifestyles are affected by domestic violence;

Whereas 30 per centum of female homicide victims in 1986 were killed by their husbands or boyfriends;

Whereas one-third of the domestic violence incidents involve felonies, specifically, rape, robbery, and aggravated assault;

Whereas in 50 per centum of families where the wife is being abused, the children of that family are also abused;

Whereas some individuals in our law enforcement and judicial systems continue to think of spousal abuse as a "private" matter and are hesitant to intervene and treat domestic assault as a crime;

Whereas in 1986, over three hundred and eleven thousand women, plus their children, were provided emergency shelter in domestic violence shelters and safehomes and the number of women and children that were sheltered by domestic violence programs increased by nearly one hundred thousand between 1983 and 1986;

Whereas for every one woman sheltered nationwide, two women in need of shelter may be turned away due to a lack of shelter space;

Whereas the nationwide efforts to help the victims of domestic violence need to be coordinated;

Whereas there is a need to increase the public awareness and understanding of domestic violence and the needs of battered women and their children; and

Whereas the dedication and successes of those working to end domestic violence and the strength of the survivors of domestic violence should be recognized: Now, therefore, be it

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,* That October 1989 is designated as "National Domestic Violence Awareness Month". The President is authorized and requested to issue a proclamation calling on the people of the United States to observe this month by becoming more aware of the tragedy of domestic violence, supporting those who are working to end domestic violence, and participating in other appropriate efforts.

---

By Mr. LEAHY:

S.J. Res. 134. Joint resolution to designate the week of October 1, 1989, through October 7, 1989, as "National Disability Awareness Week"; to the Committee on the Judiciary.

NATIONAL DISABILITY AWARENESS WEEK

● Mr. LEAHY. Mr. President, I am pleased to introduce today a joint resolution designating the week of October 1, 1989 as National Disability Awareness Week.

In its 1986 report, "Toward Independence," the National Council on Disability wrote:

People with disabilities have been saying for years that their major obstacles are not inherent in their disabilities, but arise from barriers that have been imposed externally and unnecessarily.

These barriers are forms of discrimination—in employment, housing, public accommodations, public services, transportation, and communication.

Last week, I joined 32 other Senators in sponsoring the Americans with Disabilities Act. The purpose of this historic legislation is to provide a clear and comprehensive mandate for the elimination of discrimination against persons with disabilities. Much of the work of the bill comes out of the National Council's report which recommended the legislation we introduced.

We can change the law—and it is my hope that we will pass the Americans with Disabilities Act this Congress—but we also must change the attitudes, the fear and misunderstanding that are so often the roots of discrimination. That is what my resolution seeks to do.

I want America's 37 million citizens with disabilities to be recognized for their abilities, not their disabilities. Every October, the Vermont Association of Business Industry and Rehabilitation [VABIR], coordinates a Vermont disability awareness day conference which does just this. The conference educates employers on how to hire, provide access and accommodate people with disabilities. Exhibitors display equipment and provide information valuable not only for hiring, but also for retraining employees who become disabled. I am proud to be an honorary chairperson of the Vermont Disability Awareness Conference because it helps change people's attitudes about disabilities, and more specifically, it helps to remove the barriers that prevent persons with disabilities from entering the workforce.

America's 37 million citizens with disabilities deserve an equal opportunity to fully participate in and contribute to this society. I hope you will join me in recognizing these rights by cosponsoring this important resolution.

Mr. President, I ask unanimous consent for the text of the joint resolution to be printed in the RECORD.

There being no objection, the joint resolution was ordered to be printed in the RECORD, as follows:

S.J. RES. 134

Whereas 37 million individuals in the United States have disabilities (such individuals are hereinafter referred to as "Americans with disabilities"), and over 25 percent of Americans with disabilities have more than one disability;

Whereas one out of every twelve individuals in the United States copes with some form of disability;

Whereas although nearly three out of every four individuals without a disability in the United States have at least a high-school education, the rate for Americans with disabilities is just slightly more than one in every two;

Whereas an American with a disability is two and one-half times as likely to have an income that falls below the poverty line than is a nondisabled individual in the United States;

Whereas the population of Americans with disabilities will increase dramatically over the next two decades as the ability of science of medical technology to prolong human life continually improves;

Whereas disabilities increasingly affect the people of the United States;

Whereas one working-age black American in every seven has a disability;

Whereas 31 million individuals in the United States have some form of activity limitation;

Whereas 8.2 million individuals in the United States have a visual impairment;

Whereas 17 million individuals in the United States have a hearing impairment;

Whereas 18.4 million individuals in the United States have an orthopedic disability;

Whereas 4.2 percent of all children under the age of 21 in the United States have a chronic activity limitation;

Whereas 3 percent of all school-aged children in the United States have a learning disability;

Whereas 50,000 school-aged children under the age of 18 in the United States have an emotional or behavioral disability;

Whereas 5 percent of American school-aged children in the United States have speech and language disabilities;

Whereas most Americans with disabilities recognize that Federal laws passed since the late 1960's have helped to give better opportunities to Americans with disabilities;

Whereas most Americans with disabilities strongly endorse efforts by the Federal Government to enhance the lives of persons with disabilities;

Whereas most Americans with disabilities are not alone in believing that individuals with disabilities should be protected by law from discrimination; and

Whereas the people of the United States can express their concern for all Americans with disabilities by recognizing such Americans' right to participate as integral members of our society: Now, therefore, be it

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,* That the week of October 1, 1989, through October 7, 1989, is designated as "National Disability Awareness Week", and the President of the United States is authorized and requested to issue a proclamation calling upon the people of the United States to observe that week with appropriate ceremonies and activities.●

---

By Mr. PELL (for himself, Mrs. KASSEBAUM, and Mr. GORE):

S.J. Res. 135. Joint resolution to establish a National Commission on Human Resource Development; placed on the Calendar.

NATIONAL COMMISSION ON HUMAN RESOURCE DEVELOPMENT

Mr. PELL. Mr. President, today I introduce on behalf of myself, Mrs.

KASSEBAUM, and Mr. GORE a joint resolution to establish a National Commission on Human Resource Development.

This measure originally was introduced in the 100th Congress as Senate Joint Resolution 368, and hearings were held before the Subcommittee on Education, Arts and Humanities of the Committee on Labor and Human Resources. There are slight but important changes between this measure and Senate Joint Resolution 368. One of these changes reflects the interest shown in the Commission and its charter by the academic community and industry. We were asked to create a vehicle by which these two groups could formally associate themselves with the Commission and make a direct contribution to its activities. An Academic and Industry Advisory Council has been added to provide that opportunity.

The purpose of this Commission is straightforward and in my view highly important. It is intended that the Commission go to the American public in a series of regional meetings. By the use of surveys and open direct dialog, the Commission will ask what order to function at the upper limits of the capability that is each individual's by birthright. The Commission will solicit views from the public on the role of the individual, family, community and government in researching and implementing techniques designed to increase fulfillment of human potential. It assumes that it is a normal aspiration of all citizens to more completely realize their full human potential. It is accurate to say that the real health and wealth of our Nation is in the realized potential of its citizens.

There have been exciting scientific findings in regard to the extent of human potential. For example, there are findings concerning the role that the mind can play in influencing the body's immune system. We are approaching the point at which doctors and patients alike need to know if there is a practical role the patient can play in this regard. I don't know what the proposed Commission will find, but even the most modest increases in creativity and health can have large social and economic impact.

I suggest that every problem our Nation and the world faces will yield to solutions in direct proportion to the number of citizens who are actively seeking to achieve personal excellence, and believe that the techniques for attaining fuller potential can be identified.

It is a modest step for the Federal Government to establish this Commission. No appropriated funds are being requested. The Commission is charged to raise its own operating funds from private and foundation resources.

The Commission I propose would be composed of 25 commissioners to be appointed by the President and the Congress. The measure calls for citizens with specific training and experiences, and as far as practicable would reflect the ratio of women and men and the diversity of the population of the United States. They will range in age from high school students to the retired community.

The legislation acknowledges the belief that it is a shared responsibility of the individual, the family, the community and the Nation to provide knowledge, and opportunity to increase personal excellence and to fulfill human potential.

The Commission will seek out practical, proven techniques to improve human performance. With expert scientific advice, it will recommend a research agenda to investigate promising but unproven techniques.

The life of the Commission will be 2 years. One of the responsibilities of the Commission will be to communicate with State governments on the advisability of establishing State Commissions on Human Resource Development. It is anticipated that implementation of the findings and recommendations of the Commission will extend for many years beyond the life of the National Commission, and that the primary focus of this activity properly is at the level of State and local governments and of the individual.

The drafting of this legislation has been influenced from many sectors. In January 1987, a meeting was held with Dr. William Graham, Science Advisor to President Reagan, on the subject of a possible Presidential Commission on Human Potential. A series of follow-on staff meetings were helpful in developing ideas on such a Commission. In October 1987, Stephan Schwartz, author, founder and president of the Mobius Society, and Richard Gunther, California business man and philanthropist, provided a 10-page statement on the subject that had been compiled from a series of meetings over 6 months with 23 highly qualified individuals who gave their reasons why it was timely to establish such a Commission. Additionally, as word of the Commission legislation spread, I have received highly supportive mail on the subject. It appears that citizen support groups for activity of the Commission are quietly and spontaneously forming.

The measure calls for the Commission to communicate through appropriate channels with foreign governments about the establishment of counterpart Commissions in anticipation of international sharing of ideas and findings on techniques designed to increase fulfillment of human potential. There are global problems in which the United States should assume its fair share, but only its fair share, of the responsibility to find solutions.

The best ideas from citizens of all the nations—individuals functioning at peak performance as teachers, laborers, scientists, managers, all walks of life—will be required. This is the charge to the work of the Commission, this is my hope for the Commission.

The Commission will have to work hard to deliver on its responsibilities, but its work will be a very important first step, an investment, in assisting every individual who wants to, to give back to his family, her community, his nation, her world, the fruits of minds and bodies operating at the highest potential. This is the way that problems will be solved, people functioning at their fullest potential in an interdependent world.

I ask unanimous consent that the text of the joint resolution be printed in the RECORD.

There being no objection, the joint resolution was ordered to be printed in the RECORD, as follows:

S.J. RES. 135

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE.

This resolution may be cited as the "National Commission on Human Resource Development Act".

SEC. 2. FINDINGS.

The Congress finds that—

(1) the health and wealth of the Nation is in the realized potential of its citizens;

(2) it is a normal aspiration of all citizens to more fully achieve their potential in body, mind, and spirit;

(3) techniques for attaining fuller potential of individuals can be identified;

(4) it is a shared responsibility of the individual, the family, the community and the Nation to provide the knowledge and opportunity to promote personal excellence and the highest levels of human potential;

(5) compulsive and addictive behavior, low self-esteem, high rates of teenage pregnancy, high suicide rates, and a weakened family structure arise in part from arrested or stunted development of human potential;

(6) the role of the individual in health maintenance and healing, complementing medical practices that treat symptoms and disease, has yet to be fully developed;

(7) teaching methods that inculcate a sense of enthusiasm, challenge, and accomplishment in achieving greater fulfillment of individual potential are desirable and achievable;

(8) the will of the citizenry to take responsibility for their lives, to push leadership to higher levels of performance, and to serve their community and Nation all may be enhanced by increased self-confidence achieved by development of personal excellence;

(9) there is a role for government to assist in research and education on techniques that promote the development of personal excellence and fuller realization of human potential; and

(10) increased fulfillment of human potential can contribute to—

(A) solving problems that separate people;

(B) cooperating in the interest of humankind; and

(C) strengthening world peace, security, tolerance, and fundamental human rights, and the promotion of economic and social progress and well-being for all peoples.

SEC. 3. ESTABLISHMENT.

There is established a Commission on Human Resource Development.

SEC. 4. DUTIES OF THE COMMISSION.

(a) IN GENERAL.—The Commission shall—

(1) advise the Congress, the President, and the American public on policies and programs designed to facilitate the fuller attainment of human potential;

(2) solicit views from the public on the role of the individual, family, community, and government in research, education, and implementation of techniques designed to more fully realize human potential;

(3) identify private and foundation financial resources to fund the operation of the Commission;

(4) establish a scientific advisory panel to assist in the evaluation of technologies and procedures calculated to assist in attaining higher levels of human potential;

(5) establish an academic and industry advisory council to assist in developing procedures to implement the findings of the Commission;

(6) communicate with State governments on the advisability of establishing State Commissions on Human Resource Development; and

(7) communicate with foreign governments and international organizations, after consultation with the Secretary of State, on the establishment of counterpart Commissions and prepare for an international meeting of such Commissions prior to the preparation of the final report required under section 6.

(b) ACADEMIC AND INDUSTRY ADVISORY COUNCIL.—Members of the scientific advisory panel established pursuant to subsection (a)(4), and the academic and industry advisory council established pursuant to subsection (a)(5) shall serve without financial remuneration.

SEC. 5. CENTER FOR HUMAN RESOURCE DEVELOPMENT.

(a) IN GENERAL.—The Commission shall establish an independent educational and scientific nonprofit entity, entitled the "Center for Human Resource Development" to receive contributions for the operation of the Commission, to perform such duties as may be assigned by the Commission, and to perform the duties of the Commission upon termination of the Commission.

(b) BOARD OF DIRECTORS.—The board of directors of the Center established pursuant to subsection (a), shall be selected by the Commission.

(c) VACANCY.—A vacancy in the board of directors of the Center shall be filled in a manner determined by the Commission.

(d) TERMINATION.—The termination of the Commission shall not effect the operation or existence of the Center.

SEC. 6. REPORT AND PROPOSAL.

(a) REPORT.—The Commission shall prepare and transmit a report to the President and the Congress within 18 months after funding for the operation of the Commission has been secured. The report shall describe the activities of the Commission and contain such recommendations as the Commission considers appropriate for individual, family, community and government action to more fully achieve human potential.

(b) PROPOSAL.—The Commission shall prepare and transmit to the President and the Congress a proposal for implementation of the recommendations of the Commission within 24 months after funding for the operation of the Commission has been secured.

SEC. 7. MEMBERSHIP OF THE COMMISSION.

(a) COMMISSION MEMBERSHIP.—The Commission shall consist of—

(1) 11 members appointed by the President, of which—

(A) 1 member shall be an individual with training and experience in extraordinary human performance research;

(B) 1 member shall be an individual with training and experience in the delivery of health care services as a physician;

(C) 1 member shall be an individual with training and experience in the field of higher education;

(D) 1 member shall be an individual with training and experience in the clergy;

(E) 1 member shall be an individual with experience in organized labor;

(F) 1 member shall be an individual with experience at the management level of business;

(G) 1 member shall be an individual who is retired;

(H) 3 members shall be from the general public; and

(I) 1 member shall be from an appropriate executive department; and

(2) 14 members appointed jointly by the Speaker of the House of Representatives and the President pro tempore of the Senate, of which—

(A) 1 member shall be an individual with training and experience in extraordinary human performance research;

(B) 1 member shall be an individual with training and experience in the delivery of health care services as a nurse;

(C) 1 member shall be an individual with training and experience in the field of education as a teacher at the pre-college level;

(D) 1 member shall be an individual with training and experience in the clergy;

(E) 1 member shall be an individual with experience in organized labor;

(F) 1 member shall be an individual with experience at the management level of business;

(G) 2 members shall be individuals with student high school status when appointed to the Commission;

(H) 4 members shall be from the general public;

(I) 1 member shall be a member of the Senate; and

(J) 1 member shall be a member of the House of Representatives.

(b) REPRESENTATION.—Insofar as practicable the Commissioners appointed by the President and the Congress shall reflect the diversity of the population in the United States.

(c) APPOINTMENTS.—The President and the Congress shall appoint the members of the Commission not later than 30 days after the date of the enactment of this resolution.

(d) VACANCIES.—A vacancy in the Commission shall be filled in the same manner as the original appointment was made. A vacancy in the Commission shall not affect the powers of the Commission.

(e) CHAIRPERSON.—The members of the Commission shall elect a Chairperson from among the members of the Commission.

(f) QUORUM.—14 members of the Commission shall constitute a quorum, but a lesser number may hold hearings.

(g) ORGANIZATIONAL MEETING.—The Commission shall hold an organizational meeting to establish the rules and procedures of the Commission not later than 30 days after all members are first appointed to the Commission and sufficient operating funds have been secured.

SEC. 8. COMPENSATION AND TRAVEL.

(a) COMPENSATION.—Each member of the Commission who is not an officer or employee of the United States shall be compensated at a rate established by the Commission not to exceed the daily equivalent of the annual rate of basic pay prescribed for grade GS-18 of the General Schedule under section 5332 of title 5, United States Code, for each day (including traveltime) during which such member is engaged in the actual performance of duties as a member of the Commission. Each member of the Commission who is an officer or employee of the United States shall receive no additional compensation.

(b) TRAVEL.—While away from their homes or regular places of business in the performance of duties for the Commission, all members of the Commission and nongovernment members of the Scientific Advisory Panel and the Academic and Industry Advisory Council shall be allowed travel expenses, including per diem in lieu of subsistence, at a rate established by the Commission not to exceed the rates authorized for employees of agencies under sections 5702 and 5703 of title 5, United States Code.

SEC. 9. COMMISSION STAFF.

(a) EXECUTIVE DIRECTOR.—The Commission shall appoint an Executive Director who shall be compensated at a rate established by the Commission not to exceed the rate of basic pay prescribed for level V of the Executive Schedule under section 5316 of title 5, United States Code.

(b) ADDITIONAL PERSONNEL.—With the approval of the Commission, the Executive Director may appoint and fix the compensation of such additional personnel as the Executive Director considers necessary to carry out the duties of the Commission.

(c) EXPERTS AND CONSULTANTS.—Subject to such rules as may be issued by the Commission, the chairperson may procure temporary and intermittent services of experts and consultants.

(d) PERSONNEL DETAIL AUTHORIZED.—Upon request of the chairperson, the head of any Federal agency is authorized to detail, on a reimbursable or non-reimbursable basis, any of the personnel of such agency to the Commission to assist the Commission in carrying out its duties under this Act.

SEC. 10. POWERS OF COMMISSION.

(a) HEARINGS.—For the purpose of carrying out this resolution, the Commission may hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence, as the Commission considers appropriate. The Commission may administer oaths or affirmations to witnesses appearing before the Commission.

(b) ADMINISTRATIVE PROVISION.—Any member or employee of the Commission may, if authorized by the Commission, take any action which the Commission is authorized to take by this section.

(c) INFORMATION.—The Commission may secure directly from any Federal agency such information as may be necessary to enable the Commission to carry out this Act. Upon request of the Chairperson of the Commission, the head of such agency shall furnish such information to the Commission.

(d) RESEARCH SUPPORT.—The Commission may apply and receive funding for research from any Federal or State agency or private source to advance the purposes of this Act.

(e) GIFTS.—The Commission may accept, use, and dispose of gifts, grants or donations of money, services or property. Such gifts, grants, donations, services, and property may only be used to advance the purposes of this Act.

SEC. 11. DEFINITIONS.

For purposes of this Act—

(1) The term "Center" means the Center for Human Resource Development established pursuant to section 4(a)(4).

(2) The term "Commission" means the National Commission on Human Resource Development established by section 3.

(3) The term "Federal agency" has the meaning given to the term "agency" in section 551(1) of title 5, United States Code.

SEC. 12. TERMINATION.

The Commission shall terminate 30 days after submitting the final report required by section 5 unless other provisions are made.

Mrs. KASSEBAUM. Mr. President, I am joining Senator PELL as a cosponsor of a joint resolution establishing a National Commission on Human Resource Development. The purpose of this resolution is to establish the Commission and outline its structure and responsibilities. The resolution does not seek Federal funding for the Commission, which is to be supported by private contributions.

Senator PELL has a longstanding interest in efforts to develop and enhance human potential. As chairman of the Senate Education Subcommittee, Senator PELL has demonstrated a commitment to promoting excellence and achievement in all aspects of our educational system. This resolution would take these efforts one step further, as a principal task of the Commission will be to identify ways in which to promote and encourage personal excellence in all aspects of life.

I have had the opportunity to work with Senator PELL on a variety of education issues. It is always a pleasure, and I look forward to continued cooperation on this joint resolution and other Education Subcommittee matters.

## ADDITIONAL COSPONSORS

S. 5

At the request of Mr. DODD, the names of the Senator from Michigan [Mr. LEVIN] and the Senator from Colorado [Mr. WIRTH] were added as cosponsors of S. 5, a bill to provide for a Federal program for the improvement of child care, and for other purposes.

S. 15

At the request of Mr. CRANSTON, the name of the Senator from Maryland [Ms. MIKULSKI] was added as a cosponsor of S. 15, a bill to amend the Public Health Service Act to improve emergency medical services and trauma care, and for other purposes.

S. 16

At the request of Mr. CRANSTON, the name of the Senator from Wisconsin [Mr. KOHL] was added as a cosponsor of S. 16, a bill to require the executive branch to gather and disseminate information regarding, and to promote techniques to eliminate, discriminatory wage-setting practices and discriminatory wage disparities which are based, on sex, race, or national origin.

S. 54

At the request of Mr. METZENBAUM, the name of the Senator from Oregon [Mr. HATFIELD] was added as a cosponsor of S. 54, a bill to amend the Age Discrimination in Employment Act of 1967 with respect to the waiver of rights under such act without supervision, and for other purposes.

S. 135

At the request of Mr. GLENN, the name of the Senator from Wisconsin [Mr. KOHL] was added as a cosponsor of S. 135, a bill to amend title 5, United States Code, to restore to Federal civilian employees their right to participate voluntarily, as private citizens, in the political processes of the Nation, to protect such employees from improper political solicitations, and for other purposes.

S. 198

At the request of Mr. HATCH, the name of the Senator from Vermont [Mr. LEAHY] was added as a cosponsor of S. 198, a bill to amend title 17, United States Code, the Copyright Act to protect certain computer programs.

S. 223

At the request of Mr. MOYNIHAN, the name of the Senator from North Dakota [Mr. CONRAD] was added as a cosponsor of S. 223, a bill to establish a grant program for research, treatment and public education with respect to Lyme disease.

S. 231

At the request of Mr. MOYNIHAN, the name of the Senator from California [Mr. CRANSTON] was added as a cosponsor of S. 231, a bill to amend part A of title IV of the Social Security Act to improve quality control standards and procedures under the Aid to Families With Dependent Children Program, and for other purposes.

S. 260

At the request of Mr. MOYNIHAN, the names of the Senator from California [Mr. CRANSTON], the Senator from Indiana [Mr. LUGAR], the Senator from Louisiana [Mr. JOHNSTON], and the Senator from Alabama [Mr. SHELBY] were added as cosponsors of S. 260, a bill to amend the Internal Revenue Code of 1986 to make the exclusion from gross income of amounts paid for employee educational assistance programs.

S. 342

At the request of Mr. DANFORTH, the name of the Senator from Iowa [Mr. HARKIN] was added as a cosponsor of S. 342, a bill to amend the Internal Revenue Code of 1986 to provide that certain credits will not be subject to the passive activity rules, and for other purposes.

S. 411

At the request of Mr. BOSCHWITZ, the name of the Senator from Mississippi [Mr. LOTT] was added as a cosponsor of S. 411, a bill to amend the Internal Revenue Code of 1986 to restore a capital gains tax differential, and for other purposes.

S. 419

At the request of Mr. SIMON, the names of the Senator from Iowa [Mr. HARKIN] and the Senator from Maine [Mr. COHEN] were added as cosponsors of S. 419, a bill to provide for the collection of data about crimes motivated by race, religion, ethnicity, or sexual orientation.

S. 424

At the request of Mr. THURMOND, the name of the Senator from Kentucky [Mr. FORD] was added as a cosponsor of S. 424, a bill to provide a minimum monthly annuity for the surviving spouses of certain deceased members of the uniformed services.

S. 430

At the request of Mr. DASCHLE, the name of the Senator from Massachusetts [Mr. KENNEDY] was added as a cosponsor of S. 430, a bill to amend title XIX of the Social Security Act to provide coverage for certain outreach activities undertaken at the option of a State for the purpose of identifying pregnant women and children who are eligible for medical assistance and assisting them in applying for and receiving such assistance, and for other purposes.

S. 449

At the request of Mr. BOREN, the names of the Senator from Louisiana [Mr. BREAUX], the Senator from Mississippi [Mr. LOTT], and the Senator from Montana [Mr. BURNS] were added as cosponsors of S. 449, a bill to amend the Internal Revenue Code of 1986 to provide incentives for oil and natural gas exploration and production, and for other purposes.

S. 458

At the request of Mr. DECONCINI, the name of the Senator from Minnesota [Mr. BOSCHWITZ] was added as a cosponsor of S. 458, a bill to provide for a General Accounting Office investigation and report on conditions of displaced Salvadorans and Nicaraguans, to provide certain rules of the House of Representatives and of the Senate with respect to review of the report, to provide for the temporary stay of detention and deportation of certain Salvadorans and Nicaraguans, and for other purposes.

S. 464

At the request of Mr. SANFORD, the name of the Senator from Indiana [Mr. LUGAR] was added as a cosponsor of S. 464, a bill to promote safety and health in workplaces owned, operated

or under contract with the United States by clarifying the United States' obligation to observe occupational safety and health standards and clarifying the United States' responsibility for harm caused by its negligence at any workplace owned by, operated by, or under contract with the United States.

S. 507

At the request of Mr. SIMON, the name of the Senator from Michigan [Mr. LEVIN] was added as a cosponsor of S. 507, a bill to prohibit investments in, and certain other activities with respect to, South Africa, and for other purposes.

S. 519

At the request of Mr. LAUTENBERG, the name of the Senator from North Dakota [Mr. CONRAD] was added as a cosponsor of S. 519, a bill to prohibit smoking on any scheduled airline flight in intrastate, interstate, or overseas air transportation.

S. 535

At the request of Mr. LAUTENBERG, the name of the Senator from Maine [Mr. MITCHELL] was added as a cosponsor of S. 535, a bill to increase civil monetary penalties based on the effect of inflation.

S. 565

At the request of Mr. CRANSTON, the names of the Senator from South Dakota [Mr. PRESSLER] and the Senator from Alabama [Mr. HEFLIN] were added as cosponsors of S. 565, a bill to authorize a new corporation to support State and local strategies for achieving more affordable housing; to increase homeownership; and for other purposes.

S. 566

At the request of Mr. CRANSTON, the names of the Senator from South Dakota [Mr. PRESSLER] and the Senator from Alabama [Mr. HEFLIN] were added as cosponsors of S. 566, a bill to authorize a new corporation to support State and local strategies for achieving more affordable housing, to increase homeownership, and for other purposes.

S. 581

At the request of Mr. SPECTER, the name of the Senator from North Dakota [Mr. CONRAD] was added as a cosponsor of S. 581, a bill to establish emergency response procedures for rail carriers in transporting hazardous materials.

S. 587

At the request of Mr. MITCHELL, the name of the Senator from Louisiana [Mr. JOHNSTON] was added as a cosponsor of S. 587, a bill to amend the Marine Protection, Research, and Sanctuaries Act to protect marine and near shore coastal waters through establishment of regional marine research programs.

S. 611

At the request of Mr. INOUYE, the name of the Senator from Illinois [Mr. SIMON] was added as a cosponsor of S. 611, a bill to establish administrative procedures to determine the status of certain Indian groups.

S. 618

At the request of Mr. SARBANES, the name of the Senator from Pennsylvania [Mr. HEINZ] was added as a cosponsor of S. 618, a bill to authorize the Indian American forum for political education to establish a memorial to Mahatma Gandhi in the District of Columbia.

S. 686

At the request of Mr. MITCHELL, the name of the Senator from Georgia [Mr. FOWLER] was added as a cosponsor of S. 686, a bill to consolidate and improve laws providing compensation and establishing liability for oil spills.

S. 687

At the request of Mr. BAUCUS, the name of the Senator from New York [Mr. D'AMATO] was added as a cosponsor of S. 687, a bill to amend the Clean Water Act to expand authority for penalties for discharges of oil and hazardous substances to provide for an assessment of oil spill contingency plans.

S. 691

At the request of Mr. LAUTENBERG, the name of the Senator from Georgia [Mr. FOWLER] was added as a cosponsor of S. 691, a bill to require certain information in the National Driver Register to be made available in connection with an application for a license to be in control and direction of a commercial vessel.

S. 714

At the request of Mr. MCCLURE, the names of the Senator from North Dakota [Mr. BURDICK], the Senator from California [Mr. CRANSTON], and the Senator from Utah [Mr. HATCH] were added as cosponsors of S. 714, a bill to extend the authorization of the Water Resources Research Act of 1984 through the end of fiscal year 1993.

S. 754

At the request of Mr. PACKWOOD, the names of the Senator from Alabama [Mr. HEFLIN] and the Senator from Vermont [Mr. JEFFORDS] were added as cosponsors of S. 754, a bill to restrict the export of unprocessed timber from certain Federal lands, and for other purposes.

S. 755

At the request of Mr. PACKWOOD, the name of the Senator from Alabama [Mr. HEFLIN] was added as a cosponsor of S. 755, a bill to authorize the States to prohibit or restrict the export of unprocessed logs harvested from lands owned or administered by States.

S. 762

At the request of Mr. EXON, the name of the Senator from Louisiana [Mr. JOHNSTON] was added as a cosponsor of S. 762, a bill to amend chapter 32 of title 39, United States Code, to limit the number of congressional mass mailings, require public disclosure of the costs of such mass mailings, and for other purposes.

S. 782

At the request of Mr. WILSON, the name of the Senator from California [Mr. CRANSTON] was added as a cosponsor of S. 782, a bill to amend the Clean Air Act to provide that the Administrator of the Environmental Protection Agency shall have authority to regulate air pollution on and over the Outer Continental Shelf.

S. 797

At the request of Mr. INOUYE, the name of the Senator from Nebraska [Mr. EXON] was added as a cosponsor of S. 797, a bill to amend the Communications Act of 1934 to improve the education of children by establishing a National Endowment for Children's Educational Television, and for other purposes.

S. 893

At the request of Mr. LAUTENBERG, the names of the Senator from Hawaii [Mr. INOUYE], the Senator from Minnesota [Mr. BOSCHWITZ], the Senator from Pennsylvania [Mr. SPECTER], the Senator from Michigan [Mr. LEVIN], and the Senator from Florida [Mr. GRAHAM] were added as cosponsors of S. 893, a bill to establish certain categories of Soviet and Vietnamese nationals presumed to be subject to persecution and to provide for adjustment to refugee status of certain Soviet and Vietnamese parolees.

S. 894

At the request of Mr. LAUTENBERG, the name of the Senator from Michigan [Mr. LEVIN] was added as a cosponsor of S. 894, a bill to amend the Internal Revenue Code of 1986 to allow amounts paid for home improvements to mitigate radon gas exposure to qualify for deduction for medical expenses.

S. 918

At the request of Mr. BOREN, the names of the Senator from California [Mr. CRANSTON], the Senator from Connecticut [Mr. DODD], and the Senator from Pennsylvania [Mr. HEINZ] were added as cosponsors of S. 918, a bill to enable producers of fresh mushrooms to develop, finance, and carry out a nationally coordinated program for fresh mushroom promotion, research, and consumer information, and for other purposes.

S. 919

At the request of Mr. BOND, the name of the Senator from Minnesota [Mr. BOSCHWITZ] was added as a cosponsor of S. 919, a bill to enable producers of soybeans to develop, finance, and carry out a nationally coordinated program for soybean promotion, re-

search, and consumer information, and for other purposes.

S. 973

At the request of Mr. LUGAR, the name of the Senator from Mississippi [Mr. COCHRAN] was added as a cosponsor of S. 973, a bill to create a Rural Capital Access Program within the Department of Agriculture to encourage lending institutions to provide loans to certain businesses, and for other purposes.

S. 978

At the request of Mr. INOUYE, the names of the Senator from Rhode Island [Mr. PELL], the Senator from Massachusetts [Mr. KERRY], and the Senator from Michigan [Mr. LEVIN] were added as cosponsors of S. 978, a bill to authorize the establishment within the Smithsonian Institution of the National Museum of the American Indian, to establish a memorial to the American Indian, and for other purposes.

SENATE JOINT RESOLUTION 15

At the request of Mr. PRESSLER, the name of the Senator from Delaware [Mr. ROTH] was added as a cosponsor of Senate Joint Resolution 15, a joint resolution to designate the second Sunday in October of 1989 as "National Children's Day."

SENATE JOINT RESOLUTION 55

At the request of Mr. SIMON, the names of the Senator from Delaware [Mr. BIDEN], the Senator from Florida [Mr. GRAHAM], and the Senator from Oregon [Mr. PACKWOOD] were added as cosponsors of Senate Joint Resolution 55, a joint resolution to designate the week of October 1, 1989, through October 7, 1989, as "Mental Illness Awareness Week."

SENATE JOINT RESOLUTION 57

At the request of Mr. PELL, the name of the Senator from Michigan [Mr. RIEGLE] was added as a cosponsor of Senate Joint Resolution 57, a joint resolution to establish a national policy on permanent papers.

SENATE JOINT RESOLUTION 95

At the request of Mr. MCCLURE, the names of the Senator from South Carolina [Mr. THURMOND], the Senator from Alaska [Mr. MURKOWSKI], the Senator from Rhode Island [Mr. CHAFEE], the Senator from Kansas [Mr. DOLE], the Senator from Vermont [Mr. JEFFORDS], the Senator from North Dakota [Mr. CONRAD], the Senator from Illinois [Mr. DIXON], the Senator from Louisiana [Mr. JOHNSTON], the Senator from Arizona [Mr. DECONCINI], the Senator from Illinois [Mr. SIMON], the Senator from Florida [Mr. GRAHAM], the Senator from Wyoming [Mr. SIMPSON], the Senator from New York [Mr. D'AMATO], and the Senator from South Dakota [Mr. DASCHLE] were added as cosponsors of Senate Joint Resolution 95, a joint resolution to designate the week of September 10, 1989, through September 16, 1989, as "National Check-Up Week."

SENATE JOINT RESOLUTION 104

At the request of Mr. MITCHELL, the names of the Senator from Florida [Mr. GRAHAM], the Senator from Massachusetts [Mr. KERRY], the Senator from Tennessee [Mr. SASSER], the Senator from Wyoming [Mr. WALLOP], the Senator from Wyoming [Mr. SIMPSON], and the Senator from Vermont [Mr. LEAHY] were added as cosponsors of Senate Joint Resolution 104, a joint resolution to express the sense of the Congress with respect to the health of the Nation's children.

SENATE JOINT RESOLUTION 113

At the request of Mr. DIXON, the name of the Senator from Washington [Mr. ADAMS] was added as a cosponsor of Senate Joint Resolution 113, a joint resolution prohibiting the export of technology, defense articles, and defense services to codevelop or coproduce the FSX aircraft with Japan.

SENATE JOINT RESOLUTION 129

At the request of Mr. DOLE, the names of the Senator from Illinois [Mr. DIXON], the Senator from New Jersey [Mr. LAUTENBERG], the Senator from Arizona [Mr. MCCAIN], the Senator from North Dakota [Mr. CONRAD], the Senator from Texas [Mr. GRAMM], the Senator from Mississippi [Mr. COCHRAN], the Senator from Oregon [Mr. HATFIELD], the Senator from Maryland [Mr. SARBANES], the Senator from Hawaii [Mr. INOUYE], the Senator from Wisconsin [Mr. KASTEN], the Senator from Wyoming [Mr. SIMPSON], the Senator from Pennsylvania [Mr. HEINZ], the Senator from Pennsylvania [Mr. SPECTER], the Senator from California [Mr. WILSON], The Senator from West Virginia [Mr. BYRD] and the Senator from New York [Mr. D'AMATO] were added as cosponsors of Senate Joint Resolution 129, a joint resolution to provide for the designation of September 15, 1989, as "National POW/MIA Recognition Day."

SENATE JOINT RESOLUTION 130

At the request for Mr. SARBANES, the names of the Senator from Alabama [Mr. SHELBY], the Senator from North Dakota [Mr. CONRAD], the Senator from Illinois [Mr. SIMON], the Senator from Iowa [Mr. GRASSLEY], the Senator from Rhode Island [Mr. PELL], the Senator from Kansas [Mr. DOLE], the Senator from Virginia [Mr. ROBB], the Senator from Illinois [Mr. DIXON], the Senator from Idaho [Mr. SYMMS], the Senator from North Dakota [Mr. BURDICK], the Senator from Florida [Mr. GRAHAM], the Senator from Rhode Island [Mr. CHAFEE], the Senator from Oklahoma [Mr. BOREN], the Senator from Alaska [Mr. MURKOWSKI], the Senator from Idaho [Mr. MCCLURE], the Senator from Oregon [Mr. PACKWOOD], and the Senator from Arizona [Mr. DECONCINI] were added as cosponsors of Senate Joint Resolution 130, a joint resolution designating February 11 through February 17, 1990, as "Vocational-Technical Education Week."

SENATE CONCURRENT RESOLUTION 9

At the request for Mr. HUMPHREY, the names of the Senator from Wisconsin [Mr. KASTEN], the Senator from Florida [Mr. MACK], and the Senator from South Dakota [Mr. PRESSLER] were added as cosponsors of Senate Concurrent Resolution 9, a concurrent resolution establishing procedures for expedited consideration by the Congress of certain bills and joint resolutions submitted by the President.

SENATE RESOLUTION 99

At the request for Mr. BOSCHWITZ, the names of the Senator from Iowa [Mr. HARKIN], the Senator from Hawaii [Mr. MATSUNAGA], and the Senator from North Carolina [Mr. HELMS] were added as cosponsors of Senate Resolution 99, a resolution requiring the Architect of the Capitol to establish and implement a voluntary program for recycling paper disposed of in the operation of the Senate.

SENATE RESOLUTION 114

At the request for Mr. GRAHAM, the names of the Senator from Alabama [Mr. HEFLIN], and the Senator from New York [Mr. MOYNIHAN] were added as cosponsors of Senate Resolution 114, a resolution concerning the restoration of Eastern Airlines.

---

## SENATE CONCURRENT RESOLUTION 37—RELATING TO DIFFERENTIALS IN CERTAIN MEDICARE PAYMENTS

Mr. HARKIN (for himself, Mr. BENTSEN, Mr. BURDICK, Mr. SHELBY, Mr. COCHRAN, Mr. MCCLURE, Mr. EXON, Mr. CONRAD, Mr. STEVENS, Mr. SANFORD, Mr. THURMOND, Mr. BURNS, Mr. BOREN, Mr. PRYOR, Mr. LUGAR, Mrs. KASSEBAUM, and Mr. GRASSLEY) submitted the following concurrent resolution; which was referred to the Committee on Finance:

S. CON. RES. 37

Whereas the Medicare Prospective Payment System, implemented in 1984 and based largely on the theory that urban hospitals incur a greater cost per patient than rural hospitals, does not account for the fact that rural hospitals serve a greater proportion of Medicare and indigent patients and a lesser proportion of patients covered by private health insurance than urban hospitals;

Whereas the operation of the Medicare Prospective Payment System has lead to a differential in Medicare payments made to urban and rural hospitals, with rural hospitals being reimbursed for a lesser proportion of their costs than urban hospitals;

Whereas the terms "rural" and "urban" are too narrow to describe true medical demographics and therefore should not be the basis for a Medicare cost reimbursement system;

Whereas because of the implementation of the urban-rural differential, rural hospitals began closing at twice the rate of urban hospitals in 1987;

Whereas many rural hospitals are the only source of medical care for the rural citizens of the Nation;

Whereas a viable health care network is an essential part of the infrastructure of rural economic development; and

Whereas by placing rural hospitals in financial jeopardy, the urban-rural Medicare payment differential is discriminating against agriculture, rural businesses, and rural citizens: Now, therefore, be it

*Resolved by the Senate (the House of Representatives concurring),* That the appropriate committees of the House of Representatives and the Senate should consider legislation as soon as practicable that would equalize the Medicare payments made to rural and urban hospitals.

● Mr. HARKIN. Mr. President, I am pleased to submit today, together with 15 of my colleagues, a concurrent resolution expressing the sense of the Congress that the differential rate paid under Medicare's prospective payment system to urban and rural hospitals be eliminated.

The differential payment made to rural and urban hospitals under Medicare places an undue financial burden on rural hospitals. This differential payment is slowly starving the rural hospitals to death. In 1988 alone, the American Hospital Association reported a record 81 hospital closures, of which 42 were in rural areas.

In my own State of Iowa, one hospital has gone into receivership and one is close to it. The Iowa Hospital Association tells me that 65 of 83 rural Iowa hospitals lost money in caring for patients in 1987, and Medicare reimbursement for rural hospitals in Iowa is averaging about 30 percent less than that paid to their urban counterparts. Similar scenarios are being played out all across rural America.

Medicare recipients who live in rural areas are no less deserving of quality, accessible health care than Medicare recipients who live in urban areas. Yet when a hospital closes, not only are the services of the hospital lost, but the community will have a much harder time recruiting physicians, nurses and other health care providers.

Rural hospitals are also a critical part of the economic infrastructure of the community in which they are located. Hospital closures mean more to a community than forcing residents to drive farther to receive care. In many communities, they are large employers, and their closure means a loss of jobs for many people. In addition, there is an economic ripple effect which is likely to have a financial impact on many other community businesses.

Legislative solutions have been proposed this Congress which would address the differential payments under Medicare, including S. 306, introduced by Senator BENTSEN, of which I am a cosponsor. I am asking that these proposals be a priority of all House and Senate Members during the 101st Congress.

If we don't act quickly to change Medicare's prospective payment system, the health care system in rural America will crumble. If that happens, the impact on the health of the elderly who reside in rural America will be drastic both in humane and economic terms, and simply cannot be allowed to happen—the price is too high.

I urge my colleagues to support this concurrent resolution.●

● Mr. SHELBY. Mr. President, I rise today to join my colleagues in support of this vital legislation to eliminate the differential in Medicare reimbursement for rural and urban hospitals. Hospitals in Alabama, as well as hospitals across the Nation, are closing at rapid rates. In fact, my home State has the dubious distinction of having the highest hospital closure rate in the country.

As a nation, we have committed ourselves to the ideal of universal access to basic health care services. To keep that commitment to rural citizens, we must recognize the unique stresses on our rural health care delivery system.

Small rural hospitals are the key to a strong rural health care system. In addition to basic acute care, these hospitals often provide other valuable health services to the community such as respite care, nursing care, well-child clinics, preventive care, and the list goes on.

Frequently these hospitals are the largest employer in their communities. Over the last several years, the rural unemployment rate has been consistently higher than in urban areas. When a hospital closes, many jobs are lost, further contributing to an already deteriorating rural economy.

There is growing evidence that our rural health care system is under severe strain. Rural hospitals are closing at record rates. Since 1980, over 200 rural community hospitals have closed their doors and the remaining rural hospitals across the country are experiencing such financial stress that closure may be imminent.

Like in other areas, access to community-based, high-quality, basic health care services is at risk in rural Alabama. Alabama has the highest hospital closure rate in the Nation. Between 1980 and 1987 nine hospitals closed their doors, and five of these served rural areas. In 1988, seven more hospitals ceased operation, and four were rural hospitals.

Mr. President, in the past I have been able to say that the majority of the 145 hospitals in my State were rural, but this is not longer the case. Today, only 59 rural hospitals have survived the ravaging tide of hospital closures sweeping the Nation. Last year, 75 percent of these rural hospitals reported an operating loss. This situation is not unique to my State. Across the country, hospitals are struggling with inadequate Medicare and Medicaid reimbursement, Federal cost-cutting initiatives, declining admissions, and an increasingly competitive health care environment.

There are a variety of reasons for the precarious situation in which our rural hospitals find themselves today. As compared to their urban counterparts, rural hospitals tend to be smaller, have fewer patients, provide fewer specialized services, and often serve an older population. It has been estimated that one third of our Nation's elderly live in rural areas, and rural practitioners often treat patients who are sicker as it is reported that rural Americans have disproportionately higher rates of serious chronic illness.

Due to the higher percentage of the elderly living in rural areas, rural hospitals are especially dependent on Medicare. They lack the volume and the mix of patients to balance shortfalls in Medicare reimbursement and are thus hard-pressed to pay the salaries that will attract and retain professionals.

Rural providers are finding it increasingly difficult to attract and retain health professionals, in part due to substantial differentials in rural versus urban Medicare reimbursement rates. Many rural hospitals contend that they must pay more for qualified hospital staff than their nearby urban hospitals since they both draw from the same geographic labor pool. Rural hospitals in remote areas argue that they sometimes must pay increasingly higher salaries to attract specialized staff such as intensive care nurses to their community. As hospitals are labor intensive, this magnifies the problem of making health care services locally accessible. Alabama hospitals currently spend almost half their budget on salaries, and as the demand increases for rural practitioners, so have the entry level salaries.

Although the total number of U.S. physicians may be sufficient for the Nation, there are dramatic shortages in many rural areas. Studies have shown that when a small, rural hospital closes, the community often loses its physicians and has difficulty attracting new ones because doctors often will not practice in an area without a hospital. Rural hospitals in Alabama also report severe shortages of nurses, pharmacists, physical therapists, lab technicians, and other allied health professionals.

Rural hospitals treat fewer private-paying patients and treat a disproportionately high percentage of Medicare patients. Rural citizens, as a group,

have a 15-percent higher rate of uninsuredness than the U.S. average, and a 24-percent higher rate than their urban counterparts. Also, 75 percent of the rural poor do not qualify for public assistance. In 1987, Alabama's hospitals collectively absorbed over $260 million worth of uncompensated care at actual costs, or more than 12 percent of their total experiences.

The dependence of rural hospitals on Medicare as a major payment source has become particularly keen since the implementation of the prospective payment system [PPS] in 1984. Nearly twice as many hospital closures were reported in 1987 than in 1984, due in large part to this dependency. Recent reports show that the majority of rural hospitals in Alabama are experiencing negative Medicare operating margins.

Inadequate reimbursement granted to hospitals for Medicare patients can ultimately raise concerns about quality and access to health care as reduced payment rates force hospitals to cut down on staff and close unprofitable services. This is particularly troublesome for rural hospitals. The possibility of numerous closures is becoming a reality across the country. In Alabama alone, the Alabama Hospital Association reports that as many as 13 facilities may close this year—all of them will be small, and all will be rural.

For the most part, society in general and many in government usually think it is cheaper to provide care in rural areas than in urban. In fact, however, the greater distances, geographic barriers, and sparse population actually make the provision of health care more expensive in rural areas.

There is no one strategy or solution to the problems faced by rural hospitals. Foremost in our minds should be the need to provide equitable reimbursement for small rural hospitals with respect to the Medicare prospective payment system. Access to and availability of basic health care services in our Nation's rural areas must be maintained if we are to keep the commitment to our rural residents.

Mr. President, I am pleased to cosponsor this resolution to eliminate the urban-rural reimbursement under the Medicare prospective payment system. I would also urge my colleagues to support swift overhaul of the system, as every day we delay, we place the viabililty of our rural hospitals in further jeopardy.●

## SENATE RESOLUTION 129—RELATING TO JAPANESE INVOLVEMENT IN LIBYAN WEAPONS PROGRAMS

Mr. MURKOWSKI (for himself and Mr. BRADLEY) submitted the following resolution; which was considered and agreed to:

S. RES. 129

Whereas, Libya's chemical weapons program has been using a metal-fabrication facility that Japanese corporations helped to equip at the Rabta technical-industrial complex; and

Whereas, the past association of Japanese corporations with this metal-fabrication facility at Rabta revived doubts about the effectiveness of Japan's control over strategic technologies; and

Whereas, Japanese corporations ended all activities associated with this facility when the Government of Japan advised them, on the basis of information provided by the United States, that the Government of Libya was using it for chemical weapons; and

Whereas, Japanese assistance, in any form, to the Libyan chemical weapons program would, in the future, undermine the trust and confidence necessary for the security relationship between the United States and Japan: Now, therefore, be it

*Resolved*, That it is the sense of the Senate that the proposed export of technology, defense articles or defense services pursuant to an agreement with Japan to codevelop or coproduce the Support Fighter Experimental (FSX) shall not be implemented until the President of the United States receives assurances from the Government of Japan, and transmits those assurances to the Chairman and ranking member of the Senate Committee on Foreign Relations, that:

1. No Japanese personnel are involved with any aspect of chemical weapons production in Libya; and

2. No assistance of any kind will be provided, in the future, to the Rabta complex or to any other part of the Libyan chemical weapons program by any Japanese corporation.

## AMENDMENTS SUBMITTED

## DISAPPROVAL OF FSX SALE TO JAPAN

### BYRD (AND OTHERS) AMENDMENT NO. 101

Mr. BYRD (for himself, Mr. PELL, Mr. DANFORTH, Mr. MOYNIHAN and Mr. BINGAMAN) proposed an amendment to the joint resolution (S.J. Res. 113) prohibiting the export of technology, defense articles, and defense services to codevelop or coproduce the FSX aircraft with Japan; as follows:

Strike out all after the first word and insert in lieu thereof the following:

SECTION 1. CODEVELOPMENT OF THE FSX WEAPON SYSTEM.

(a) IN GENERAL.—The President shall ensure that all technology, defense articles, and defense services provided by the United States or any United States corporation or entity to Japan pursuant to the agreement described in subsection (b) to codevelop the Support Fighter Experimental (FSX) weapon system shall be subject to the requirements of subsections (a), (c), and (d) of section 3 of the Arms Export Control Act.

(b) DESCRIPTION OF AGREEMENT.—The agreement referred to in subsection (a) is the agreement for which the President submitted a certification pursuant to section 36(d) of the Arms Export Control Act on May 1, 1989 (transmittal No. MC-9-89).

SEC. 2. COPRODUCTION OF THE FSX WEAPON SYSTEM.

(a) IN GENERAL.—In the event that the United States and Japan seek to coproduce the FSX weapon system—

(1) the United States and Japan shall negotiate and sign a memorandum of understanding (MOU) containing the terms and conditions for that coproduction; and

(2) such MOU shall—

(A) prohibit the transfer to Japan of critical engine technologies (including, but not limited to, hot section and digital fuel control technologies); and

(B) prohibit the sale or retransfer by Japan of the FSX weapon system or any of its major subcomponents codeveloped or coproduced with the United States.

(b) APPLICATION OF ARMS EXPORT CONTROL ACT.—Technology, defense articles, and defense services resulting from any coproduction of the FSX weapon system by the United States and Japan shall be subject to the requirements of subsections (a), (c), and (d) of section 3 of the Arms Export Control Act.

(c) POLICY ON UNITED STATES WORKSHARE.—It is the sense of the Congress that any Memorandum of Understanding (MOU) between the United States and Japan on coproduction should specify that the United States share of the total value of the coproduction shall be not less than 40 percent of that value, including the value of manufacturing spare parts and other support items which are part of the lifetime maintenance costs of the FSX weapon system.

SEC. 3 GAO REPORT.

(a) IN GENERAL.—Beginning 6 months after the date of enactment of this joint resolution, and every 12 months thereafter, the Comptroller General of the United States, after consultation with appropriate officials of United States agencies represented on the Technical Steering Committee, shall submit to the Speaker of the House of Representatives and the chairman of the Committee on Foreign Relations of the Senate a report describing the progress made in implementing the Memorandum of Understanding (MOU) Between the United States Department of Defense and the Japan Defense Agency on Cooperation in the Development of the FSX Weapon System, signed on November 29, 1988, and related documents thereto.

(b) DEFINITION.—For purposes of this subsection the term "Technical Steering Committee" refers to the FSX Technical Steering Committee established jointly by the Japan Defense Agency and the United States Department of Defense

SEC. 4. IMPACT OF MOU'S RELATING TO THE FSX WEAPON SYSTEM ON THE COMPETITIVE POSITION OF THE UNITED STATES.

(a) SOLICITATION OF RECOMMENDATIONS.—In the implementation of the memorandum of understanding (MOU) and related agreements between the United States and Japan regarding the codevelopment of the FSX weapon system, and in the negotiation, renegotiation, and implementation of future memoranda of understanding and related agreements concerning coproduction of the FSX weapon system, the Secretary of Defense shall regularly solicit and consider comments or recommendations from the Secretary of Commerce with respect to the commercial implications of such agreements and the potential impact on the internation-

al competitive position of United States industry.

(b) REVIEW BY SECRETARY OF COMMERCE.—Whenever the Secretary of Commerce has reason to believe that any such memorandum of understanding or related agreement has, or threatens to have, a significant adverse impact on the international competitive position of United States industry, the Secretary of Commerce may request a review of the agreement. If, as a result of the review, the Secretary of Commerce determines that the strategic commercial interests of the United States are not being served, the Secretary of Commerce shall recommend to the President any modification to the agreement he deems necessary to ensure an appropriate balance of interests.

(c) CONSIDERATION OF RECOMMENDATIONS.—(1) The President shall consider the recommendation of the Secretary of Commerce concerning—

(A) the commercial implications of any such memorandum of understanding or related agreement, and

(B) the potential impact on the international competitive position of United States industry,

in determining whether such memorandum of understanding or related agreement shall be implemented or agreed upon.

(2) Any such memorandum of understanding or related agreement shall not be implemented or agreed upon if the President determines that such agreement is likely to have a significant adverse impact on United States industry that outweighs the benefits of implementing or entering into such an agreement.

SEC. 5. DEFINITIONS.

As used in this joint resolution, the term "defense article" and "defense service" shall have the same meanings as are given to those terms in paragraphs (3) and (4), respectively, of section 47 of the Arms Export Control Act.

## DIXON AMENDMENT NO. 102

Mr. DIXON proposed an amendment to amendment No. 101 proposed by Mr. BYRD (and others) to the joint resolution (S.J. Res. 113), supra, as follows:

Strike out all after "Section" on line 3, page 1, and insert in lieu thereof the following:

(a) the proposed export of technology, defense articles, or defense services pursuant to a license and technical assistance agreement with Japan described in subsection (b) to codevelop the Support Fighter Experimental [FSX] aircraft is prohibited.

(b) An agreement referred to in subsection (a) is an ageement for which the President submitted a certification pursuant to section 36(d) of the Arms Export Control Act on May 1, 1989 (transmittal No. MC-9-89).

## DIXON AMENDMENT NO. 103

Mr. DIXON proposed an amendment to amendment No. 101 proposed by Mr. BYRD (and others) to the joint resolution (S.J. Res. 113), supra, as follows:

On page 3, line 20 of the pending amendment, strike "Committee on Foreign Relations of the Senate" and insert in lieu thereof: "Committees on Foreign Relations, Armed Services, Commerce, Science and Transportation, and Banking, Housing, and Urban Affairs of the Senate".

## HEINZ AMENDMENT NO. 104

Mr. HEINZ proposed an amendment to amendment No. 101 proposed by Mr. BYRD (and others) to the joint resolution (S.J. Res. 113), supra, as follows:

At the end of paragraph (a) of section 3 of the amendment offered by the Senator from West Virginia [Mr. Byrd], add the following:

"Such report shall state—

"(1) whether any technology involved in development of the FSX weapon system has been transferred to the Japanese space shuttle program or any other part of the Japanese aviation sector or aerospace technology;

"(2) whether any such technology has been diverted to any third party country unauthorized to receive such technology, in violation of the license and technology assistance agreement for the FSX weapon system; and

"(3) whether any such technology has been made available, legally or illegally, to adversaries who could use such technology to the detriment of the North Atlantic Treaty Organization [NATO], the United States, any other member country of NATO, Japan, Australia, or New Zealand."

## NOTICES OF HEARINGS

COMMITTEE ON RULES AND ADMINISTRATION

Mr. FORD. Mr. President, I wish to announce that at the Committee on Rules and Administration business meeting scheduled for Wednesday, May 17, 1989, at 9:30 a.m., in SR-301, Russell Senate Office Building, the committee plans to consider S. 874. This bill would establish national voter registration procedures for Presidential and congressional elections.

While the Daily Digest has been carrying this item for the Rules Committee agenda for the 17th, the official notice that I placed in the RECORD last Thursday, which listed all the legislation the committee plans to mark up, inadvertently omitted S. 874.

SELECT COMMITTEE ON INDIAN AFFAIRS

Mr. INOUYE. Mr. President, I would like to announce that the Select Committee on Indian Affairs will be holding a mark up on Tuesday, May 16, 1989, beginning at 2:30 p.m., in 485 Russell Senate Office Building on S. 978, a bill to establish the National Museum of the American Indian and S. 402, the Puyallup Land Claims Settlement Act.

Those wishing additional information should contact the Select Committee on Indian Affairs at 224-2251.

Mr. President, I would like to announce that the Select Committee on Indian Affairs will be holding a hearing on Friday, June 9, 1989, beginning at 9:30 a.m., in 485 Russell Senate Office Building on the implementation of amendments to the Indian Self-Determination Act.

Those wishing additional information should contact the Select Committee on Indian Affairs at 224-2251.

COMMITTEE ON SMALL BUSINESS

Mr. BUMPERS. Mr. President, I would like to announce that the Small Business Committee's Subcommittee on Rural Economy and Family Farming will hold a field hearing in Livingston, MT, on May 24, 1989. This hearing was originally scheduled for May 26, 1989. The subcommittee will be hearing testimony on the impact of S. 863, the Rural Access to Capital Act of 1989, and S. 759, the Rural Access to Telecommunications Services Act of 1989, on rural communities. The hearing will be held at the Park County Courthouse Community Room, 414 Callender Street, Livingston, MT, and will commence at 8 a.m. For further information, please call Tamara McCann of the committee staff at 224-4352.

## AUTHORITY FOR COMMITTEES TO MEET

COMMITTEE ON FOREIGN RELATIONS

Mr. DIXON. Mr. President, I ask unanimous consent that the Committee on Foreign Relations be authorized to meet during the session of the Senate on Tuesday, May 16 at 2 p.m. to mark up the Foreign Relations Authorization Act for fiscal year 1990.

The PRESIDING OFFICER. Without objection, it is so ordered.

SPECIAL COMMITTEE ON INVESTIGATIONS

Mr. DIXON. Mr. President, I ask unanimous consent that the Special Committee on Investigations of the Select Committee on Indian Affairs be authorized to meet during the session of the Senate on May 16, 1989, at 10 a.m. to hold hearings pursuant to Senate Resolution 66, section 21, agreed February 28, 1989.

The PRESIDING OFFICER. Without objection, it is so ordered.

SPECIAL COMMITTEE ON INDIAN AFFAIRS

Mr. DIXON. Mr. President, I ask unanimous consent that the Select Committee on Indian Affairs be authorized to meet on May 16, 1989, beginning at 2:30 p.m., in 485 Russell Senate Office Building, to consider for report to the Senate S. 978, a bill to establish the National Museum of the American Indian and S. 402, the Puyallup Land Claims Settlement Act.

The PRESIDING OFFICER. Without objection, it is so ordered.

SUBCOMMITTEE ON DEFENSE INDUSTRY AND TECHNOLOGY

Mr. DIXON. Mr. President, I ask unanimous consent that the Subcommittee on Defense Industry and Technology of the Committee on Armed Services be authorized to meet on Tuesday, May 16, 1989, at 9 a.m. in open session to receive testimony on the defense technology base.

The PRESIDING OFFICER. Without objection, it is so ordered.

SUBCOMMITTEES ON CONVENTIONAL FORCES AND ALLIANCE DEFENSE; READINESS, SUSTAINABILITY AND SUPPORT; AND MANPOWER AND PERSONNEL

Mr. DIXON. Mr. President, I ask unanimous consent that the Subcommittees on Conventional Forces and Alliance Defense; Readiness, Sustainability and Support; and Manpower and Personnel of the Committee on Armed Services be authorized to meet on Tuesday, May 16, 1989, at 2:30 p.m. in open session to receive testimony on alternatives for substituting Reserve Forces for Active Air Forces, with emphasis on rapid reinforcement of Europe. Also Donald B. Rice for Secretary of the Air Force.

The PRESIDING OFFICER. Without objection, it is so ordered.

COMMITTEE ON ARMED SERVICES

Mr. DIXON. Mr. President, I ask unanimous consent that the Committee on Armed Services be authorized to meet on Tuesday, May 16, 1989, at 11 a.m. in open session to consider the nomination of Gen. Robert T. Herres, U.S. Air Force, for reappointment as Vice Chairman of the Joint Chiefs of Staff.

The PRESIDING OFFICER. Without objection, it is so ordered.

SUBCOMMITTEE ON SCIENCE, TECHNOLOGY, AND SPACE

Mr. DIXON. Mr. President, I ask unanimous consent that the Subcommittee on Science, Technology, and Space, of the Committee on Commerce, Science, and Transportation, be authorized to meet during the session of the Senate on May 16, 1989, at 2 p.m. to hold a hearing on the issues and options involved in creating a national research and technology strategy to help build a U.S.-based high-definition television industry.

The PRESIDING OFFICER. Without objection, it is so ordered.

SUBCOMMITTEE ON RURAL DEVELOPMENT AND RURAL ELECTRIFICATION

Mr. DIXON. Mr. President, I ask unanimous consent that the Subcommittee on Rural Development and Rural Electrification of the Committee on Agriculture, Nutrition, and Forestry, be authorized to meet during the session of the Senate on Tuesday, May 16, 1989, at 9:30 a.m. to hold a hearing on rural development.

The PRESIDING OFFICER. Without objection, it is so ordered.

SELECT COMMITTEE ON INTELLIGENCE

Mr. DIXON. Mr. President, I ask unanimous consent that the Select Committee on Intelligence be authorized to meet during the session of the Senate on Tuesday, May 16, 1989, at 2 p.m. to hold a closed hearing on intelligence matters.

The PRESIDING OFFICER. Without objection, it is so ordered.

COMMITTEE ON THE JUDICIARY

Mr. DIXON. Mr. President, I ask unanimous consent that the Committee on the Judiciary be authorized to meet during the session of the Senate on Tuesday, May 16, 1989, at 10 a.m. to hold a hearing on child abuse.

The PRESIDING OFFICER. Without objection, it is so ordered.

SUBCOMMITTEE ON OVERSIGHT OF GOVERNMENT MANAGEMENT

Mr. DIXON. Mr. President, I ask unanimous consent that the Subcommittee on Oversight of Government Management, Committee on Governmental Affairs, be authorized to meet during the session of the Senate on Tuesday, May 16, 1989, at 9:30 a.m., to hold a hearing on oversight of DOD's inadequate use of off-the-shelf items.

The PRESIDING OFFICER. Without objection, it is so ordered.

SUBCOMMITTEE ON THE HANDICAPPED

Mr. DIXON. Mr. President, I ask unanimous consent that the Subcommittee on the Handicapped, of the Committee on Labor and Human Resources, be authorized to meet during the session of the Senate on Tuesday, May 16, 1989, at 2 p.m., to conduct a hearing on Americans with Disabilities Act, S. 933.

The PRESIDING OFFICER. Without objection, it is so ordered.

## ADDITIONAL STATEMENTS

### THE NATIONAL BICENTENNIAL COMPETITION ON THE CONSTITUTION AND BILL OF RIGHTS

● Mr. DECONCINI. Mr. President, this month in our Nation's Capital over 950 young people from 44 States gathered to participate in the National Bicentennial Competition on the Constitution and Bill of Rights. I am proud to announce that a team from Corona Del Sol High School in Tempe represented my home State Arizona. These young scholars worked hard to reach the national finals by winning in the district and the State competitions. Their performance at the national level was equally outstanding, as they were among the 10 finalists.

The members of the team are Charles F. Adams, Andre E. Brennan, David C. Burns, Bryan C. Choate, Stacy L. Combs, Lisa M. Dillion, Elizabeth M. Enderle, Amy A. Fiedler, Kirstin M. Hermanson, Stacey M. Jackson, Jeffrey M. Jennings, Michael W. Kahn, Dina J. Krause, Matthew B. Levine, Jana G. Seiter, Gregory S. Sorenson, Laura L. Southern, Terry L. Maidi, Brent A. Villanueva, Scott E. Walker, Michael C. Wisdom, and Shawn P. Young.

Along with the students, their instructor Jim Denton deserves much of the credit for the success of the team. In addition, Lois Fitch, the district coordinator, and Don Nordlund, the State coordinator, have worked hard in helping not only this team reach the finals, but also in overseeing the entire program.

The National Bicentennial Competitive on the Constitution and Bill of Rights is the most extensive educational program in the country developed to educate young people about the Constitution and Bill of Rights. With the support of Congress, the active involvement of Representatives and Senators, and the efforts of thousands of civic and education leaders, the program achievements over the past 2 years have been dramatic: 1,022,320 students have studied the curriculum; 14,381 teachers are teaching the course; 420 congressional districts and the five territories have fully functioning programs; 92 U.S. Senators are supporting the program in their States; and 393 U.S. Representatives are participating in their districts.

The program provides students with a specially designed 6-week course of study designed to provide upper elementary, middle and high school students with a fundamental understanding of the Constitution and Bill of Rights and the principles and values they embody. Students complete the instructional portion of the program with a test designed to measure their "constitutional literacy" and receive a certificate of achievement signed by their U.S. Representative.

High school participants then enter a nationwide series of competitions at the congressional district, State, and national levels. Students testify before a panel of experts at a simulated congressional hearing designed to measure understanding and capacity to apply principles being learned to historical and contemporary events. Each year, the National Bicentennial Competition culminates in 3 days of intensive competition among classes from almost every State in the Union.

Mr. President, the need to educate our young people about the Constitution and Bill of Rights is well documented. Studies have found that only slightly more than half of students surveyed were able to identify the original purpose of the Constitution. Nearly half thought the President could appoint Members of Congress and one-third thought he could adjourn Congress when he saw fit. Indeed, another survey conducted on behalf of the Hearst Corp. suggested that over half of Americans thought that the Marxist credo "from each according to his ability, to each according to his need" can be found in the Constitution. Most alarming was the finding that a greater proportion of today's students display antidemocratic attitudes than did students in 1952.

The benefits of this educational program are clear—it is making a difference among the over 1 million students who have studied the program.

A recent study has shown that the National Bicentennial Competition Program has increased the constitutional literacy of our young citizens. Students in classrooms all over the country are debating the issues that concerned the Founding Fathers and demonstrating how the Constitution's basic principles apply to them today.

The preservation of our freedom and our Nation depends upon our young people, the decisionmakers of tomorrow. We have much to gain from educating them about the Constitution, the Congress, and the continuing responsibilities of citizenship. I am proud to have students from my State perform so well in the national finals, and I commend each of them and their teacher for their hard work in accomplishing this great achievement.●

## AMERICA SALUTES BROADWAY WEEK

● Mr. D'AMATO. Mr. President, I rise today to elevate public awareness of the individuals and organizations who devote their time and energy to advancing the cause of live theater by calling attention to the week of May 29, 1989, through June 4, 1989. This week has been designated "America Salutes Broadway Week" by the League of American Theatre Wing. This resolution with Broadway as the focus of the Tribute designates the week of May 29, 1989, through June 4, 1989, as "America Salutes Broadway Week."

Broadway theater enriches the lives of almost every American and is the cornerstone of our modern culture. Broadway enjoys a great cultural legacy that continues to stir the American imagination; it recalls our past, but it also speaks to future generations. Today, Broadway is as healthy as it has been in years, and its future looks just as bright. Broadway represents the best live entertainment in the world.

Broadway can be described as the longest street in the United States, stretching from Maine to Hawaii and Florida to Alaska. It is easily accessible to all Americans since its touring productions travel to all 50 States. Every American has the opportunity to see a Broadway show in or near his or her hometown.

Broadway is a street of dreams. It is a magnet that draws young American theater artists—actors, playwrights, designers and young directors—and inspires them to create their best work.

Broadway shows provide an economic boost to every city in which they are seen. It is documented that for every dollar spent at the box office, an additional $3 are pumped into local economies through such ancillary services as hotels, restaurants, retail stores, and transportation.

If you want to be thoroughly entertained by a musical spectacle, attend a Broadway show. If you want your mind opened to ideas about political, social, and religious ideologies or if you want a simple diversion from everyday life—attend a Broadway show. Broadway can be many things to many Americans.●

## CUTS IN INDIA'S DEFENSE BUDGET

● Mr. DECONCINI. Mr. President, in these times of continued tension among nations in certain parts of the world, I believe that it is important to recognize the efforts of those nations which do their part in attempting to reduce these tensions. It is for this reason that I want to congratulate the Government of India for its decision to cut its national defense budget.

The government of Prime Minister Rajiv Gandhi has recognized the importance of sending a strong signal to its neighbors in the Asian subcontinent. In response to the withdrawal of Soviet occupation troops from Afghanistan and the ceasefire in the Iran-Iraq War, India has reduced its budgeted defense spending levels for the fiscal year 1989-90 in absolute terms by $124 million. This reduction in defense spending is a cut of approximately 12 percent over the previous year. According to the February 28, 1989, edition of the Hindustan Times, the revised Indian defense budget has dropped defense spending to 14 percent of the total Indian budget for the current fiscal year. This is also the third straight year in which defense spending, as a portion of the total Indian budget, has been reduced.

In the early part of this decade, the Indian Government had directed a significant portion of its resources to increased military procurement. The reduction in spending for the third year in a row recognizes the resource crunch facing the nation and the need for implementing measures for greater cost effectiveness. It also allows for more funds to be spent on the massive human and economic problems facing this growing nation. Other nations, including the United States, are facing similar situations in trying to achieve a balance in funding levels between important human and defense needs.

In India's case, the defense reduction also marks a period of stabilization in its relations with its neighbors and former adversaries—Pakistan and China. While the nations in the region must continue their efforts to stem the growth of potentially destabilizing weapons, this action by India deserves the recognition and support of the United States Government. I encourage other nations in this part of the world to follow the positive example set by the Government of India.●

## NATIONAL WEEK OF COMMITMENT TO HELP THE HOMELESS

● Mr. D'AMATO. Mr. President, I rise today to cosponsor Senate Joint Resolution 111, a joint resolution designating the week beginning October 8, 1989, as "National Week of Commitment to Help the Homeless."

The problem of homelessness in America is a national tragedy no citizen can ignore. According to the Department of Education, 220,000 schoolchildren lack a home, while 65,000 are unable to attend school regularly because of their plight; 5,000 homeless youths die each year, children unknown, unwanted, and uncared for. They are victims of a cruel reality.

It is for these casualties of our society that we must act to promote a sense of civic duty. Voluntary efforts would go a long way in mitigating the suffering of the homeless, and I urge my colleagues to join me in support of this legislation.●

## FETAL ALCOHOL SYNDROME AWARENESS

● Mr. GRAHAM. Mr. President, I rise to draw the attention of my colleagues to an important public education effort which began on Mother's Day, May 14. The National Council on Alcoholism, in concert with the Office for Substance Abuse Prevention, the Center for Science in the Public Interest, and the Healthy Mother, Healthy Babies Coalition are mounting a major awareness campaign to educate Americans about the risks of drinking during pregnancy.

In 1981 the Surgeon General issued a health message warning women about the dangers of drinking alcohol during pregnancy. Seven years later a 1988 Bureau of Alcohol, Tobacco and Firearms study found that many participants were relatively unaware of suspected alcohol related health hazards such as fetal alcohol syndrome. Although most felt drinking alcohol during pregnancy was dangerous, there were some who thought it was good for you during pregnancy. A few even mentioned that they consumed liquor during pregnancy at their doctor's direction. The study also found that only 4 in 10 adults are familiar with and understand the term fetal alcohol syndrome.

Fetal alcohol syndrome [FAS] is a combination of physical and mental birth defects that result from drinking alcohol during pregnancy. Fetal alcohol effects [FAE] are those signs in the offspring that have been linked to alcohol use during pregnancy which do not meet the diagnostic criteria for full-blown FAS.

Mr. President, because the research in this area is incomplete, it is assumed there is no safe amount of alco-

hol consumption during pregnancy. However, alcohol related birth defects are 100 percent preventable if alcohol is not consumed during pregnancy.

Public education is essential to reduce the incidence of alcohol related birth defects in the United States. The 1988 antidrug bill included legislation requiring health and safety warning labels on all alcoholic beverages. These labels, which will appear on all alcoholic beverage containers by late 1989 will urge women not to drink alcohol during pregnancy and will serve as an important educational tool.

It is appropriate that this week, from Mother's Day, May 14 to May 20, has been declared "Alcohol-Related Birth Defects Awareness Week." The purpose of the week is to educate the American public and increase awareness of the adverse consequences of alcohol consumption during pregnancy. The need for such education is evidenced by the following facts:

Only 57 percent of Americans under the age of 45 have heard of fetal alcohol syndrome.

At least 5,000 babies each year suffer the effects of FAS. As many as 50,000 babies each year suffer the milder effects of alcohol birth defects known as fetal alcohol effects.

FAS is the third leading cause of mental retardation and the leading preventable one. It is characterized by growth deficiencies, facial abnormalities—including a small head circumference, flattened face and sunken nasal bridge—malformed organs and mental retardation.

The incidence of FAS is approximately 3 per 1,000 live births.

Society spends $15 million a year to treat babies born with such birth defects, $670 million to care for children and adolescents with the affliction and $760 million to look after adults. All told, the indirect loss of productivity is $510 million.

In conclusion, public educational efforts such as "Alcohol-Related Birth Defects Awareness Week" are an important part in the continuing effort to reduce the unnecessary tragedy and loss suffered by uninformed families throughout the United States. The National Council on Alcoholism and the numerous organizations involved with Alcohol-Related Birth Defects Awareness Week are to be commended for their commitment and dedication to the educational efforts concerning this serious public health problem and for providing American families with a clear message about drinking during pregnancy.●

## COSPONSORSHIP OF NATIONAL CORRECTIONAL OFFICERS WEEK

● Mr. D'AMATO. Mr. President, I rise today to commend Senate Joint Resolution 72, a joint resolution that designated the week beginning May 7, 1989 as "National Correctional Officers Week."

This week commemorated those risking life and limb to accept responsibility for guarding the more than 600,000 inmates in our country. Working in highly stressful environments, these individuals place themselves in dangerous situations to police the prison population as well as protect surrounding communities. I feel we owe a special debt to correctional officers and was heartened by the passage of this legislation by my colleagues.●

## CHILDREN: OUR HIGHEST PRIORITY

● Mr. SARBANES. Mr. President, I joined recently in introducing a measure in the Senate known as the "Health of America's Children" resolution. It is my understanding that this resolution is currently before the Labor and Human Resources Committee and may soon be brought to the floor for full Senate consideration. I rise today to urge prompt passage of this resolution and to bring to the attention of the Senate the urgent need to move quickly to address the critical issues facing us with respect to our children's future.

While disagreements over matters of policy are inevitable in a free and democratic republic, there is little room for disagreement about what must be our country's highest priority—the protection and well-being of our children. It has been well established that under the policies of the previous administration, our Nation's children lost precious ground with Federal spending on programs for children falling in the last decade from $51 to $49 billion in real dollars.

Since 1980, the number of children not covered by health insurance has grown steadily with current figures showing 20 percent of all children under age 18 without insurance and approximately 15 percent of pregnant women uninsured. According to a study by the National Association of Children's Hospitals and Related Institutions, less than 60 percent of U.S. children under age 4 received basic immunizations in 1985.

In addition, the United States has one of the highest infant mortality rates of any industrialized nations. Maryland's average infant mortality rate of 11.7 per 1,000, slightly higher than the national average, and Baltimore City's rate of 18.2 per 1,000 for black infants, illustrates graphically the need for an increased investment in prenatal and neonatal care. Prenatal care not only benefits infants in the short term, but may also improve their potential to become healthy and productive adults. Missed opportunities to prevent or treat childhood health problems may impose lifetime costs on children, their families, and society.

In an effort to address this critical problem, I joined in sponsoring the Infant Mortality and Children's Health Act to require States to raise the ceiling for Medicaid eligibility to 185 percent of the Federal poverty level for pregnant women and infants. States would also be required to phase-in Medicaid coverage for children up to age 18 living in families at or below 100 percent of the poverty level. Under this proposal, Medicaid coverage and services would become more readily available to those who are eligible and coordination would be increased between the Medicaid Program and the Special Supplemental Food Program for Women, Infants, and Children [WIC].

The Federal investment in child nutrition programs has also declined over the past decade. Funding for the School Lunch and School Breakfast Programs, the Child Care Food Program, and the Summer Food Service Program fell 29 percent from 1982 to 1985—yet the previous administration continued to propose Federal budgets which slashed funding for critical child nutrition programs.

I adamantly opposed such cuts and I look forward to the opportunity to renew our Federal commitment in this area through the reauthorization of expiring child nutrition programs: The Summer Food Service Program for Children serving approximately 22,000 children per day in my State of Maryland; the Food Distribution Program providing $19 million worth of food and commodities to Maryland's schools; Child Care Food programs; the WIC Program; Charitable Institutions and the Disaster Feeding Program; the Nutrition Education and Training Program, and the State Administrative Expense Funds Program.

Legislation to reauthorize these programs has been introduced in the House and is expected to be introduced in the Senate in the near future. I strongly support a renewed Federal investment in these critical programs and will continue to monitor carefully relevant legislation to ensure their prompt reauthorization.

Child care is another area which requires immediate attention. There can be no doubt that the existing national supply of child care services is inadequate to meet the needs of the increasing number of children who have mothers employed outside of the home. The number of preschool children with mothers in the labor force has grown by 75 percent over the past 15 years, and the number of school-age children with working mothers has increased by 22 percent. Over half of all mothers who have infants under 1 year of age are working outside the home.

It is obvious that prompt action must be taken to respond to this increasing need. A study conducted in 1987 by the U.S. Bureau of Labor Statistics found that only 2 percent of all business establishments—defined as individual business or Government work sites with one or more workers—provide employer-supported child care services. Given this, it might reasonably be assumed that the Federal Government would have increased its support of child care services to meet the changing needs of our society. Instead, the previous administration sought massive cuts in appropriations for Federal programs providing support for child care services, especially those serving child care needs of low-income Americans.

The current administration has proposed a tax credit approach which includes a $1,000 tax credit for families with incomes below $13,000 and children under age 4, and an expansion of the current dependent child care tax credit. However, this approach does not address the issues of supply and quality of child care and would not benefit families with school-age children.

To address the present problem more fully, I have joined in sponsoring the Act for Better Child Care Services which focuses on ensuring the availability of quality, affordable child care services throughout the Nation. I also support the Family and Medical Leave Act, to provide employees with an amount of job-guaranteed, unpaid leave upon the birth or adoption of a child or the serious illness of a child or parent. The United States remains the only industrialized nation that does not have some form of national family leave policy for working parents. I regret that a filibuster prevented final action on this proposal as well as child care legislation during the last Congress. I intend to continue to work for the prompt passage of measures which address our Nation's pressing child care needs in a comprehensive manner.

Mr. President, the final matter I would like to address with respect to the well-being of our Nation's children is that of Federal support for education. As in the areas of health and child care, children have suffered as a result of actions taken in the last 8 years. The previous administration chipped away unrelentingly at Federal aid to education. In fiscal year 1981, the administration's budget request for education was 6 percent less than the funding approved by Congress in the previous year, and the 1982 budget request was 16 percent less than the 1981 appropriation level. The 1983 request of $9.95 billion was nearly 33 percent below the previous year's level of spending.

In fiscal year 1984, the President requested $13.2 billion, or 14.5 percent less than the appropriation approved by Congress in the previous year. In fiscal year 1985, an election year, the administration proposed a marked increase over its previous budget. Even so, the request only matched the actual funding level for fiscal year 1984. The following year, the budget request was again cut sharply, 18-percent less than the fiscal year 1984 appropriation. Both the fiscal year 1987 and fiscal year 1988 requests were below the amount appropriated the year before, 15 percent and 29 percent lower, respectively. In fiscal year 1989—another election year—the Reagan administration requested level funding for education.

Congress attempted to preserve the long-term Federal investment in education by consistently appropriating more for education than was requested by the administration. Nevertheless, from 1980 to 1988 Federal outlays for the Department of Education decreased as a percentage of the total budget from 2.5 to 1.8 percent. Federal funding for elementary and secondary education programs decreased by 26 percent.

I am concerned especially that funding for compensatory education programs has fallen by 25 percent since 1980. It is well established that ensuring a sound educational experience at an early age greatly enhances the future lives of our Nation's children. In fact, early education programs such as the Perry Preschool in Ypsilanti, MI, the Brookline Early Education project, Philadelphia Head Start, the Syracuse University Children's Center, and other child development programs have shown that high quality preschool programs can reduce, by as much as 40 percent, the likelihood that children will drop out of school, become pregnant as teenagers, become dependent on welfare, or become involved in crime.

Given these statistics and during a period when problems existing in urban education led the Carnegie Foundation for the Advancement of Teaching to describe students in large urban centers as "an imperiled generation," the cuts outlined above cross the line from unwise to incomprehensible. It is imperative to remember that children are the future. Unless we provide future generations with the quality education necessary to acquire the knowledge and skills needed to function successfully in an increasingly complex world, we not only imperil the futures of our children—we imperil the future of our Nation. I am pleased that the current Congress is considering initiatives to provide high quality early childhood education. We must continue our efforts to ensure the development of such programs and increase support for existing programs like chapter I and Head Start which have already proven their effectiveness.

Mr. President, in a society where one out of four children is born poor, one out of six has no health insurance, and one out of seven is at risk of dropping out of school, we must renew and strengthen the Federal investment in programs which promote our children's well-being. With a fresh and sustained commitment to this critical task, we will ensure a more productive future for our children and a stronger foundation for our Nation.●

## RESCUING A NATION

● Mr. HATFIELD. Mr. President, he was a 40-year-old mining engineer who had decided that "just making money isn't enough," the orphaned son of an Iowa blacksmith who had already lived on several continents. Years later, he would become President of the United States. But in August 1914, he would begin what biographer George Nash calls an undertaking unprecedented in world history: an organized rescue of an entire nation from starvation.

The man was Herbert Hoover, and his Commission for Relief in Belgium would become "an international symbol of practical idealism." So too would he.

Dr. George Nash, the author of "The Life of Herbert Hoover: The Humanitarian, 1914-1917" and a number of other books, details this tremendous undertaking and the man who made it possible in "An American Epic: Herbert Hoover and Belgian Relief in World War I." I ask that this uplifting story be printed in the RECORD following my remarks.

The article follows:

"AN AMERICAN EPIC": HERBERT HOOVER AND BELGIAN RELIEF IN WORLD WAR I

(By George H. Nash)

Senator Everett Dirksen of Illinois was once asked by a group of junior high school students to define diplomacy. The senator replied: "If I said to my wife, 'You have a face that would stop a thousand clocks,' that would be stupidity. But if I turned to her and said, 'Dear, when I behold you, time stands still,' that's diplomacy!"

The subject of my essay, and of the book that I have just published, is, in a way, diplomacy, but diplomacy of a special sort—indeed, of a character that the world had never seen before. The Life of Herbert Hoover: The Humanitarian, 1914-1917 is also a book about politics, again of a special sort: the politics of philanthropy and humanitarian relief on a scale previously unknown and unimagined. And, of course, my book is the second installment in a biography of one of the least understood of all American leaders.

While preparing this volume, I spent many rewarding days in the research rooms and corridors of the National Archives, where I received the courteous assistance of people like Assistant Archivist for Presidential Libraries John Fawcett and archivists Ronald Swerczek and Gerald Haines. I was

drawn here by two superb collections: Record Group 59 (the General Records of the Department of State) and RG 84 (the Records of the Foreign Service Posts of the Department of State). Of the latter, two in particular—the files of our embassy in London and legation in Brussels for the years of World War I—proved to be indispensable. And no doubt like innumerable other scholars over the years who have explored these particular treasures, I say: Hurrah for the State Department's decimal file and the access to the past that it facilitates. Would that every other agency of government used a similar classification scheme.

This summer the nations of Eruope and North America will recall the seventy-fifth anniversary of the outbreak of the First World War. For the people of the United States this commemoration will evoke many images. Of battle sites like Château-Thierry and Belleau Wood. Of soldiers like John J. Pershing and Sergeant York. Of Flanders Fields where poppies grow. Of a musical call to arms, "Over There." For some Americans the remembrance will elicit another image as well: of the grim, chaotic month of August 1914, when the independent kingdom of Belgium courageously resisted an invading German army, only to fall victim to a four-year ordeal of conquest.

One American will be forever linked in history with Belgium's travail in that awful war. His name, of course, is Herbert Hoover. After the battle of the Marne, giant European armies bogged down in the trenches, and famine threatened beleaguered Belgium, a highly industrialized nation of 7 million dependent upon imports for three-quarters of her food. On one side the German army of occupation refused to take responsibility for victualing the civilian population. Let Belgium import food from abroad as she had done before the war, said the Germans. On the other side stood the tightening British naval blockade of Belgian ports. Let the Germans, as occupiers of Belgium, feed its people, said the British. Besides, they argued, how could one be sure that the Germans would not seize imported food for themselves?

As the tense days passed in the early autumn of 1914, food supplies dwindled ominously in Belgium. To the outside world went emissaries pleading for the allies to permit food to filter through the naval noose. Finally, on October 22, after weeks of negotiations, Herbert Hoover established under diplomatic protection a neutral organization to procure and distribute food to the Belgian populace. Great Britain agreed to let the food pass unmolested through its blockade. Germany in turn promised not to requisition this food destined for helpless noncombatants.

Why Hoover? In the summer of 1914 Herbert Clark Hoover was a prosperous forty-year-old international mining engineer living in London—and dreaming of a career of public service in the United States. This orphaned son of an Iowa blacksmith had come far indeed from his humble beginnings in the American Middle West. Rising rapidly in his chosen profession, by 1914 he directed or in part controlled a worldwide array of mining enterprises that employed a hundred thousand men. "If a man has not made a fortune by 40 he is not worth much," Hoover had said, while still in this thirties. By August 1914 he had achieved his goal yet was not content. "Just making money isn't enough." he confessed to a friend. Instead, he wanted (as he put it) to "get into the big game somewhere." Fascinated by the power of the press to mold and direct public opinion, Hoover that summer was negotiating to purchase a newspaper in California. Events in Europe compelled him to abandon his quest. Had it not been for "the guns of August," he would have entered American public life—and might even be remembered today—as a newspaper magnate.

In the first tumultuous weeks of the war, tens of thousands of American travelers in Europe fled the war-shocked continent for the comparative safety of London—and, they hoped, passage home. It was not as easy as that. Arriving in the British capital, many Yankee tourists found themselves unable to cash their instruments of credit or obtain temporary accommodation, let alone tickets for ships no longer crossing the Atlantic. Responding to the travelers' panic and necessities, Hoover and other American residents of London organized an emergency relief effort that provided food, temporary shelter, and financial assistance to their stranded fellow countrymen. Eventually the passenger ships resumed their sailings, and more than 100,000 weary and frightened travelers headed back to the United States. Hoover's untiring and efficient leadership during the crisis earned him the gratitude of the American ambassador to Great Britain, Walter Hines Page. And when a few weeks later the plight of Belgium became perilous, Ambassador Page and others agreed upon Hoover, a man of demonstrated competence, to administer this new mission of mercy. The globe-trotting mining engineer who had done well, and who now wanted to good, had found an unexpected entree into the "big game."

And so began an undertaking unprecedented in world history: an organized rescue of an entire nation from starvation. Initially no one expected this humanitarian task to last more than a few months. Few foresaw the gruesome stalemate that developed on the western front. As Hoover himself later wrote, "The knowledge that we would have to go for four years, to find a billion dollars, to transport five million tons of concentrated food, to administer rationing, price controls, agricultural production, to contend with combatant governments and with world shortages of food and ships, was mercifully hidden from us."

Within a few months Hoover and a team of mostly American volunteers built up what one British goverment official called "a piratical state organized for benevolence." Indeed, the novel relief organization, which went by the name of the Commission for Relief in Belgium (CRB), possessed some of the attributes of a government. It had its own flag, it negotiated "treaties" with the warring European powers, and its leaders parleyed regularly with diplomats and cabinet ministers in several countries. It even had a "pirate" leader in Hoover, who enjoyed informal diplomatic immunity and traveled freely through enemy lines—probably the only American citizen permitted to do so in the entire war.

As a historian and biographer of Mr. Hoover, I am particularly impressed by four aspects of his wartime service to the people of Belgium. First, by the sheer complexity and magnitude of the relief commission that he led. Today we are apt to take for granted the prompt intervention of humanitarian agencies in areas of distress, be it a famine in Ethiopia, an earthquake in Mexico, or a typhoon in Bangladesh. In 1914, however, no institution for the succor of Belgium existed; it became Hoover's awesome responsibility to create one.

Consider the array of tasks that the Commission for Relief in Belgium was obliged to perform. First it had to raise money throughout the world—partly through charitable appeals, but primarily, as the war went on, through subsidies from the Allied governments. With this money it had to purchase wheat and other foodstuffs from North America, South America, and Australia. Then it had to arrange for shipping these foodstuffs to Belgium; eventually the CRB had a fleet of several dozen ships continuously at its disposal. When these ships entered the European war zone, they were required to navigate carefully lest they be seized or subjected to submarine attack. And when the food-laden vessels reached the neutral Dutch port of Rotterdam, their cargo had to be unloaded for conveyance by canal into Belgium.

Once inside the occupied country the supplies had to be prepared in mills, dairies, and bakeries for human consumption. Then the food had to be distributed equitably to an anxious population scattered over more than 2,500 villages, cities, and towns. As part of its undertaking, the CRB needed to verify that the daily rations did indeed reach their intended recipients and not the German army of occupation. Working with Hoover and his staff was a vast network of forty thousand Belgian volunteers who handled the distribution of food throughout their land. This parallel Belgian organization was known as the Comité National de Secours et d'Alimentation. At its head were some of the country's most eminent business leaders. In early 1915 Hoover's team was allowed to extend its life-sustaining operations to 2 million desperate French civilians caught behind the German battle lines on the western front. Thus the CRB's work came to encompass a total area of nearly twenty thousand square miles.

The commission's functions were even more complex than this summary suggests. Writing in early 1917, one of the CRB's young supervisory delegates, Joseph C. Green, explained in a letter what providing food to a civil population under enemy control actually entailed:

"Take the one item of bread for example. First the [CRB] Provincial Representative has to figure out periodically the exact population of his Province, and the exact quantities of native wheat and rye and of imported wheat and maize on hand. From this he calculates the quantity of imported grain necessary to cover a certain period. This he reports to Brussels, and Brussels to London. London supplies the ships. New York purchases and sees to the loading. Rotterdam transships into canal barges. In the meantime Brussels has decided upon the exact quantities to be shipped to each mill in the country, and Rotterdam ships accordingly. The provincial man must see to the unloading and the milling. The milling involves questions of percentages of bran and flour, of mixtures of native and foreign grains, of the disposal of byproducts and so on."

And this was just the start: "When the flour is finally milled, the real work of distribution begins. Sacks must be provided and kept in rotation. The exact quantity of flour required by a given Commune for a given period must be ascertained. Shipments by canal or rail or tram or wagon must be made to every Commune dependent upon the mill. Boats and cars and horses must be obtained and oil must be supplied for engines and fodder for horses. When the

flour has reached the Local Committee it must be carefully distributed among the bakers in accordance with the needs of each. Baking involves yeast, and the maintenance of yeast factories, and the disposal of by-products, and questions of hygiene and a dozen other minor matters. When the bread is baked it must be distributed to the population by any one of a dozen methods which guarantee an absolutely equitable distribution, each man, woman and child getting the varying ration to which he is entitled, paying for it if he can afford it, and getting it free if he can't. All this involves financial problems, and bookkeeping, and checking and inspection, all along the line; and the whole process to the tune of endless bickering with German authorities high and low, and endless discussions with a thousand Belgian committees.

"Now, if you have digested that, you have some idea of what it means to supply a nation with bread. But that is only one item among many. Lard, rice, milk, clothing, etc., etc.: each involves its own special series of problems."

But "relief in Belgium" meant even more than this. By the middle of April 1917 nearly 5 million people in Belgium and northern France were destitute. Using the CRB's gifts from abroad and the profits from its own food sales to the well-to-do, the Comité National financed a vast and growing web of benevolence, including more than 2,700 local charitable committees as well as various other more specialized institutions. All in all, Hoover calculated that more than half the entire population was receiving some kind of assistance in the spring of 1917, including at least 2,700,000 who were helped by the communal charitable committees.

One object of special solicitude was the young. It was our task and the Belgians', Hoover wrote later, "to maintain the laughter of the children, not to dry their tears." Thanks to the CRB's external fund raising and food imports, and the dedicated zeal of Belgian volunteers, the challenge was impressively met. By early 1917 (to cite but one example) three-fourths of Belgium's children were receiving daily hot lunches at canteens established especially for this purpose.

Another particular concern to Hoover was the plight of Belgium's renowned lace workers. Deprived of essential raw material by the invasion and subsequent blockade, a workforce of forty thousand women faced destitution, long-term idleness, and possible attenuation of their skills until Hoover and his associates stepped in. The CRB arranged to import needed thread for the lacemakers and to sell some of their finished products abroad. It also helped committees make advances to the women for their unsold production, such money to be recovered from the export of accumulated merchandise after the war. In these ways an entire industry was kept alive and thousands of skilled women self-supporting. The sale of the exquisite lace in England and the United States also no doubt helped to sharpen "the club of public opinion" that Hoover wielded in behalf of Belgium's cause.

No enterprise so massive, so multifaceted, so exposed to the passions of war, could hope to function undisturbed. This is the second feature of Hoover's relief experience that impresses the biographer: the unremitting pressures and troubles that beset him at every turn. From the day of its inception, the CRB had to cope with critics in the various belligerent governments who were convinced that its work was enhancing the military strength of one side or the other. Scarcely a month went by that did not witness some challenge to the precarious existence of the commission. Time and again Hoover was immersed in exhausting negotiations in an endless race against famine and malnutrition. Prime Minister Herbert Asquith, Lloyd George, the British Admiralty, the German high command: all at one time or another opposed him—and felt the sting of his relentless entreaties. At times, too, he had furious disagreements with his Belgian counterpart Emile Fancqui, a man, like himself, of great ability and formidable force of personality. Let no one think that humanitarian relief, because of its noble and generous purpose, was exempt from political intrigue, personal ambition, and diplomatic rivalry. It was not.

Sometimes, weary from incessant conflicts with one or another belligerent power, however contemplated resigning. "Were it not for the haunting picture in one's mind of all the long line of people standing outside the relief stations in Belgium," he wrote early in the war, "I would have thrown over the position long since." Ofttimes, too, he threatened to resign—the better to obtain his objectives. But Hoover did not quit. When the chips were down, it was his critics who yielded, recognizing his indispensability and growing statute and the risk of angering American public opinion that he had so skillfully mobilized.

Third, I continue to be impressed—as were so many observers at the time—by the energy, resourcefulness, and public relations acumen of the man at the apex of the CRB. While the relief commission had many volunteers—all, like Hoover, working without pay—and while Hoover himself emphasized the value of organization, his local subordinates knew that one man dominated their endeavors: the man they called "the Chief."

What kind of person was he? Here is Edward Eyre Hunt's description of him in the Belgian relief period:

"In appearance he is astonishingly youthful, smooth-shaven, dark haired, with cool, watchful eyes, clear brow, straight nose, and firm, even mouth. His chin is round and hard.

"One might not mark him in a crowd. There is nothing theatrical or picturesque in his looks or bearing. . . . At work he seems passive and receptive. He stands still or sits still when he talks, perhaps jingling coins in his pocket or playing with a pencil. His repertory of gestures is small. He can be so silent that it hurts.

"Being an American he sometimes acts first and explains afterwards. But his explanations, like his actions, are direct and self-sufficient."

To Ambassador Walter Hines Page, life was "worth more . . . for knowing Hoover. But for him Belgium would now be starved. . . . He's a simple, modest, energetic little man who began his career in California and will end it in Heaven; and he doesn't want anybody's thanks."

Hoover's ability to concentrate on the relief problems at hand was almost legendary. Joseph C. Green later described an encounter he had with "the Chief" in the Brussels office of the CRB:

". . . I found Mr. Hoover standing with his back to the wall, gazing fixedly at a spot on the floor five or six feet in front of me.

"I went over, said good morning, and was about to proffer my hand in the Belgium fashion when I became aware that he was absolutely unconscious of my presence. I stood about awkwardly for a few minutes till he came to with a start, and recognized me with a nod. This extreme absorption in the business of the moment is one of Mr. Hoover's chief characteristics. Belgians, with their more elaborate code of good manners, find it difficult to understand him."

Sometimes Hoover's ability to concentrate had amusing aspects. Hugh Gibson, an American diplomat, told Green one day of the time—

"That Mr. Hoover once came to the Legation to see him on business. During the entire conversation he paced the floor in the little salon upstairs. One of his pacings led him to the door, and he walked out. Gibson thought that he was going to continue his walking up and down in the hall, and his first intimation that the interview was terminated was the sound of footsteps hurrying downstairs. Gibson ran after him and just reached the outside door in time to shout a hurried goodbye."

When the United States entered the European conflict in 1917, Hoover returned home to head a new wartime agency, the United States Food Administration. But the relief commission that brought him fame continued to function, although in a reorganized form necessitated by the end of American neutrality. Throughout the war the CRB and Comité National indefatigably fed more than nine million people a day in Belgium and northern France. And when the commission finally closed its accounts, it found that it had spent nearly a billion dollars. It had sustained the health and morale of the Belgian people. It had made Herbert Hoover an international symbol of practical idealism, and it had launched him on what he later called "the slippery road of public life."

Hoover was not a man to covet what he called "European decorations." Moreover, once he became an official of the United States government he could not accept a title of nobility. In August 1918, therefore, when Hoover visited the tiny portion of Belgium not under German control, King Albert, on petition of his ministers, presented his American guest a specially created, unique title: "Ami de la nation belge," Friend of the Belgian Nation. By royal directive only Hoover would ever hold this title of esteem.

Hoover's association with Belgium did not terminate with the end of World War I. At that point he could easily have retired from the scene; most men no doubt would have done so. But even before the cessation of hostilities he was thinking ahead to the reconstruction of the strifetorn land whose history had intersected so fatefully with his own. As early as 1916 he suggested to the exiled Belgian minister of finance that the CRB's excess funds at the end of the war be used to establish a foundation "for the stimulation of scientific and industrial research." In 1918 Hoover confided to the American minister to Belgium, Brand Whitlock:

"As to the question of re-building in Belgium and Northern France, it is the one job that I would like to have. I believe that it contains usefulness and sentiment beyond any other occupation after this War is ended, and there is nothing that would appeal to me so much as to join with you in a mission of this kind. . . ."

In 1920, after various negotiations, Hoover's dreams achieved practical fruition. Upon liquidating, the CRB had a surplus of over $35 million. Of this sum it distributed more than $18 million in outright gifts to

the Universities of Brussels, Ghent, Liège, Louvain, and other educational institutions. The remainder of the money was divided between two foundations created that year: the CRB Educational Foundation in the United States, and the Fondation Universitaire in Belgium.

Through this device Hoover and his wartime associates forged enduring bonds of Belgian-American cultural exchange, bonds that persist to this day. During the 1920s, for instance, Hoover's foundation granted over $1,600,000 for the rebuilding of the University of Louvian, so terribly ravaged during the German occupation. Thus was born in the tragedy of World War I an empire of philanthropy with which Hoover was identified for the rest of his life.

Finally—and this is the fourth theme to which I call your attention—the creation of the Commission for Relief in Belgium turned out to be more than a passing episode in a great war—and more than a springboard to one man's political career. Hoover's endeavor was in fact a pioneering effort in global altruism—in his own words, "an American epic" that in some ways was the prototype of much that followed in this bloody century. In 1916 Lord Eustace Percy of the British Foreign Office described Hoover as "the advance guard and symbol of the sense of responsibility of the American people towards Europe." A few months later the New Republic echoed this assertion, acclaiming the CRB as "an outpost of the Republic" whose continued success was of the highest national priority. Hoover and his colleagues, declared the journal, had "created an American obligation in Europe." To the New York Times in early 1917, Hoover's administration of the CRB ranked as "perhaps the most splended American achievement of the last two years."

In more recent times the world has grown accustomed to American action to save lives and restore the fractured economies of far-off lands. Indeed, today such involvement is almost universally taken for granted. One reason for this expectation, one reason for its acceptance—although few today know it—is the institution created nearly seventy-five years ago by Herbert Hoover.

For Hoover, also, the Belgian experience was but a prologue. In the years 1917 to 1921, he as well as his country moved even more prominently onto the international stage. No longer just the almoner of Belgium, he became (in General Pershing's words) "the food regulator for the world"—or, as one admirer put it, a "Napoleon of mercy." It has been said that Hoover was responsible for saving more lives than any other person in history. The story of that achievement during the remainder and aftermath of World War I will be a principal focus of the next volume of my biography.

Sixty years ago this fall, while Hoover was seeking the office of President, a certain mediocrity was running for city council in Augusta, Georgia. The candidate apparently knew his limitations, for he announced in his campaign advertisements, "I know I'm not much, but why vote for less?" Without discussing Hoover's later political odyssey, I hope I have said enough here to suggest why his contemporaries came to feel that with him they did not, so to speak, have to "vote for less," and how it was possible for him to become President of the United States without ever having held an elective office.

Why did he do it? Any autobiographical statement that he composed sometime during World War I provides a clue:

"There is little importance to men's lives except the accomplishments they leave to posterity. What a man accomplishes is of many categories and of many points of view; moral influence, example, leadership in thought and inspiration are difficult to measure, to prove or to treasure . . . and the proportion of success to be attributed to their effort is always indeterminate. In the origination or administration of tangible institutions or constructive works men's parts can be more certainly defined. When all is said and done accomplishment is all that counts."

During his lifetime Hoover created and administered many "tangible institutions," the most remarkable of which was the Commission for Relief in Belgium. He also left behind a panoply of achievements long obscured by the bitter memory of the Great Depression. When Hoover died in 1964 at the age of ninety, he had spent fifty years—a half century—in one form or another of public service. It was a record that in sheer scope and duration may be without parallel in American history.

A life like that requires not pages but volumes to measure.●

## NUCLEAR REGULATION REORGANIZATION AND REFORM ACT OF 1989—S. 946

● Mr. BREAUX. Mr. President, on May 9 I introduced S. 946, the Nuclear Regulation Reorganization and Reform Act of 1989, along with Senators SIMPSON and BIDEN. I ask unanimous consent that the text of the bill be printed in the RECORD.

The text of the bill follows:

S. 946

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. This Act may be cited as the "Nuclear Regulation Reorganization and Reform Act of 1989".

### TITLE I—REORGANIZATION AND REFORM OF NUCLEAR ENERGY REGULATION

#### Subtitle A—Nuclear Safety Agency

DECLARATION OF PURPOSES

SEC. 101. The Congress declares that—

(a) a clear and coordinated national policy for the development, use, and regulation of atomic energy for peaceful purposes, in accordance with the objectives of the Atomic Energy Act of 1954, as amended, is in the best interest of the general welfare and the common defense and security of this Nation; and

(b) to best achieve these objectives, improvements in the effectiveness of the current approach to the regulation of atomic energy for peaceful purposes are required.

DEFINITIONS

SEC. 102. For the purpose of this Act—

(a) the term "Agency" means the Nuclear Safety Agency established under section 103; and

(b) the term "Administrator" means the Administrator of the Nuclear Safety Agency appointed under section 104(a).

ESTABLISHMENT OF NUCLEAR SAFETY AGENCY

SEC. 103. (a) There is hereby established the Nuclear Safety Agency (hereinafter in this Act referred to as the "Agency"). The Agency shall succeed the Nuclear Regulatory Commission in existence on the day before the effective date of this Act.

(b) There are transferred to the Agency all of the functions of the Nuclear Regulatory Commission.

(c) For purposes of title 5 of the United States Code, the Agency is an Independent Establishment in the Executive Branch of the government.

(d)(1) The Administrator shall keep the Committees of the Senate and the House of Representatives which, under the rules of the Senate and the House, have jurisdiction over the functions of the Agency, fully and currently informed with respect to the activities of the Agency.

(2) For the purpose of any review by the Office of Management and Budget of any Agency rule or regulation, the following procedures shall apply:

(A) For each Agency rule or regulation reviewed by the Office of Management and Budget, the Office shall establish a public docket and shall include in such docket the following information:

(i) copies of all written material received by the Office concerning the Agency rule or regulation under review that originates from persons who are not employees of the federal government; and

(ii) a list of all meetings and all other communications, including oral communications, with persons who are not employees of the federal government concerning the Agency rule or regulation under review.

(B) The Office of Management and Budget shall inform the Administrator of all scheduled meetings with persons who are not employees of the federal government concerning any Agency rule or regulation under review by the Office and shall provide the Agency with a reasonable opportunity to attend such meetings.

(C) The Administrator shall place in the rulemaking record for any nuclear regulation reviewed by the Office of Management and Budget the following information:

(i) copies of all drafts of any proposed or final rule submitted to the Office for review;

(ii) copies of all written materials pertaining to any proposed or final rule submitted to the Office for review; and

(iii) a written explanation of the specific reasons for any significant changes made by the Agency in the draft of any proposed or final rule submitted to the Office for review as a result of such review.

(D) The time for review of Agency rules or regulations by the Office of Management and Budget shall not exceed sixty days following receipt of such submission by the Office. The time for review may be extended for good cause by the Office for an additional thirty days. Notice of any such extension, together with a succinct statement of the reasons therefore, shall be placed in the rulemaking record.

(E) Nothing in this Act alters in any manner—

(i) rulemaking authority vested by law in the Agency to initiate or complete a rulemaking proceeding or to issue, modify, or rescind a rule or regulation; or

(ii) the criteria for rulemaking applicable under other statutes.

OFFICERS

SEC. 104. (a) The Agency shall be administered under the supervision and direction of an Administrator, who shall be appointed by the President, by and with the advice and consent of the Senate.

(b) There shall be in the Agency a Deputy Administrator who shall be appointed by the President, by and with the advice and

consent of the Senate. The Deputy Administrator shall perform such functions as the Administrator shall prescribe.

(c)(1) Section 5313 of title 5, United States Code, is amended by adding at the end thereof the following: "Administrator, Nuclear Safety Agency.";

(2) Section 5314 of title 5, United States Code, is amended by adding at the end thereof the following: "Deputy Administrator, Nuclear Safety Agency.";

(3) Section 5313 of title 5, United States Code, is amended by striking "Chairman, NRC";

(4) Section 5314 of title 5, United States Code, is amended by striking "Member, NRC"; and

(5) Section 5315 of title 5, United States Code, is amended by striking "Executive Director for Operations, Nuclear Regulatory Commission".

ABOLITION OF NUCLEAR REGULATORY COMMISSION

SEC. 105. The Nuclear Regulatory Commission is hereby abolished. Sections 201(a)-(g) and 209 of the Energy Reorganization Act of 1974, as amended, are repealed.

TRANSFER AND ALLOCATION OF APPROPRIATIONS AND PERSONNEL

SEC. 106. The personnel employed and the assets, liabilities, grants, contracts, property, records, and unexpended balances of appropriations, authorizations, allocations, and other funds employed, held, used, arising from, available, or to be made available, in connection with the Nuclear Regulatory Commission and the functions transferred under this Act, are, subject to section 1531 of title 31, United States Code, transferred to the Agency for appropriate allocation.

EFFECT ON PERSONNEL

SEC. 107. (a) The transfer of personnel pursuant to this Title shall not cause any employee to be separated or reduced in grade or compensation.

(D) Any person who, on the day before the effective date of this title, held a position compensated in accordance with the Executive Schedule prescribed in chapter 53 of title 5, United States Code, and who, without a break in service, is appointed in the Agency to a position having duties comparable to those performed immediately preceding his appointment, shall continue to be compensated in his new position at not less than the rate provided for his previous position for the duration of his service in this new position.

INCIDENTAL TRANSFERS

SEC. 108. The Director of the Office of Management and Budget, at such time or times as the Administrator shall provide, may make such determination as may be necessary with regard to the transfer of the Nuclear Regulatory Commission pursuant to this Title and the transfer of functions under this Title, and to make such additional incidental disposition of personnel, assets, liabilities, grants, contracts, property, records, and unexpended balances of appropriations, authorizations, allocations, and other funds held, used, arising from, available, or to be made available in connection with the Nuclear Regulatory Commission and the functions transferred under this Title, as may be necessary to carry out the provisions of this Title. The Director of Management and Budget shall provide for such further measures and dispositions as may be necessary to effectuate the purposes of this Title.

SAVINGS PROVISIONS

SEC. 109. (a) All orders, determinations, rules, regulations, permits, grants, contracts, certificates, licenses, and privileges—

(1) which have been issued, made, granted, or allowed to become effective by the President, the Nuclear Regulatory Commission, or any court of competent jurisdiction, in the performance of functions which are transferred under this Title; and

(2) which are in effect at the time this Title takes effect,

shall continue in effect according to their terms until modified, terminated, superseded, set aside, revoked, or repealed in accordance with law by the President, the Administrator or other duly authorized official, a court of competent jurisdiction, or by operation of law.

(b)(1) The provisions of this Title shall not affect any proceeding, petition, or application for a license or other form of permission or approval pending at the time this Title takes effect before the Nuclear Regulatory Commission with respect to functions transferred under this Title, but such proceedings, petitions, and applications, to the extent that they relate to functions so transferred, shall be continued before the Agency. Decisions shall be issued with respect to such proceedings, applications, or petitions, appeals shall be taken therefrom, and payments shall be made pursuant to such decisions, as if this Title had not been enacted. Decisions issued with respect to such proceedings, applications, or petitions shall continue in effect until modified, terminated, superseded, revoked, or repealed by the Administrator or other duly authorized official, by a court of competent jurisdiction, or by operation of law. Nothing in this subsection shall be deemed to prohibit the discontinuance or modification of any such proceeding, petition, or application under the same terms and conditions and to the same extent that such proceeding, petition, or application could have been discontinued or modified if this Title had not been enacted.

(2) The Administrator is authorized to promulgate regulations providing for the orderly transfer of proceedings continued under paragraph (1) of the Agency.

(c) Except as provided in subsection (e)—

(1) the provisions of this Title shall not affect actions commenced prior to the date this Title takes effect, and

(2) in all such actions, proceedings shall be had, appeals taken, and judgments rendered, in the same manner and with the same effect as if this Title had not been enacted.

(d) No action or other proceeding commenced by or against any individual in the official capacity of such individual as an officer of the Nuclear Regulatory Commission shall abate by reason of the enactment of this Title. No cause of action commenced by or against the Nuclear Regulatory Commission or functions transferred under this Title shall abate by reason of the enactment of this Title.

(e) If, before the date on which this Title takes effect, the Nuclear Regulatory Commission, or any officer thereof in the official capacity of such officer, is a party to an action under this Title, such action shall be continued with the Administrator or other appropriate official of the Agency, as the case may be, substituted or added as a party.

(f) Orders and actions of the Administrator in the exercise of the functions transferred under this Title shall be subject to judicial review to the same extent and in the same manner as if such orders and actions had been by the Nuclear Regulatory Commission in exercising such functions immediately preceding their transfer. Any statutory requirements relating to notice, hearings, actions upon the record, or administrative review that apply to the exercise of such functions transferred under this Title shall apply to the exercise of such functions by the Administrator.

REFERENCE

SEC. 110. With respect to any function transferred under this Title and exercised after the effective date of this Title, any reference in any other federal law, Executive Order, rule, regulation, certificate, directive, instruction, delegation of authority, or other official document in force on the effective date of this Title of or pertaining to the Nuclear Regulatory Commission shall be deemed to refer and apply to the Agency. After consultation with the appropriate committees of the Congress, the Administrator shall prepare and submit to the Congress proposed legislation containing technical and conforming amendments to title 42, United States Code, and to other provisions of law to reflect the changes made by this Title. Such legislation shall be submitted not later than six months after the effective date of this Title.

CONFORMING CHANGES

SEC. 111. Title II of the Energy Reorganization Act of 1974 (42 U.S.C. 5841 et seq.) is amended by—

(a) striking the phrase "a Director" wherever that phrase appears and inserting in lieu thereof "an Assistant Administrator";

(b) striking the phrase "the Director" wherever that phrase appears and inserting in lieu thereof "the Assistant Administrator"; and

(c) striking the phrase ", as provided in section 209," wherever that phrase appears.

CONSTRUCTION AUTHORIZATION FOR NUCLEAR WASTE REPOSITORY

SEC. 112. Section 191 of the Atomic Energy Act of 1954, as amended, is amended by adding a new subsection (c), as follows:

"(c)(1) Upon the receipt of an application for a construction authorization pursuant to 42 U.S.C. 10134(b), the Administrator shall establish one or more licensing boards for the conduct of any formal adjudicatory proceedings that may be requested on such application. Each board shall be comprised of three members, one of whom shall be qualified in the conduct of administrative proceedings and two of whom shall be appointed from among persons nominated by the Nuclear Waste Technical Review Board in accordance with paragraph (2). Members of the Board shall be appointed for such length of time as may be necessary to consider and act upon such application.

"(2) The Nuclear Waste Technical Review Board shall, not later than 60 days after the date on which the recommendation of site designation becomes effective under 42 U.S.C. 10135, nominate not less than 6 persons for appointment to the initial licensing board established pursuant to paragraph (1). Each person nominated for appointment to the Board shall have such technical or other qualifications as the Nuclear Waste Technical Review Board deems appropriate to the issues to be decided in consideration of an application for a construction authorization.

"(3) If a board member becomes unavailable or is recused after appointment, or it

the Administrator determines that proceedings before more than one board become necessary to complete the proceedings in a timely manner, additional members or additional boards shall appointed in the same manner provided for the appointment of the initial member of board. For the purpose of appointing members required to be nominated by the Nuclear Waste Technical Review Board, the Administrator may, as appropriate, either appoint from among those initially nominated or shall request the Nuclear Waste Technical Review Board to nominate one or more additional groups of six persons.

"(4) Upon the issuance of an initial decision by the licensing board on an application for a construction authorization, the Administrator may either affirm the decision in whole or in part, or set aside, remand, or reverse any action, findings, or conclusions found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law or unsupported by substantial evidence.".

Subtitle B—Office of Investigations

SEC. 121. (a) Title II of the Energy Reorganization Act of 1974 (42 U.S.C. 5801 et seq.) is amended by adding a new section 205A, as follows:

"OFFICE OF INVESTIGATIONS

"SEC. 205A. (a) There is hereby established in the Agency an Office of Investigations under the direction of an Assistant Administrator for Investigations, who shall be appointed by the Administrator, who shall report directly to the Administrator and who shall serve at the pleasure of and be removable by the Administrator.

"(b) Subject to the provisions of this Act, the Assistant Administrator for Investigations shall perform such functions as the Administrator shall designate, including investigations into possible violations of the Atomic Energy Act, the Energy Reorganization Act, or any other statutes that the Administrator is responsible for implementing, and rules, regulations, orders, and license conditions issued by the Agency thereunder, that may involve intent or purpose to commit such violation, or that may have arisen as a result of careless disregard, deception, or other indications of willful intent.

"(c)(1) The Assistant Administrator for Investigations may initiate an investigation at the request of the Administrator, Deputy Administrator, or a Regional Administrator.

"(2)(A) The Assistant Administrator may initiate an investigation on his or her own initiative. The Administrator may prohibit the Assistant Administrator from conducting investigative activities, after the Assistant Administrator has decided to initiate, carry out, or complete an investigation, if the Administrator determines specifically with respect to such investigation that such prohibition is necessary to protect the public health and safety or the common defense and security.

"(B) If the Administrator exercises any power under subparagraph (A), the Assistant Administrator shall submit a statement concerning such exercise within thirty days to the Committee on Environment and Public Works of the Senate and the Committees on Interior and Insular Affairs and Energy and Commerce of the House of Representatives.

"(C) The Administrator shall, within thirty days after submission of a statement under subparagraph (B), transmit a statement of the reasons for the exercise of power under subparagraph (A) to the Committee on Environment and Public Works of the Senate and the Committees on Interior and Insular Affairs and Energy and Commerce of the House of Representatives.

"(d) Any employee of the Agency obtaining information concerning possible violations falling within the scope of authority of the Office of Investigations shall promptly provide such information to the Office of Investigations.

"(e) Whenever the Assistant Administrator for Investigations has reasonable grounds to believe that there has been a violation of Federal criminal law, the Assistant Administrator, after notifying the Administrator, shall report such violation to the Attorney General. Neither the Administrator nor any other employee of the Agency shall prevent or prohibit the Assistant Administrator from reporting such violations to the Attorney General.".

(b) Within 90 days from the date of enactment of this Act, the Commission and the Attorney General shall enter into a memorandum of understanding to—

(1) provide for the coordination of matters that could lead both to enforcement action by the Commission as well as criminal prosecution by the Attorney General;

(2) provide decision procedures and schedules with respect to action on matters referred to the Attorney General; and

(3) facilitate the exchange of information relating to matters within the respective jurisdiction of the Commission and the Department of Justice.

(c) Section 5315 of title 5, United States Code is amended by adding at the end thereof the following: "Assistant Administrator for Investigations, Nuclear Safety Agency.".

Subtitle C—Nuclear Reactor Safety Investigations Board

FINDINGS AND PURPOSE

SEC. 131. (a) The Congress finds that—

(1) there exists a potential for conflict of interest in the investigation of significant safety events arising out of activities licensed or otherwise regulated by the Nuclear Safety Agency, where the Agency's prior action or inaction may have been a partial contributor to the cause of such event;

(2) an independent organization for the investigation of such events will inspire greater public confidence in the investigatory process for such incidents; and

(3) the increased stature and enhanced visibility of the investigations conducted by such an independent organization, and the recommendations made as a result of such investigations, will help to ensure timely consideration and implementation of the recommendations of such an organization.

(b) The purpose of this subtitle is to establish a Nuclear Reactor Safety Investigations Board to—

(1) conduct independent investigations of significant safety events arising out of activities at production or utilization facilities licensed by the Agency under section 103 or 104 of the Atomic Energy Act of 1974 (42 U.S.C. 2133, 2134); and

(2) submit to the Administrator and to the Congress the results of any such investigation, including any recommendations for actions to be taken by the Administrator to prevent the recurrence of such events.

NUCLEAR REACTOR SAFETY INVESTIGATIONS BOARD

SEC. 132. (a) There is hereby established within the Nuclear Safety Agency an independent board to be known as the Nuclear Reactor Safety Investigations Board (hereafter in this section referred to as the "Board").

(b) The Board shall consist of three members who shall be appointed by the President, by and with the advice and consent of the Senate. The members shall be appointed on the basis of technical qualification, professional standing, and demonstrated competence and knowledge relevant to the investigative functions of the Board. No more than two members of the Board shall be of the same political party. Not later than 90 days after the effective date of this Title, the President shall submit such nominations for appointment to the Board. The President shall designate one member to serve at the Chairperson of the Board.

(c) The terms of office of members of the Board shall be three years, except as otherwise provided in this subparagraph. Of the three members first appointed to the Board, one shall serve for one year, one for two years, an one for three years. Any individual appointed to fill a vacancy occurring on the Board prior to the expiration of the term of office for which his or her predecessor was appointed shall be appointed for the remainder of the term. Upon the expiration of his or her term of office, a member shall continue to serve until his or her successor is appointed and shall have qualified. Any member of the Board may be removed by the Residents for inefficiency, neglect of duty, or malfeasance of office.

(d)(1) The Chairperson shall be the chief executive officer of the Board and shall exercise the excutive and administrative functions of the Board with respect to the appointment and supervision of personnel employed by the Board, the distribution of business among such personnel and among administrative units of the Board, and the use and expenditure of funds.

(2) Section 5314 of title 5, United States Code, is amended by adding at the end thereof the following: "Chairperson, Nuclear Reactor Safety Investigations Board.".

SEC. 133. The Board shall have the following functions and authorities:

(a)(1) The Board may investigate or cause to be investigated any significant safety event, as defined in paragraph (5) of this subsection, arising out of activites at production or utilization facilities licensed by the Agency under section 103 or 104 of the Atomic Energy Act of 1954 (42 U.S.C. 2133, 2134). The Board may also investigate or cause to be investigated other safety events upon the request of the Administrator.

(2) The purpose of any investigation initiated pursuant to this subsection shall be to determine the facts, conditions, and circumstances of the significant safety events investigated, including—

(A) an assessment of the implications of such event for public health and safety;

(B) a determination of whether such event is part of a pattern of similar events at production or utilization facilities licensed by the Agency under section 103 or 104 of the Atomic Energy Act of 1954 (42 U.S.C. 2133, 2134) which could adversely affect the public health or safety; and

(C) an assessment of the root causes of such event, including the contribution, if any, of the actions of the Agency to such event.

(3) The Board shall report in writing, and shall submit such report to the Administrator, on the facts, conditions, and circumstances of each event investigated pursuant to this subsection, including—

(A) the date and place of the event;

(B) the nature and probable consequence of the event;

(C) the cause or causes of the event; and

(D) any action recommended to prevent the recurrence of the event, including any recommendations for actions to be taken by the Agency with regard to regulatory requirements or practices.

(4)(A) The Administrator shall respond in writing to any recommendations of the Board within 120 days of receipt of such recommendations. Such written response shall detail specific measures adopted or to be adopted by the Administrator in response to such recommendations, and explanations for the Administrator's inaction on any recommendations not adopted.

(B) The recommendations of the Board made pursuant to paragraph (3) and the response of the Administrator to such recommendations shall be made available to the public and shall be submitted to Congress.

(5) For the purpose of this subtitle, a "significant safety event" shall be defined as an event that involves:

(A) a moderate exposure to, or release of, radioactive material from a production or utilization facility licensed by the Agency under section 103 or 104 of the Atomic Energy Act of 1954 (42 U.S.C. 2133, 2134);

(B) a major degradation of essential safety-related equipment at a production or utilization facility licensed by the Agency under section 103 or 104 of the Atomic Energy Act of 1954 (42 U.S.C. 2133, 2134); or

(C) a major deficiency in the design, construction, use of, or management controls for a production or utilization facility licensed by the Agency under section 103 or 104 of the Atomic Energy Act of 1954 (42 U.S.C. 2133, 2134).

(6) Except for investigations initiated at the request of the Administrator, the Board shall, prior to the initiation of an investigation pursuant to this section, consult with the Administrator and, if the Board determines that an investigation is warranted, the Board shall set forth in writing the basis for the Board's determination that the event constitutes a significant safety event, as defined in paragraph (5). The written statement of the Board's basis for initiating an investigation shall not be subject to judicial review. The written statement shall be made available to the public and shall be submitted to Congress.

(7) No part of the conclusions, findings, or recommendations of any report of the Board relating to any event or the investigation of such event shall be admitted as evidence or used in any suit or action for damages growing out of any matter mentioned in such report.

(b) Following the issuance of a written determination pursuant to paragraph (a)(6) of this section, or upon the initiation of an investigation requested by the Administrator, any employee of the Board, upon presenting appropriate credentials, including any security clearance required by the Administrator, and a written notice of inspection authority, may enter the facility where the event has occurred and do all things appropriate for a proper investigation. The employee may inspect and copy records, files, and documents, including licensee records, files, and documents at locations other than the facility where the event occurred, and may inspect processes, controls, and facilities relevant to the investigation of such event.

(c) Subject to section 552a of title 5, United States Code, the Board may secure directly from any agency or instrumentality of the United States such information as that agency or instrumentality may already possess as may be necessary to enable the Board to carry out an investigation pursuant to this subtitle. Upon request of the Board, the head of such agency or instrumentality shall furnish such information to the Board. The information which the Board may secure under this subsection may include any material designated as classified material pursuant to the Atomic Energy Act of 1954, or any materials designated as safeguards information and otherwise protected from disclosure under section 147 of the Atomic Energy Act of 1954.

(d)(1) Following the issuance of a written determination pursuant to paragraph (a)(6) of this section, or upon the initiation of an investigation requested by the Administrator, the Board or, upon authority of the Board, any member thereof, any administrative law judge employed by or assigned to the Board, or any officer or employee duly designated by the Board, may, for the purpose of carrying out this subtitle, hold such hearings, sit and act at such times and places, administer such oaths, and require by subpoena or otherwise attendance and testimony of such witnesses and the production of evidence as the Board or such officer or employee deems advisable. Subpoenas shall be issued only under the signature of a Board member, upon authorization by the Board, and may be served by any person designated by the Board.

(2) Any person who willfully neglects or refuses to qualify as a witness, or to testify, or to produce any evidence in obedience to any subpoena duly issued under the authority of this paragraph shall be fined not more than $5,000, or imprisoned for not more than 6 months, or both. Upon certification by the Board of the facts concerning any willful disobedience by any person to the United States Attorney for any judicial district in which the person resides or is found, the Attorney may proceed by information for the prosecution of the person for the offense.

(3) Where the Board discovers information during the course of its investigation involving matters within the jurisdiction of the Agency's Inspector General or the Assistant Administrator for Investigations, such information shall be forwarded promptly, as appropriate, directly to the Inspector General or concurrently to the Administrator and the Assistant Administrator for Investigations.

(e)(1) Subject to such rules as may be prescribed by the Board, the Board may appoint and fix the pay of such officers and employees (including investigators and attorneys) as the Board considers necessary to carry out the powers and duties of the Board. Appointments shall be made under this paragraph in such manner that not more than the equivalent of 55 full-time officers and employees are employed by the Board at any time.

(2) Employees of the Board shall be selected, appointed, employed, and compensated pursuant to section 161d. of the Atomic Energy Act of 1954, as amended.

(f) Subject to such rules as may be prescribed by the Board, the Board may procure temporary and intermittent services under section 3109(b) of title 5, United States Code, but at rates for individuals not to exceed the daily equivalent of the maximum annual rate of basic pay payable for grade GS-18 of the General Schedule. The amount of consultant services which may be obtained by the Board under this subsection shall not exceed, during any fiscal year period, the amount of services which would be obtained if the Board procured on a full-time basis the services of 12 consultants.

(g)(1) Upon request of the Board, the Administrator or the head (or governing authority) of any other Federal agency or instrumentality may—

(A) detail to the Board, on a reimbursable basis, such personnel as may be desirable to assist the Board in carrying out its duties; and

(B) make available to the Board, on a reimbursable basis, such facilities, equipment, or other administrative support services as may be desirable to assist the Board in carrying out its duties.

(2) The Administrator shall provide the Board with appropriate and adequate office space, together with such equipment, office supplies, and communications facilities and services as may be necessary for the operation of the Board and shall provide necessary maintenance services for such offices and the equipment and facilities located therein.

(h) The Board may confer with employees of State or local government agencies and may use, on a reimbursable basis, such services, records, and facilities as such agencies may make available to the Board.

(i) The Board may use the United States mails in the same manner and under the same conditions as other departments and agencies of the United States.

(j) The Board shall report annually to the Congress on the activities of the Board. Such report shall contain—

(1) a summary of the significant safety events investigated by the Board during the preceding calendar year; and

(2) a summary, in such detail as the Board deems advisable, of the recommendations made by the Board pursuant to subparagraph (a)(3)(D) of this section, together with the observed response of the Administrator to each such recommendation.

Such reports shall be made available to Federal, State, and local government agencies concerned with safety at production or utilization facilities licensed by the Agency under section 103 or 104 of the Atomic Energy Act of 1954 (42 U.S.C. 2133, 2134). Upon request, such reports shall be made available to other interested persons.

(k) The Board is authorized to establish rules, procedures, or other appropriate guidance governing the operations of the Board and the conduct of Board investigations.

SEC. 134. There shall be transferred to the Board such offices of the Agency, or functions, powers, or duties of such offices, as the Administrator may determine are properly related to the functions of the Board and will further the purposes of this Act, except that there shall not be transferred to the Board any program operating responsibilities.

SEC. 135. (a) There are hereby authorized to be appropriated for each of the fiscal years 1989, 1990, 1991, 1992, 1993, and 1994 the sum of $5,500,000.

(b) The Board shall terminate at the end of fiscal year 1994.

Subtitle D—Separability

SEC. 141. If any provision of this title, or the application of such provision to any person or circumstance, is held invalid, the remainder of this title, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

Subtitle E—Effective Date

SEC. 151. This Title and the amendments made by this Title shall take effect on such date during the 6-month period beginning on July 21, 1989, as the President may direct in an Executive Order. If the President fails to issue an Executive Order for the purpose of this section, this Title and such amendments shall take effect on January 21, 1990.

TITLE II—MISCELLANEOUS PROVISIONS

NOTIFICATION REQUIREMENTS FOR NONCOMPLIANCE

SEC. 201. Section 206 of the Energy Reorganization Act of 1974, as amended (42 U.S.C. 5846), is amended to read as follows:

"NONCOMPLIANCE

"SEC. 206. (a) Any firm constructing, owning, operating, or supplying the components of any facility or activity which is licensed or otherwise regulated pursuant to the Atomic Energy Act of 1954, as amended, or pursuant to this Act, and any individual director or responsible officer of such a firm, obtaining information reasonably indicating that such facility or activity or basic components supplied to such facility or activity—

"(1) fails to comply with the Atomic Energy Act of 1954, as amended, or any applicable rule, regulation, order, or license of the Agency relating to substantial safety hazards, or

"(2) contains a defect which could create a substantial safety hazard, as defined by regulations which the Agency shall promulgate,

shall immediately notify the Agency of such failure to comply, or of such defect, unless such firm or individual has actual knowledge that the Agency has been adequately informed of such defect or failure to comply.

"(b) The Administrator is authorized to issue such regulations and orders as may be necessary to ensure compliance with this section, including regulations and orders requiring any firm subject to this section to devise and implement procedures to identify, evaluate, and report defects.

"(c) Any firm or individual who violates any regulation or order issued under subsection (b) of this section shall be subject to a civil penalty in the same manner and amount as for violations subject to a civil penalty under section 234 of the Atomic Energy Act of 1954, as amended.

"(d) The requirements of this section shall be prominently posted on the premises of any firm subject to this section.

"(e) The Agency is authorized to conduct such reasonable inspections, investigations, and other enforcement activities as needed to ensure compliance with the provisions of this section and with any regulations and orders issued thereunder.

"(f) For purposes of this section, the term 'firm' shall have the meaning provided for the term 'person' in subsection 11 s. of the Atomic Energy Act of 1954, as amended, except that it shall include the Department of Energy to the extent that its facilities, materials, or activities are licensed by the Agency and shall not include an 'individual.' ".

DISCLOSURE OF SECURITY-RELATED SAFEGUARDS INFORMATION

SEC. 202. Section 147 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2167), is amended by inserting the following language in subsection a. before the sentence that begins "The Commission shall exercise the authority": "Paragraphs (1), (2), and (3) of this subsection shall include safeguards information contained in generic studies, reports, and analyses that would provide substantial assistance in compromising or negating any of a licensee's specific security measures or procedures to protect nuclear material or facilities, as described in subparagraphs (1), (2), and (3) of this subsection, or in targeting a licensee's vital plant equipment as described in subparagraph (3) of this subsection.".

STORAGE AND DISPOSAL OF GREATER-THAN-CLASS-C LOW-LEVEL WASTE

SEC. 203. (a) Subject to the requirements an limitations of this section, the Secretary is authorized to accept for storage low-level radioactive waste with concentrations of radionuclides that exceed the limits established by the Agency for Class C radioactive waste, as defined by section 61.55 of title 10, Code of Federal Regulations, as in effect on January 26, 1983, that is owned or generated under license or regulation of the Agency (or an Agreement State): *Provided, however,* That no such waste shall be accepted by the Secretary until the Secretary submits to Congress a comprehensive report setting forth—

(1) the options for the permanent disposal of such waste and a discussion of the actions that the Secretary intends to take to implement the preferred disposal option; and

(2) the options for ensuring that the beneficiaries of the activities resulting in the generation of such waste bear all reasonable costs of the storage and disposal of such waste and a discussion of the actions that the Secretary intends to take to implement the preferred cost recovery option.

(b) Low-level radioactive waste with concentrations of radionuclides that exceed the limits established by the Agency for Class C radioactive waste, as defined by section 61.55 of title 10, Code of Federal Regulations, as in effect on January 26, 1983, that is owned or generated under license or regulation of the Agency (or an Agreement State) shall, except as otherwise provided in subsections (c) and (d), be stored or disposed of only in a facility that is licensed by the Agency (or an Agreement State). Any storage or disposal facility for such waste that is operated by the Federal Government shall be licensed only by the Agency.

(c) Prior to the issuance of a license for a storage facility, the Agency may permit the transfer to the Secretary for storage of low-level radioactive waste with concentrations of radionuclides that exceed the limits established by the Agency for Class C radioactive waste, as defined by section 61.55 of title 10, Code of Federal Regulations, as in effect on January 26, 1983, that is owned or generated under license or regulation of the Agency (or an Agreement State), if the Agency determines in writing that such transfer is necessary to eliminate an immediate and serious threat to the public health and safety or the common defense and security.

(d)(1) Nothing in this section shall be deemed to apply to or otherwise affect any contractual obligation of the Secretary entered into on or before June 9, 1988, pursuant to which the Secretary is required to accept low-level radioactive waste with concentrations of radionuclides that exceed the limits established by the Agency for Class C radioactive waste, as defined by section 61.55 of title 10, Code of Federal Regulations, as in effect on January 26, 1983, that is owned or generated under license or regulation of the Agency (or an Agreement State).

(2) Nothing in this section shall be deemed to alter, amend, or otherwise apply to the activities of the Secretary pursuant to the West Valley Demonstration Project Act (42 U.S.C. 2021a *et seq.*).

(3) Nothing in this section shall be deemed to alter, amend, or otherwise apply to the activities of the Secretary specifically authorized pursuant to the Memorandum of Understanding Between the U.S. Nuclear Regulatory Commission and the U.S. Department of Energy Concerning the Removal and Disposition of Solid Nuclear Wastes from Cleanup of the Three Mile Island Unit 2 Nuclear Plant (46 Federal Register 38614, July 28, 1981), as amended by the Memorandum of Understanding Between the U.S. Nuclear Regulatory Commission and the U.S. Department of Energy Concerning the Removal and Disposition of Solid Nuclear Wastes from Cleanup of the Three Mile Island Unit 2 Nuclear Plant (47 Federal Register 16229, April 15, 1982).

(4) Nothing in this section shall be deemed to alter, amend, or otherwise apply to the activities of the Secretary pursuant to the Nuclear Waste Policy Act of 1982, as amended (42 U.S.C. 10101 *et seq.*).

(5) Nothing in this section shall be deemed to alter, amend, or otherwise affect the responsibility of States or compacts pursuant to the Low Level Radioactive Waste Policy Amendments Act of 1985 (42 U.S.C. 2021b *et seq.*).

(6) Nothing in this section shall be deemed to alter, amend, or otherwise apply to low-level radioactive waste with concentrations of radionuclides that exceed the limits established by the Agency for Class C radioactive waste, as defined by section 61.55 of title 10, Code of Federal Regulations, as in effect on January 26, 1983, that is owned or generated under license or regulation of the Agency (or an Agreement State) and that is classified for national security purposes pursuant to the Atomic Energy Act of 1954, as amended.

QUARTERLY REPORT ON IMPLEMENTATION OF THE NUCLEAR WASTE POLICY ACT

SEC. 204. The Administrator shall submit to the Committee on Energy and Commerce and the Committee on Interior and Insular Affairs of the House of Representatives and the Committee on Environment and Public Works of the Senate each quarter a report on the status of the Agency's implementation of the Nuclear Waste Policy Act of 1982, as amended (42 U.S.C. 10101 *et seq.*). Such report shall include a detailed summary of—

(a) the activities of the Agency during such quarter;

(b) the funds expended during such quarter;

(c) all interactions with the Department of Energy with regard to implementation of the Act, including Agency communications, recommendations, and other activities regarding the development of a repository pursuant to title I of such Act; and

(d) the technical issues that relate to the licensability of any candidate site under consideration for development as a repository and any activities undertaken by the Agency during such quarter with respect to such issues.

WEST CHICAGO THORIUM TAILINGS SITE

SEC. 205. The Nuclear Safety Agency may not designate a permanent disposal site for low-level nuclear wastes at Ann and Factory Streets in West Chicago, Illinois, until the

Agency has studied alternative sites to determine the safest site available to store such wastes.●

## THANK YOU SUE GENTRY FOR YOUR DEDICATION AND SERVICE TO INDEPENDENCE, MO

● Mr. BOND. Mr. President, Miss Sue Gentry, a lifelong Missourian, is being honored by her native home of Independence on May 19. Miss Gentry's professional and personal achievements stand as a living legacy in her community.

Sue Gentry began her heralded journalism career in 1929 at the Independence Examiner, a paper she would spend her entire career with. She served as editor of the paper from 1943 to 1952 holding the distinction of being the only woman to do so. She traveled to Washington, DC, in 1945 to cover the White House Press Conference on the end of the war with Japan.

Miss Gentry excelled outside the halls of the Examiner as well. She joined the Daughters of the American Revolution in 1939; she was elected president of the Missouri Press Women in 1959, and she served as president of Theta Signa Phi, an honor society for women in communication, from 1954 to 1955. From 1966 to 1989 she has worked as editor of the Jackson County Historical Society Journal. In 1974, she became president of the Jackson County Historical Society and today serves as cochairman of the society's archives.

Sue Gentry has not gone unnoticed by her peers or her community. In 1960, she received the "Woman of Achievement" Award from Theta Sigma Phi. William Chrisman High School cited her as their outstanding alumnus in 1969. The following year, 1970, she was named Missouri Press Woman of the Year. Throughout the seventies, she was honored several times by the Independence Chamber of Commerce, the Independence School Board, and other organizations in eastern Jackson County.

The decade of the eighties has continued to bring acclaim and recognition to this most-deserving lady. "Sue Gentry Day" was celebrated in Independence in 1984. Last year, the city of Independence presented her with an award for public service and the Rotary Club named her recipient of the Mark H. Siegfried Rotary Award of Merit.

Miss Sue Gentry has dedicated her life to the community of Independence, MO, through her tireless civic endeavors and high standards of professionalism as a journalist. She has made an impact decade after decade and has touched generations.

My fellow colleagues, please join me in commending Miss Sue Gentry for her lifetime of dedication to the great people of Independence and all of Missouri.●

## BUDGET SCOREKEEPING REPORT

● Mr. SASSER. Mr. President, I hereby submit to the Senate the latest budget scorekeeping report for fiscal year 1989, prepared by the Congressional Budget Office in response to section 308(b) of the Congressional Budget Act of 1974, as amended. This report was prepared consistent with standard scorekeeping conventions. This report also serves as the scorekeeping report for the purposes of section 311 of the Budget Act.

This report shows that current level spending is over the budget resolution by $0.9 billion in budget authority, and over the budget resolution by $0.4 billion in outlays. Current level is under the revenue floor by $0.3 billion.

The current estimate of the deficit for purposes of calculating the maximum deficit amount under section 311(a) of the Budget Act is $135.7 billion, $0.3 billion below the maximum deficit amount for 1988 of $136.0 billion.

The report follows:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
*Washington, DC, May 15, 1989.*

Hon. JIM SASSER,
*Chairman, Committee on the Budget, U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The attached report shows the effects of congressional action on the budget for fiscal year 1989 and is current through May 12, 1989. The estimates of budget authority, outlays, and revenues are consistent with the technical and economic assumptions of the most recent budget resolution, House Concurrent Resolution 268. This report is submitted under section 308(b) and in aid of section 311 of the Congressional Budget Act, as amended, and meets the requirements for Senate scorekeeping of section 5 of Senate Concurrent Resolution 32, the 1986 first concurrent resolution on the budget.

Since my last report, Congress has taken no action that affects the current level of spending or revenues.

Sincerely,

ROBERT D. REISCHAUER,
*Director.*

### CBO WEEKLY SCOREKEEPING REPORT FOR THE U.S. SENATE, 101ST CONG., 1ST SESS., AS OF MAY 12, 1989

[In billions of dollars]

| | Current level [1] | Budget resolution H. Con. Res. 268 [2] | Current level +/− resolution |
|---|---|---|---|
| Fiscal Year 1989 | | | |
| Budget authority | 1,233.0 | 1,232.1 | 0.9 |
| Outlays | 1,100.1 | 1,099.8 | .4 |
| Revenues | 964.4 | 964.7 | −.3 |
| Debt subject to limit | 2,750.3 | [3] 2,824.7 | −74.4 |
| Direct loan obligations | 24.4 | 28.3 | −3.9 |
| Guaranteed loan commitments | 111.0 | 111.0 | |
| Deficit | 135.7 | [4] 136.0 | [5] −.3 |

[1] The current level represents the estimated revenue and direct spending effects (budget authority and outlays) of all legislation that Congress has enacted in this or previous sessions or sent to the President for his approval and is consistent with the technical and economic assumptions of H. Con. Res. 268. In addition, estimates are included of the direct spending effects for all entitlement or other mandatory programs requiring annual appropriations under current law even though the appropriations have not been made. The current level of debt is subject to limit reflects the latest U.S. Treasury information on public debt transactions.

[2] In accordance with sec. 5(a)(b) the levels of budget authority, outlays, and revenues have been revised for Catastrophic Health Care (Public Law 100–360).

[3] The permanent statutory debt limit is $2,800.0 billion.

[4] Maximum deficit amount [MDA] in accordance with section 3(7)(D) of the Congressional Budget Act, as amended.

[5] Current level plus or minus MDA.

### PARLIAMENTARIAN STATUS REPORT 101ST CONGRESS, 1ST SESS., SENATE SUPPORTING DETAIL, FISCAL YEAR 1989 AS OF CLOSE OF BUSINESS MAY 12, 1989

[In millions of dollars]

| | Budget authority | Outlays | Revenues |
|---|---|---|---|
| I. Enacted in previous sessions: | | | |
| Revenues | | | 964,434 |
| Permanent appropriations and trust funds | 874,205 | 724,990 | |
| Other appropriations | 594,475 | 609,327 | |
| Offsetting receipts | −218,335 | −218,335 | |
| Total enacted in previous sessions | 1,250,345 | 1,115,982 | 964,434 |
| II. Enacted this session: | | | |
| Adjust the Purchase Price for Non-Fat Dry Dairy Products (Public Law 101–7) | | −10 | |
| Implementation of the Bipartisan Accord on Central America (Public Law 101–14) | −11 | | |
| Total enacted this session | −11 | −10 | |
| III. Continuning resolution authority | | | |
| IV. Conference agreements ratified by both Houses | | | |
| V. Entitlement authority and other mandatory items requiring further appropriation action: | | | |
| Dairy indemnity program | (2) | (2) | |
| Special milk | 4 | | |
| Food Stamp Program | 253 | | |
| Federal crop insurance corporation fund | 144 | | |
| Compact of free association | 1 | 1 | |
| Federal unemployment benefits and allowances | 31 | 31 | |
| Worker training | 32 | 32 | |
| Special benefits | 37 | 37 | |
| Payments to the Farm Credit System | 35 | 35 | |
| Payment to the civil service retirement and disability trust fund [1] | (85) | (85) | |
| Payment to hazardous substance superfund [1] | (99) | (99) | |
| Supplemental security income | 201 | 201 | |
| Special benefits for disabled coal miners | 3 | | |
| Medicaid: | | | |
| Public Law 100–360 | 45 | 45 | |
| Public Law 100–485 | 10 | 10 | |
| Family support payments to States: | | | |
| Previous law | 355 | 355 | |
| Public Law 100–485 | 63 | 63 | |
| Veteran's compensation COLA (Public Law 100–678) | 345 | 311 | |
| Total entitlement authority | 1,559 | 1,121 | |
| VI. Adjustment for economic and technical assumptions | −18,925 | −16,990 | |
| Total current level as of May 12, 1989 | 1,232,969 | 1,100,103 | 964,434 |
| 1989 budget resolution H. Con. Res. 268 | 1,232,050 | 1,099,750 | 964,700 |
| Amount remaining: | | | |
| Over budget resolution | 919 | 353 | |
| Under budget resolution | | | 266 |

[1] Interfund transactions do not add to budget totals.

[2] Less than $500 thousand.

Note.—Numbers may not add due to rounding.

## DRUGS, LAW ENFORCEMENT AND FOREIGN POLCY

● Mr. KERRY. Mr. President, recently the Foreign Relations Subcommit-

tee on Terrorism, Narcotics and International Operations, which I chair, issued its report on "Drugs, Law Enforcement and Foreign Policy," chronicling the serious problems our Government has faced and continues to face in the war on drugs.

The report concluded that drugs are the No. 1 national security threat to the United States in this hemisphere. The evidence shows narcotics knows neither national boundaries nor ideology. The cartels have linked up with governments and terrorist movements alike throughout Latin America. The cartels and their networks must be understood for what they are—serious threats to the security of the United States at home and abroad and they must be treated as such.

The subcommittee also found that too often other foreign policy interests were permitted to sidetrack, disrupt, and undercut the war on drugs. As a result, our law enforcement personnel have been demoralized and our communities threatened. Again and again, we found agencies with foreign policy responsibilities failing to provide law enforcement with the information it needed to make arrests and otherwise enforce the law.

The subcommittee also found that United States law enforcement and foreign policy officials failed to address the drug issue for fear of jeopardizing the war on Nicaragua. This affected law enforcement in two areas especially—responding to the information on General Noriega's criminal empire, and responding to criminal activity related to the Contras.

The saga of General Noriega represents one of the great foreign policy failures of recent memory. Our decision to continue working with him long after our Government had extensive information regarding his drug trafficking has been a continuing betrayal of the public trust.

The subcommittee found that the secret Contra war provided numerous opportunities for drug traffickers to link up with the Contras, and they did. The subcommittee compiled an extensive record of these links, which have been significantly corroborated by documents obtained from law enforcement agencies.

Unfortunately, we found many examples of each of the above failures.

The subcommittee found cases in which high U.S. officials intervened to stop law enforcement operations aimed at nailing drug kingpins.

We found that a United States Ambassador to the Bahamas had shut down a Justice Department drug sting aimed at bringing down corrupt Bahamian Government officials.

We learned how high United States officials, including Lt. Col. Oliver North, went to the Justice Department to intercede on behalf of a man convicted of a narco-terrorist assassination plot against a Honduran President—because the man had been the administration's liaison to the Contras.

We were told by a former United States Ambassador to Costa Rica that a decision was made by the United States to "put Noriega on the shelf" and take no action against his drug trafficking until the Sandinista government had been overthrown.

We were told by the head of the Drug Enforcement Agency that someone at the National Security Counsel leaked information on a DEA drug sting operation against the Sandinistas in order to influence a congressional vote on Contra aid, causing the operation to abort.

We also found out that the State Department chose four companies controlled by drug traffickers to provide assistance to the Contras. As a result, drug traffickers got funds out of the U.S. public treasury as part of our Contra humanitarian assistance program.

Finally, the report includes a summary of allegations that officials in the Justice Department sought to undermine and interfere with this investigation in 1986 because of concerns about its possible political impact. The charge came from a Federal prosecutor in Miami, Jeffrey Feldman, who was handling the investigation of weapons and Neutrality Act cases involving contra supporters.

According to prosecutor Feldman, Justice Department officials may have simultaneously interfered with a Federal grand jury in Miami, and with our congressional investigation in Washington, because of concerns about their impact on the Contra program.

These allegations raise very serious issues, which I understand are under investigation by the Independent Counsel.

These findings are significant, and I believe they deserve the serious attention of the Congress. I have already introduced legislation in response to a number of these findings, the "International Narcotics and Terrorism Control Act of 1989," S. 924, which is currently cosponsored by Senators D'AMATO, ADAMS, MOYNIHAN, CRANSTON, FORD, SANFORD, and DECONCINI, and on which I anticipate the Foreign Relations Committee will soon hold hearings.

I ask that the executive summary of the report entitled "Drugs, Law Enforcement and Foreign Policy," issued by the Subcommittee on Terrorism, Narcotics and International Operations be included in the RECORD at this point.

The summary follows:

EXECUTIVE SUMMARY AND CONCLUSIONS

"The American people must understand much better than they ever have in the past how (our) safety and that of our children is threatened by Latin drug conspiracies (which are) dramatically more successful at subversion in the United States than any that are centered in Moscow."

That warning was delivered in Subcommittee testimony by General Paul C. Gorman, now retired and formerly head of U.S. Southern Command in Panama. Such a characterization, coming from an individual who served with such distinction in the United States Army, should not be taken lightly.

There should not be any doubt in anyone's mind that the United States is engaged in a war directed at our citizens—the old, the young, the rich, the poor. Each day, with what has become a numbing regularity, the American people are besieged with the news of the latest casualties in the drug war.

The Colombian drug cartels which control the cocaine industry constitute an unprecedented threat, in a non-traditional sense, to the national security of the United States. Well-armed and operating from secure foreign havens, the cartels are responsible for thousands of murders and drug-related deaths in the United States each year. They exact enormous costs in terms of violence, lower economic productivity, and misery across the nation.

The American criminal justice system has been overwhelmed by the drug war. To date, most of the U.S. law enforcement efforts have been directed at the domestic drug distribution network. The result is a criminal justice system swamped with cases which cannot be processed fast enough, jails that are overflowing with prisoners, a greater influx of cocaine than when the war on drugs was declared in 1983, and a cheaper, higher quality product.

As a recent study sponsored by the Criminal Justice Section of the American Bar Association noted:

"A major problem reported by all criminal justice participants is the inability of the criminal justice system to control the drug problem . . . through the enforcement of the criminal law. Police, prosecutors and judges told the Committee that they have been unsuccessful in making a significant impact on the importation, sale and use of illegal drugs, despite devoting much of their resources to the arrest, prosecution and trial of drug offenders".

Attempts to interdict the flow of drugs at the border, while important, has experienced only marginal success. According to U.S. officials in the vanguard of the war on drugs, at best, interdiction results in the seizures of only 15 percent of the illegal narcotics coming into the country. For the drug cartels, whose production capabilities stagger the imagination, a 15 percent loss rate is more than acceptable.

Demand reduction through education and rehabilitation are critical elements in the war on drugs. But most experts acknowledge that even this strategy will require a considerable period of time before major inroads are made into significantly reducing cocaine usage in this country.

The narcotics problem is a national security and foreign policy issue of significant proportions. The drug cartels are so large and powerful that they have undermined some governments and taken over others in our hemisphere. They work with revolutionaries and terrorists. They have demonstrated the power to corrupt military and civilian institutions alike. Their objectives seriously jeopardize U.S. foreign policy interests and objectives throughout Latin America and the Caribbean.

The Subcommittee investigation has led to the following conclusions and recommendations.

PAST FAILURES

In the past, the United States government has either failed to acknowledge, or underestimated, the seriousness of the emerging threat to national security posed by the drug cartels. The reasons for this failure should be examined by the Senate Select Committee on Intelligence, in concert with the Senate Committee on Foreign Relations, to determine what corrective steps should be taken.

In some instances, foreign policy consideration interfered with the U.S.'s ability to fight the war on drugs. Foreign policy priorities towards the Bahamas, Honduras, Nicaragua, and Panama at times delayed, halted, or interfered with U.S. law enforcement's efforts to keep narcotics out of the United States. In a few cases within the United States, drug traffickers sought to manipulate the U.S. judicial system by providing services in support of U.S. foreign policy, with varying results.

U.S. officials involved in Central America failed to address the drug issue for fear of jeopardizing the war efforts against Nicaragua.

The war against Nicaragua contributed to weakening an already inadequate law enforcement capability in the region which was exploited easily by a variety of mercenaries, pilots, and others involved in drug smuggling. The Subcommittee did not find that the Contra leaders personally were involved in drug trafficking. There was substantial evidence of drug smuggling through the war zones on the part of individual Contras, Contra suppliers, Contra pilots, mercenaries who worked with the Contras, and Contra supporters throughout the region.

The saga of Panama's General Manuel Antonio Noriega represents one of the most serious foreign policy failures for the United States. Throughout the 1970's and 1980's, Noriega was able to manipulate U.S. policy toward his country, while skillfully accumulating near-absolute power in Panama. It is clear that each U.S. government agency which had a relationship with Noriega turned a blind eye to his corruption and drug dealing, even as he was emerging as a key player on behalf of the Medellin cartel.

POLICY AND PRIORITIES

International drug trafficking organizations are a threat to U.S. national security. Our government must first acknowledge that the activities of the drug cartels constitute a threat of such magnitude and then establish a more coherent and consistent strategy for dealing with the problem.

The threat posed by the drug cartels should be given a major priority in the bilateral agenda of the U.S. with a number of countries, including the Bahamas, Haiti, Colombia, Bolivia and Paraguay. It should be among the most important issues with a number of other countries, including Mexico and Honduras.

In order to signal to other countries the seriousness with which the United States regards the drug issue, the President should convene a summit meeting of Latin American leaders to begin developing a strategy to deal with this issue and related economic problems.

Narcotics law enforcement has often taken a back seat to other diplomatic and national security priorities. The war on drugs must not in the future be sacrificed to other foreign policy considerations.

ADMINISTRATIVE RECOMMENDATIONS

The Treasury Department should begin negotiations on gathering information on large foreign U.S. dollar deposits, as authorized by the 1988 Omnibus Drug Bill.

The State Department should make a special effort to control multiple entry visas from countries which are major drug transit countries or which harbor major drug organizations.

The Federal Aviation Administration should undertake a major effort to inspect hundreds of substandard aircraft, many of which are used for smuggling illegal narcotics. These aircraft are located throughout the United States, and those which do not meet FAA specifications should be grounded immediately.

Individuals who represent themselves as working for the CIA or other national security agencies of the United States Government, and who in fact do not, should be prosecuted promptly to the full extent of the law.

All U.S. law enforcement agencies should devote significantly greater attention to counter-intelligence in order to prevent drug traffickers from penetrating their operations.

The existing distrust among law enforcement agencies working on the drug problem and national security agencies must be resolved. Ways must be found to make it possible for law enforcement agencies to have access to national security intelligence information related to the drug threat.

Federal salaries of senior prosecutors and investigators must be raised and special Senior Executive Service positions created in order to encourage the most talented and experienced personnel to remain on the job.

SPECIFIC LEGISLATIVE RECOMMENDATIONS

The President should be given a series of optional sanctions to apply to major drug producing and drug-transit countries which have not fully cooperated with the U.S. in drug enforcement efforts. This would allow the President to certify a nation under the national security provision of 481(h)(2)(a)(i)(II), and thus avoid the mandatory sanctions contained in current law, while still giving him other optional sanctions. The proposed sanctions would include: prohibiting ships that have stopped at such a nation within 60 days from discharging passengers or cargo in the U.S.; denying landing rights in the U.S. to the national airlines of such a nation; subjecting goods and containers from any such nation to special inspections, quarantines, or other additional regulations to prevent them from being used to transport prohibited substances to the United States; denying or limiting non-immigrant visas to nationals of any such nation; eliminating Customs preclearance agreements with any such nation.

No government employee or official with responsibility for narcotics issues in either the Executive or Legislative branches of government should be permitted to represent a foreign government on narcotics matters for a period of three years after they leave. The penalties for violating such a prohibition should be the same as for violations of the Federal Regulation of Lobbying Act of 1946.

The Department of State should be required to notify the Congress within 10 days whenever it denies a request from law enforcement for reasons of national security or foreign policy. The notification should include a full description of the reasons for the refusal. Past decisions by the Department of State to end law enforcement operations on such grounds should have been subject to Congressional review; this provision would ensure that Congress remain in a position to exercise oversight over such decisions.

The Department of State should be prohibited from entering into contracts with any individual or company under indictment or convicted of any narcotics-related offenses, including money laundering. The Department should be required to institute procedures by which it would routinely check with the FBI, Customs and DEA to determine whether a company or individual is under investigation before the Department enters into any contract with the company or individual.

No U.S. intelligence agency should be permitted to make any payments to any person convicted of narcotics related offenses, except as authorized in writing by the Attorney General in connection with the investigation or prosecution of criminal activity.

The Neutrality Act should be amended to apply only to actions which are not specifically authorized by the State Department. Each such authorization would require prompt notification by the State Department to the House and Senate Foreign Affairs and Foreign Relations Committees, and Select Committees on Intelligence.

The annual drug certification report should be required to review links between international narcotics trafficking, money laundering and international terrorism (including guerrilla groups on the right and the left with regard to ideology.)

The National Director of Narcotics Policy should be required to report to the Congress on current U.S. federal personnel practices affecting all persons engaged in the war on drugs to determine whether adequate resources are being devoted to hiring, training, promotion, and retention of federal employees responsible for narcotics matters.●

## ELECTRIC UTILITY BANKRUPTCY CLARIFICATION ACT

● Mr. HUMPHREY. Mr. President, earlier this year, Senator RUDMAN and I introduced legislation to clarify the U.S. Bankruptcy Code with respect to its treatment of electric utilities. Our bill, S. 46, and a House companion, H.R. 681, protect ratepayers by preventing electric utilities from using the chapter 11 reorganization provisions of the Bankruptcy Code to circumvent State laws.

S. 46 fills a gap in the Bankruptcy Code by clarifying the role of State regulatory authorities in a bankruptcy proceeding. This gap was revealed when the largest utility in New Hampshire filed for bankruptcy under chapter 11. The Public Service Co. of New Hampshire [PSNH] has asked the Federal Bankruptcy Court to approve a reorganization plan which would transfer jurisdiction of PSNH's rates from the State Public Utility Commission to the Federal Energy Regulatory Commission. In seeking to supplant State Law, PSNH hopes to realize enormous rate increases. In fact, under PSNH's plan, New Hampshire customers would bear a 40-percent

rate increase in order to protect the financial interests of PSNH's creditors.

Mr. President, S. 46 is designed to protect the ratepayers from unwarranted and exorbitant rate increases that will result when utilities seek to circumvent State laws through the reorganization provisions in the Bankruptcy Code. S. 46 simply requires that, in cases where a proposed reorganization plan would restrict the existing jurisdiction of a State regulatory body, that State authority would have to approve the utility's reorganization plan.

Although S. 46 was promoted by the PSNH bankruptcy, the problem addressed by the bill is by no means confined to New Hampshire. In fact, State leaders and utility regulators from across the Nation are writing to urge their congressional delegations to support S. 46. Recently, I have received letters of endorsement from the Governor of Maine, the Arkansas Public Service Commission, the New Jersey Board of Public Utilities, the Wisconsin Public Service Commission, and the Indiana Utility Regulatory Commission.

Mr. President, these State representatives share my belief that the Federal bankruptcy laws were never intended to short circuit State jurisdiction over public utilities. I urge my colleagues to join their States in supporting S. 46.

I ask that a copy of each of these letters be printed in the RECORD.

The letters follow:

STATE OF WISCONSIN
PUBLIC SERVICE COMMISSION,
*Madison, WI, April 13, 1989.*

Re S. 46—A bill proposing to prevent electric utilities from declaring bankruptcy to circumvent state law.

Hon. JOSEPH R. BIDEN, Jr.,
*Chairman, Committee on Judiciary, U.S. Senate, Russell Senate Office Building, Washington, DC.*

DEAR CHAIRMAN BIDEN: The Public Service Commission of Wisconsin is in full support of S. 46, and requests that it be supported by you and the Judiciary Committee. Wisconsin ratepayers could be seriously harmed should a Wisconsin electric utility adopt the course of action taken by the Public Service Company of New Hampshire with regard to the Seabrook Nuclear Power Plant. It is important that Wisconsin ratepayers remain protected by our state reorganization statute. Therefore, we request that you support Senator Humphrey's clarifying legislation.

Thank you for your consideration.

Sincerely,

CHARLES H. THOMPSON,
*Chairman.*
MARY LOU MUNTS,
*Commissioner.*
CHERYL L. POFAHL,
*Commissioner.*

ARKANSAS PUBLIC
SERVICE COMMISSION,
*Little Rock, AR, April 27, 1989.*

Hon. DALE BUMPERS,
*U.S. Senator,*
*Dirksen Senate Office Building, Washington, DC.*

DEAR SENATOR BUMPERS: On January 25, 1989, Senator Gordon Humphrey introduced S. 46. This legislation would prevent electric utilities from using the reorganization provisions of the bankruptcy code to circumvent State laws governing rates and other matters.

The Arkansas Public Service Commission supports this legislation. However, we are concerned that the definition of electric utility used in § 110.(c) hits more than was intended. It appears that a broad interpretation of this section could potentially include co-generation facilities. Under the Public Utility Regulatory Policy Act, the utility that ordinarily supplies a co-generation facility with electricity is required to buy any excess electricity produced by a co-generation facility. This could possibly bring these co-generation facilities in under the resale provision.

The Arkansas Public Service Commission urges you to support S. 46 with an amendment specifically exempting the co-generation facilities.

Thank you for your consideration in this matter.

Sincerely,

SAM I. BRATTON, Jr.,
*Chairman.*
PATRICIA S. QUALLS,
*Commissioner.*
JULIUS D. KEARNEY,
*Commissioner.*

STATE OF MAINE,
OFFICE OF THE GOVERNOR,
*Augusta, ME, April 12, 1989.*

Hon. JOSEPH R. BIDEN, Jr.,
*SD-224, Washington, DC.*

DEAR SENATOR BIDEN: As a result of Maine's recent exposure to two utility bankruptcies with the potential for serious disruption of the affordable supply of electricity to our state, I am writing to urge your support of H.R. 681, the Electric Utility Bankruptcy Clarification Act. This bill provides that bankruptcies and reorganizations of public utilities will not short-circuit state regulatory jurisdiction. In the course of a recent reorganization filing under Chapter 11 of the Bankruptcy Code made by Public Service of New Hampshire, that utility has proposed that federal regulatory oversight of a newly-created holding company should supersede state jurisdiction over costs associated with the Seabrook nuclear power plant. A Maine consumer-owned electric utility, the Eastern Maine Electric Cooperative, has filed for protection under Chapter 11 as well, due to its inability to support continued investment in the Seabrook project.

I favor enactment of H.R. 681 due to Maine's interest in effective state regulation of electric utilities, particularly in cases where those utilities face an uncertain and troubled financial future. The federal government and courts have for years recognized the importance of state regulation of electric utility operations. In the absence of H.R. 681's enactment, this important state interest could be jeopardized in pending—and future—bankruptcy proceedings.

Thank you for your attention to this very important concern.

Sincerely,

JOHN R. MCKERNAN, Jr.,
*Governor.*

STATE OF NEW JERSEY,
BOARD OF PUBLIC UTILITIES,
*Newark, NJ, April 12, 1989.*

Re S. 46 and HR. 681, Bills Proposing to Prevent Electric Utilities from Declaring Bankruptcy to Circumvent State Law.

Hon. GORDEN J. HUMPHREY,
*U.S. Senator, Washington, DC.*

DEAR SENATOR HUMPHREY: The New Jersey Board of Public Utilities is concerned about the precedent being set by Public Service Company of New Hampshire's (PSNH) filing for Bankruptcy and Reorganization under Chapter 11 of the United States Code. It has come to our attention, through the National Association of Regulatory Utility Commissioners, that PSNH is seeking reorganization in order to circumvent state regulation.

This Board supports the passage of S. 46 and H.R. 681 which are designed to prevent such action by utilities. It is our belief that clarification of the bankruptcy law to require prior state regulatory approval for plans of adjustment or reorganization is a positive action.

Thank you for considering our comments on this important issue.

Very truly yours,

CHRISTINE TODD WHITMAN,
*President.*

INDIANA UTILITY
REGULATORY COMMISSION,
*Indianapolis, IN, April 10, 1989.*

Re S. 46 Senator Gordon Humphrey.

Hon. RICHARD G. LUGAR,
*306 Hart Building, Washington, DC.*

Dear SENATOR LUGAR: The Indiana Utility Regulatory Commission would like to express our strong support for S. 46 introduced by Senator Gordon Humphrey entitled the "Electric Utility Bankruptcy Clarification Act". Senator Humphrey's bill addresses a problem in New Hampshire where Public Service Company of New Hampshire has sought protection of the bankruptcy Court. The PSNH bankruptcy is the result of problems emanating from the long delay in issuing an operating license to the Seabrook Nuclear Power Plant.

In March of 1986, this Commission by emergency action following lengthy proceedings granted Public Service Indiana emergency rates which, in conjunction with numerous other provisions of the Order, saved PSI from bankruptcy. One of the reasons that this Commission determined it to be essential that PSI not become bankrupt is the very problem addressed by Senator Humphrey's bill. That question is the extent to which a bankruptcy court might go in setting rates for a utility's electric customers contrary to the orders of the state's legitimate ratemaking agency, in our case the Indiana Utility Regulatory Commission.

Although PSI avoided bankruptcy as a result of the closing down of the Marble Hill construction, the Wabash Valley Power Association which held a 17% interest in that new construction, was forced into bankruptcy more specifically a Chapter 11 proceeding. The major problem now facing WVPA in those proceedings are the claims of the Rural Electrification Administration that it has the power to override state jurisdictions and to order WVPA in spite of the

IURC and without express authority from anyone, including the bankruptcy court, to raise its electric rates to a level deemed sufficient by the REA.

This very brief and oversimplified review of our situation in Indiana should help you to understand why the IURC considers S. 46 or similar legislation to be very important. As a matter of fact, while S. 46 may meet the New Hampshire crisis it really is not broad enough to address the current conflict between the IURC and REA. Regardless of that concern, however, we strongly support the remedy provided by S. 46 in that it would definitely clarify the position of all parties insofar as bankruptcy proceedings of a public utility are concerned.

Presently WVPA has pending before the United States District Court for the Southern District of Indiana in civil action IP 89-126-C its complaint for declaratory judgment against the Rural Electrification Administration to settle this jurisdictional question. I am enclosing for you and your staff a copy of this complaint in order that you may better understand WVPA's position in this matter, a position with which the IURC is fully in accord. Frankly, we consider the manner in which the Rural Electrification Administration is addressing this problem to be an example of federal bureaucracy at its worst. You are probably already aware of the fact that REA has advised WVPA's member cooperatives that no further financial assistance will be extended until the member cooperatives comply with REA's orders. The IURC is seeking to intervene in these federal court proceedings in support of WVPA.

While we are very optimistic that WVPA will prevail in the declaratory judgment action, it seems preferable that such confrontations be resolved either by changes in policy or, if that is not possible, federal legislation.

A number of Indiana utilities are subsidiaries of holding companies. Although none seems in current danger of bankruptcy, the situation addressed by S. 46 could occur in Indiana at some further date. We urge your support of S. 46 and any amendments which might further strengthen the bill.

The Commission and its Staff will be very happy to provide you with any additional information which you might wish in regard to this problem.

Sincerely yours,

LESLIE DUVALL,
*Acting Chairman.*●

## CLEAN WATER ACT AMENDMENTS

● Mr. D'AMATO. Mr. President, I rise today as a cosponsor of S. 687, legislation which will expand authority under the Clean Water Act with regard to penalties for major oilspills.

It's been nearly 2 months since the *Exxon Valdez* ran aground on Bligh Reef in Prince William Sound. The toxic crude oil has killed thousands of birds, at least 600 sea otters, countless other marine and wildlife as well as fouling nearly 300 miles of shoreline. The Coast Guard has reported that cleanup efforts are progressing slowly at best.

The question that many Americans have asked is why was Exxon so ill prepared for such a disaster? Why wasn't the contingency plan followed? Why did it take so long for the Federal Government to intervene? And what is Congress going to do about all of this?

S. 687 gives Congress a chance to do something to help deter future oilspills. This legislation increases the amount of the penalty that can be applied to a company responsible for a major oilspill from a minimum of $5,000 to a minimum of $50,000. It also gives the EPA Administrator the discretion to increase that penalty in response to the severity of the spill up to $50 per barrel. In the case of the *Exxon Valdez* that would have been in the neighborhood of $12 million.

The legislation also requires the EPA to report back to Congress within 1 year with an assessment of existing oilspill contigency plans and recommendations for changes and improvements.

While we cannot guarantee that there will never be another major oilspill, we can take steps to strengthen existing laws and toughen penalties for such inevitable events. This legislation will go a long way toward deterring future oilspills and increasing the standards of vigilance and care in the oil industry necessary to protect our fragile environment. I urge my colleagues to support this bill.●

## TERRY ANDERSON

● Mr. MOYNIHAN. Mr. President, today marks the 1,522d day of captivity for Terry Anderson in Beirut.

I ask that the March 16, 1986, column by Jack Anderson and Dale Van Atta be printed in the RECORD.

The column follows:

STILL HOSTAGE

One year ago today, a green Mercedes pulled in front of the parked car in which Associated Press correspondent Terry Anderson was sitting on a street in West Beirut. He was talking with a friend, AP photographer Don Mell.

"I don't like this," Mell recalls saying, as the green car pulled up. He stepped back from Anderson's car, and said: "Get out of here."

Before either American could do anything, three men brandishing pistols jumped out of the Mercedes. They dragged Anderson out of his car and up to theirs, knocking his glasses off. There was nothing Mell could have done.

It was clear that Anderson was the kidnappers' target. The previous day, he had told colleagues a green Mercedes tried twice to run him off the road.

Anderson was the AP's chief Mideast correspondent. The story of Anderson and his family in the year he has been held prisoner by terrorists is a heart-rending one.

A respected foreign correspondent who had worked in Tokyo, South Korea and South Africa, Anderson was assigned to Beirut in late 1982. He soon won a reputation as an astute observer of Lebanese Shiite activities; he already had a solid reputation as a reporter who meticulously checked his facts.

"He had a sense of value about his work," his sister, Peggy Say of Batavia, N.Y., told us. "He honestly felt they needed him there because he felt he was unbiased."

The seemingly insoluble tragedy of Lebanon affected this compassionate reporter deeply. A close friend and fellow journalist, Robert Fisk, a veteran of a decade in Beirut, recalls the time Anderson came into the AP office to write after seeing an Arab child burned to death in some mindless act of violence. Anderson put his head down on his typewriter and wept unashamedly. Then he wrote his story.

"The only thing that happened he absolutely would not talk about was the bombing of the Marine compound," his sister said. An ex-Marine himself, Anderson "had spent a lot of time with those Marines," she explained. The devastating suicide bombing of the compound at Beirut airport killed 259 Americans in October 1983.

Anderson learned to live in the constant danger of Beirut with some degree of ease. In 1984, he persuaded his father, Glenn, to pay him a visit. Concerned that his own apartment wasn't safe enough, Anderson checked his father into the Commodore Hotel, a reporter's hangout normally immune from attack by the competing armed factions in the city.

"Dad visited him until his hotel room was shelled by gunfire," Peggy Say recalled. "It blew out the wall in Dad's room, so he came back home." Almost to the moment he was kidnapped, Anderson felt protected from deliberate acts of violence—or at least assured his family that he was. He told them that the Shiite Moslem terrorists needed him to tell their story to the world, and must realize it would be counterproductive for them to harm him. Despite these assurances, Anderson took the precaution of sending his wife, Mikki, and their young daughter, Gabrielle, back to Mikki's native Japan a year before his abduction.

Anderson's captors have provided scant informaton about their prisoner. The family received two letters from him soon after his kidnapping, but both read as if they had been dictated by the terrorists. The release of a fellow hostage, the Rev. Benjamin Weir, last September brought the family a heart-warming report of Anderson's courage in captivity.

Weir told the family that Anderson's greatest concern seemed to be whether his newborn child was a boy or girl. It was a girl, born on June 7, not quite three months after the kidnapping.

To tell Anderson the good news, the family put together a videotape for his 38th birthday last October. His captors allowed him to see it, and in the only apparently authentic letter he sent, Anderson said he wept with happiness on seeing the film of his new daughter.

Since then tragedy has stalked the Anderson family. His father, who had worked tirelessly for his release, died Feb. 15 of cancer diagnosed only 5 weeks earlier. At the funeral, the oldest son, Glenn Jr., had a heart attack.

Today in Washington, the relatives of American hostages in Lebanon will hold a religious service in the morning and a candlelight vigil in front of the White House in the evening.

Lest we forget, the other hostages known to be still alive are Peter Kilburn, an American University of Beirut librarian; The Rev. Lawrence Jenco, a Catholic relief official; David Jacobsen, an American University hospital official; and Thomas Sutherland, agriculture dean of the university.●

## SELF-DEFENSE, AN INHERENT RIGHT

● Mr. McCLURE. Mr. President, it is clear that self-defense is an inherent right. It is a peculiar notion indeed that denies us this basic right. Must we cringe before the thugs that terrorize the innocent and the weak? If we do, evil will surely prevail.

I am pleased to share with my colleagues two excellent letters to the editor, one to the Washington Post written by Frank Tauss of Vienna, and the other to the Washington Times, by Derek W. Linden of Bethesda. We have all been horrified by the vicious beating and rape of a young woman in Central Park. Her life has been shattered; nothing can mend that. We can, however, imagine how events would have differed if the victim had been armed, or if the criminals had feared some kind of effective self-defense or punishment.

Perhaps we are seeing a breakdown in the moral fiber of the individual, for whatever reason. I have no sympathy with those who find excuses for such brutality. When normal standards for moral behavior are missing, as they were in this case, and other, less publicized cases, society must move to protect itself. It must first of all not deny the law-abiding individual the means for self protection. It must also ensure that such savagery is swiftly and certainly punished, thus instilling the fear that will promote restraint in those otherwise lacking conscience.

Mr. President, I ask that the two following letters be inserted in the RECORD.

The letters follow:

[From the Washington Post, May 16, 1989]

WHAT IF THE JOGGER HAD CARRIED A GUN?

The difference between Bernhard Goetz and that unfortunate woman in Central Park is that Mr. Goetz recognized that a danger existed and prepared himself for it. It is madness that once you are selected to be a victim by a thug you have no real recourse but to suffer the violence as did the jogger, or be vilified and prosecuted for protecting yourself. Would Mr. Goetz have been mutilated or killed had he not defended himself? If the jogger had been armed and shot one or more of her attackers, would she, too, stand trial?

When an individual steps beyond the limits of civilized behavior, then it is the right of the civilized to defend themselves. No amount of psychological rationalization can alter the fact that one of our basic instincts is to survive, first as an individual and then as a group. Those who threaten our survival should feel a swift and painful retribution, either at the hands of the intended victim in the act of self-defense or by the community in the aftermath.

I do not want to be killed; I will not kill. I do not wish to be stolen from; I will not steal. Do unto others as you would have others do unto you is not just a quote from a religious text; it is a definition of the social contract that allows groups of people to live in relative harmony with one another.

Those who are horrified by the idea of killing in self-defense or retribution, think how it would feel if it were your sister or your wife or your mother or yourself who was raped or killed. If you do not love yourself or those in your life enough to want to survive, that's OK. That's your choice. But it is not my choice.

When a person demonstrates that he is not bound by the same conscience and morality as the community and takes from someone else all that he really has, his life, then that person forfeits his rights, privileges and even his existence. This will not prevent or discourage all such attacks; nothing can eliminate all the crime and criminals as long as humans are imperfect. But swift and final punishment will prevent the violator from killing again and let others know that we value ourselves and will not take lightly the loss of one of our own.

Until the apologists realize this and accept the reality of the world we live in, there will be more, not fewer, victims.

FRANK TAUSS.

VIENNA.

---

[From the Washington Times, May 16, 1989]

ADDING A SIGNIFICANT RISK FACTOR TO THE PAST-TIME OF "WILDING"

While I agree with the general tenor of Samuel Francis' April 27 column, "Up in Central Park, down in New Orleans," condemning the vicious maiming and gang-rape that occurred in Central Park, he is fundamentally wrong in asserting that New York's Sullivan law has disarmed criminals in New York.

The effect of personal disarmament (colloquially referred to as "gun control") in New York, Washington, D.C., and other major cities has not been to disarm criminals, but rather to disarm law-abiding citizens. Personal disarmament has not affected violent crime; in fact when law-abiding citizens are disarmed, criminals are emboldened.

This horrible incident also provides vivid illustration, if any was needed, that the only sure means of self-defense available to a victim confronted by physically stronger and more numerous assailants is a handgun.

One can well imagine what might have happened if the victim had been armed with one of the new, light-weight, high-capacity semi-automatic handgun that undercover police officers (including some New York officials who vociferously oppose the ownership of such handguns by civilians) are making their handguns of choice. One might even surmise that with the addition of significant risk to the activity, "wilding" might fall into disfavor among its current participants.

DEREK W. LINDEN.

BETHESDA, MD.●

---

## COLLEGE LOANS VERSUS GRANTS

● Mr. SIMON. Mr. President, as often as we say it, it cannot be said too many times: Education is our Nation's best investment in the future. While President Bush says he wants to be our "education president," the fact remains we are devoting only about 2 percent of our Federal budget to education. There are all sorts of ways we can improve our educational system and one of those is shifting our national priorities. But another important issue that I have written about in my weekly column is the question of college loans versus grants. I ask that a copy of my column be printed in the RECORD.

COLLEGE LOANS VERSUS GRANTS: SOME SURPRISING ANSWERS

[EDITOR'S NOTE.—Senator Simon is former chairman of the House Subcommittee on Higher Education and now serves on the Senate Subcommittee on Education.]

This nation has to do better in education. You will continue to hear me say that over and over, until we act to change our priorities.

One of many illustrations of this shortcoming is in higher education.

In the last nine years the average cost of college—eliminating the inflation factor—has risen by 40 percent. During that same period, family income grew 33 percent—and federal assistance for students rose 3 percent.

It should not surprise anyone, then, that in many key measures of using talent we are slipping. For example, the number of blacks graduating from high schools has risen over those same years, while the number going to college has dropped.

Not only has student financial aid dropped, it has been twisted.

We have shifted away from a primary emphasis on grants to go to college, to loans.

What's wrong with that? A number of things:

(1) It costs the federal government more money. That may be hard for some to believe but it is true. Because we subsidize interest and also pay for loan defaults, the costs are escalating. Of the money provided for student loans this year, 43 percent is not going for loans, but to pay for defaults.

(2) It discourages college attendance. That happens for two reasons: It is a barrier to some people to take out loans in the first place, particularly if you come from a family unaccustomed to taking out loans, or you are from a family that has been burdened already by having too much debt. A second factor is that we now have studies that show that students who go to college through grants are more likely to stay and complete their work than students who rely on loans.

(3) The loans often postpone the traditional American dream. What is that dream? Having a home of your own and a family. One young couple I talked to recently is faced with repayments of $422 a month for seven years. They're living on limited income. They would like to have that home and family, but they see no alternative but to postpone those hopes.

(4) Loans discriminate. We have made a great deal of progress in this country that we can look to with pride. But it is still true that those of us who are white males will on the average earn more when we graduate from college than those of you who are female or members of minority groups. That means that it is easier for some people to repay loans than for others.

(5) Loans twist occupational goals. You're a college student, facing $10,000 to $15,000 in loan repayments when you get out of college. You must choose between majoring in business or law, or becoming either a teacher or a social worker. You are a person of above average talent, who would like to become a teacher or a social worker, but you also want to pay off that loan quickly. Is

the nation better served by your shifting over to a major in business or becoming a lawyer? Probably not, yet that is the way we tilt things.

I do not favor doing away with loans. We should keep the loan program we have, but as we recognize that more student aid is essential for the nation's future, we should shift what we spend toward more grants.

For most American families, sending young people to college is a struggle—more of a struggle than it should be. If we devoted more than the present 2 percent of the federal budget to education, and did it wisely, it would be less of a struggle for these families.

And the nation would be well served.●

## NUCLEAR AND MISSILE PROLIFERATION

● Mr. GLENN. Mr. President, I have spoken many times about the global spread of nuclear weapons and missiles, and about the measures that are needed to halt this proliferation before it sends the world into turmoil. If anyone here seriously thinks that these problems are now under effective control—or that the threats from the proliferation of these weapons are remote from the daily lives of average Americans—then I have a few comments that may change your mind.

### A VOICE OF REASON

Let us start with some common sense—you do not need a top secret intelligence clearance to understand how the proliferation of these deadly weapons threatens us all. As much as I have read and spoken about this problem, I have not seen a more straightforward statement of the risks and responsibilities that we face as a nation in this area than a brief opinion piece by A.M. Rosenthal that appeared in last Friday's New York Times.

Mr. President, I ask to submit at this point in the RECORD an op-ed by A.M. Rosenthal, from the New York Times of May 12, 1989.

The article follows:

### THE WEAPONS OF HELL

At least we will know where to put the blame. If the day comes when the terrorist nations use the weapons of hell against us or other enemies, at least we will know that.

At first, we will try to evade the truth. We will say it is the fault of our friends and allies who sold those mad-men the material for the chemical weapons, the missiles and the nuclear technology.

But eventually we will have to face reality: the blame belongs to us, the Government and people of the United States. We knew, and could have stopped it, but did not.

About 40 West German companies are suspected by Washington of shipping chemicals and technology for chemical warfare to a Libyan plant and other Middle Eastern countries. German companies helped Libya, Syria, Iraq and possibly Iran build missile capability.

China is sending missiles to Libya. A Swiss company negotiated with Iran to build a poison gas plant.

We know Pakistan, and probably India too, has received clandestine help from abroad in preparing its nuclear weapons capability. Pakiston is an American ally and India a democracy important to us.

But perhaps someday far less friendly regimes will rule in Islamabad or New Delhi. Then we would live in fear that nuclear weapons capability could be transferred to bitterly hostile nations.

The principal target for the chemical weapons—the Libyan plant alone will produce 40 tons a day for warfare—of course would be Israel.

But the terrorist nations showed, during the Iran-Iraq war, that they will use chemical weapons against each other and their own people.

So it is easily conceivable that countries that deliberately blow up civilian airliners might one day raise the terror level by planting and exploding a chemical weapon somewhere in the West. The Ayatollah would regard it an act of special piety.

Americans look on drowsily. Is the danger on another planet? American specialists on terrorism and weaponry are astonished at the public passivity.

American Governments have not provided leadership. The Reagan Administration sent more than 250 polite complaints to the West Germans about nuclear aid to Pakistan and chemicals to Middle Eastern countries.

But the protests were usually secret. Our German allies either buried or routinely denied them.

Now, that Swiss company finally agrees that helping Iran build a poison gas plant would not be a delicate thing to do.

The West Germans got around to arresting the former director of the company that built the Libyan plant—the same company that, in January, Bonn indignantly denied was doing anything of the sort.

Well, that's nice. But all those other complaints Washington made to Germany, what happened to them and how were investigations carried out?

But it is not useful to blame the Germans or Swiss or Chinese. Obviously they do not consider selling chemical weapons or missiles to terrorist nations that bad; matter of values.

It is this country's job and moral obligation to stop friends and allies from sending terror weapons to terrorists.

First, the Government must stop wrapping the record in secrecy, stop putting "classified" stamps on our protests, stop covering evasions and denials. The "secrets" are kept not from suppliers or receivers—just the American public. President Bush can end that with a telephone call to the State Department.

Then we should cut off from the U.S. market every foreign company we believe is sending materials or technology for these weapons to terrorists; cut them off very fast, for very long.

Legislation to do this is before the Senate and the House, introduced by members of both parties. The Administration wants the decisions to cut off trade left to the President. No; they should be automatic by law.

We must tell the Chinese Government that we happen to have our own little cultural sensitivities and that they must choose between missiles to Libya and business with us.

Then we must say much the same thing to our allies. Most of them are as worried as we—and as clean. As for Germany, perhaps we may find that more Germans will agree with us than with the grossly, unforgivably insensitive German companies on the list of traders in hell.

Of course, we have to make absolutely sure we are not in that trade in any way ourselves—as we and Israel were so shamefully when the missiles were sent to Iran. It is part of waking up and looking in the mirror—better now than waiting until just one day too late.

Mr. Rosenthal makes three key points:

First, since today's foreign friends may easily become tomorrow's foes—a lesson we learned the hard way in the cases of Libya and Iran—we should not directly or indirectly condone the proliferation of nuclear weapons or nuclear-capable missiles anywhere, even by our friends. It is our duty to encourage our friends to see the folly in possessing such weapons and to communicate our firm determination to stop this mad pursuit of what Mr. Rosenthal calls, the weapons of hell. We must have a global policy.

Second, the United States cannot shirk its responsibilities by covering up proliferation with the veil of secrecy based on political concerns—secrecy based on legitimate concern about intelligence sources and methods is one thing, but secrecy based on political convenience is quite another. When we send hundreds of diplomatic protests and messages to other nations that are chronic suppliers of materials for these "weapons of hell," our responsibility does not—and cannot—stop with the delivery of these so-called demarches.

Why should the Congress and the American people not be informed if our diplomacy is ineffective in stopping this deadly commerce? Why should the citizens in the offending country never be provided an opportunity to learn of the concerns that we are expressing to their leaders? Are we using secrecy to protect the guilty, or to mask a failed policy? If so, maybe an appropriate subject for Mr. Rosenthal's next op-ed might be, the "policies of hell."

His third point is that our policies must have some teeth—when we detect illicit trafficking in commodities associated with nuclear weapons, missiles, chemical or biological weapons, we must have something more in our grab-bag of diplomatic responses than what Richard Perle has recently called, demarche-mallows. I believe Mr. Rosenthal is right: The time has come for the United States to impose stiff economic penalties on companies that chronically traffic in goods related to all of these types of weapons. We need to penalize not just the use of these weapons in war. We need to go after the "kingpins" of the illicit nuclear and missile marketplace. The world must know where we stand.

### THE VOICE OF THE AMERICAN PEOPLE

Although the previous administration did very little to educate the American people about the threats we all face from the proliferation of nu-

clear weapons and their various delivery systems, I am convinced that the public understands that nuclear terrorism or regional wars involving these "weapons of hell" are threats that deserve a high priority in any administration.

In the early days of the last Presidential campaign, the polling firm, Marttila & Kiley, Inc., released a survey of randomly selected American voters which shows that the public at large is definitely concerned about the problem of nuclear proliferation. Here are a few quotes from the findings of that survey:

Several findings point to a growing public concern that nuclear proliferation and Third World instability, perhaps even more than a continued arms race between the superpowers, represent the gravest threats to our national security.

Other than "tensions in the Persian Gulf" * * * Americans are more likely to view "the spread of nuclear weapons to the Third World" as a serious threat to our country's security than any other item we tested.

Fully 76 percent regard nuclear proliferation as an "extremely" or "very" serious threat to national security * * * this ranks higher than either the "nuclear weapons buildup by the U.S. and Soviet Union" (64 percent), or "Soviet aggression around the world" (56 percent).

More recently, the Roper Center for Public Opinion Research has reported a Yankelovich survey in which 1,000 randomly selected registered voters from across the Nation were asked to assess the extent to which "the spread of nuclear weapons to Third World countries" threatened our national security interests.

Here are the results of that October 1988 poll: An astounding 87 percent of the respondents ranked nuclear proliferation as either an "extremely serious" or a "very serious" threat. It is interesting that this figure is over 10 percent higher than the result obtained in October 1987 to the same question. Only 2 percent of the voters in the 1988 poll called the proliferation threat, "not very serious."

This, Mr. President, is the voice of the American people—this is where we stand.

THE VOICE OF THE MEDIA

In recent months, the international and domestic news media has been issuing one horror story after another about the worsening global spread of nuclear weapons, missiles, and chemical and biological weapons. I ask to submit into the RECORD at the end of my remarks the full texts of several of these reports. Here is what the media is reporting:

Pakistan continues its march toward the bomb.—The European press is having a field day with reports that Pakistan has acquired from West Germany United States-origin tritium—an H-bomb material—tritium recovery equipment, lithium—used in producing tritium—and a United States-origin laser, the latter as part of a package of equipment for making nuclear fuel. Meanwhile, the Pakistani army chief has boasted that his recently tested surface-to-surface missiles "are extremely accurate systems and can carry a payload of over 500 kg (1,100 pounds)." All of these developments are occurring in a country that receives hundreds of millions of dollars in United States economic and military aid—aid that President Reagan recently certified "will reduce significantly the risk" of Pakistan acquiring the bomb.

India's nuclear and missile programs are rolling like the ancient juggernaut.—India is now reported to be ready to test fire a 1,500 mile intermediate-range ballistic missile. It is ironic that India, after having condemned the United States and the Soviet Union for many years for failing to make progress in nuclear disarmament, is now developing a nuclear-capable missile that is within the class of delivery systems that the United States and Soviets have just agreed to eliminate. India has also reportedly acquired United States-origin beryllium—a material used in components of United States nuclear weapons—for its nuclear program and has been openly accused by the Government of Norway as the illicit destination of over 20 tons of Norwegian heavy water, a material used in producing plutonium.

Nuclear and missile developments are of growing concern in East Asia.—China persists in its stubborn refusal to join international treaties against the proliferation of nuclear weapons, while aggressively promoting sales of ballistic missiles and missile technology to unstable regions. Admiral Thomas Brooks, the Director of U.S. Naval Intelligence, recently testified before the House Committee on Armed Services that in 1988, "the PRC began marketing its 'M' series of short range tactical missiles * * * the M-9 SRBM (325 nm range) is certain to find clients in a number of Middle Eastern/South Asian states." The Chinese are also marketing dual-use equipment and materials associated with the development of nuclear weapons. Meanwhile, I have learned that our Government is considering selling to China valuable nonnuclear parts for nuclear powerplants, worth hundreds of millions of dollars, even though United States law bars the provision of United States nuclear technology to China until certain nonproliferation conditions are met. And thanks to a recent 30-year United States/Japan nuclear agreement, Japan no longer needs United States case-by-case approvals to make use of or ship, by air or sea, ton quantities of weapon-usable plutonium produced from United States-supplied nuclear fuel or reactors. Press reports are also circulating that North Korean may be building an unsafeguarded nuclear reprocessing plant for plutonium production, and that South Korea is working on a ballistic missile that meets the standard international criteria of being "nuclear-capable." If the Korean peninsula goes nuclear, how long could Japan afford not to follow suit?

But there are other regions that are receiving their fair share of press reports in recent months:

The Middle East is on the verge of an arms race involving all of the "weapons of hell."—While Israel's nuclear weapons and long-range missile programs remain unfettered and a subject that is taboo for discussion even among Israel's own citizens, Iraq appears determined to develop its own heavy missiles, chemical and biological weapons and, according to some recent reports, nuclear arms to meet its own regional ambitions. Egypt appears determined to acquire its own IRBM with the assistance of Argentina, Iraq, and unscrupulous European arms dealers. Saudi Arabia, meanwhile, is sitting comfortably with its new Chinese nuclear-capable CSS-2 IRBM's. According to Admiral Brooks—the United States naval intelligence chief—Libya, Iraq and Iran are all, in his words, "actively pursuing" a nuclear weapons capability. Who knows who will be the next to toss a match into the Middle East tinderbox?

Projects are underway in Latin America to develop nuclear submarines and nuclear-capable missiles.—Along with continuing concerns about the refusal of both Argentina and Brazil to join international treaties banning the acquisition or proliferation of nuclear arms, a concern heightened by the dangers of political instability in each country, both nations appear determined to acquire long-range ballistic missiles and nuclear submarines. And both Argentina and Brazil appear intent to export their nuclear-capable missiles to customers in the Middle East.

THE VOICE OF THE NEW ADMINISTRATION

President Bush has stated both in the campaign and after coming to office, that he regards nuclear and missile proliferation to be among the foremost threats facing the Nation and our allies. I hope that he is able to translate his concern into tangible policies designed to halt the spread of these dangerous weapons. He will certainly have my support in pursuing this objective.

Soon the new administration will have a major choice to make. Will we continue the policies of the past, with all of their trappings—such as the demarche-mallows, the refusal to report bad news to Congress and the American people, the blindness to proliferation activities in friendly countries, and the myth that being a reliable supplier of nuclear goods and military

aid will purchase responsible nonproliferation policies among recipients of those supplies? Or will we reinvigorate our policies with new ideas, fresh approaches, and a heightened sense of national commitment? I hope we are prepared to show the world that we not content with trying to manage proliferation, and that we are willing to work creatively with other nations to stop it outright.

Mr. President, as chairman of the Committee on Governmental Affairs, I would like to announce that the committee will hold a hearing on Thursday, May 18 to hear the views of the new administration on these issues. We will hear the testimony of CIA Director William Webster, Mr. Reginald Bartholomew, who has been called the "nonproliferation czar" at the State Department, and Ambassador Ronald Lehman, the new Director of the Arms Control and Disarmament Agency, to assess the threat and our national responses to these awesome challenges facing the Nation.

I hope that this hearing marks the start of a new era of cooperation and consultation between the Executive and Congress in the nonproliferation area. We are going to need this cooperation at home if we are to expect any cooperation or respect from our friends and foes abroad.

The material to be printed in the RECORD follows:

[From Nuclear Fuel, Mar. 6, 1989]

U.S. REPEATEDLY WARNED GERMANY ON NUCLEAR EXPORTS TO PAKISTAN

(By Mark Hibbs)

The U.S. government has issued about 100 specific communiques to the West German government related to planned exports to the Pakistan Atomic Energy Commission (PAEC) and its affiliated organizations, according to information obtained by NuclearFuel. Documents reveal that since the early 1970s planned exports—some of which were carried out—included a range of items—from computer technology to uranium.

Beginning in 1982, U.S. nonproliferation officials began warning Bonn that PAEC attempted to acquire technology for capture of pure tritium. In March, and again in May, 1986, the U.S. told German officials that the firm Linde AG was planning to export a tritium extraction facility to PAEC.

In responding to U.S. requests, German officials contacted Linde, which said it "had no plans" to export such a facility.

The U.S. sent a third warning in December 1986. "Notwithstanding Linde's assertions, we continue to believe that the information we provided you previously is correct, and that Linde submitted a proposal to PAEC for installation of a tritium recovery facility."

While on two previous occasions German export officials asserted that technology from Linde "could not result in a form of pure tritium," the U.S. government replied that "our technical information indicates that such a facility could result in a pure form of tritium."

Western tritium experts queried by NuclearFuel said that the U.S. position was correct. Linde AG, one of a handful of firms in the world with expertise in the field of cryogenic distillation of hydrogen isotopes, could have supplied a heavy water detritiator with capability to purify the tritium gas product.

In 1985, Germany licensed for export to Pakistan a tritium plant by the firm NTG Nukleartechnik GmbH (NTG), preferring to call it a "heavy water purifier" instead of—as the U.S. preferred—a "tritium recovery facility" in the interests of complying with German regulations on sensitive nuclear exports. While heavy water purification technology is not subject to export controls in Germany, technology for the recovery of tritium is controlled.

The U.S. believed that Germany would control export of tritium capture technology to Pakistan according to a pledge made by German officials at a spring 1986 meeting of the Coordinating Committee on Export Controls (COCOM). While German officials previously told the U.S. they "had no authority" to control tritium technology exports, the U.S. government told Bonn that Germany "should now have the legal authority to control the export of a tritium recovery facility." Equipment especially designed for tritium production or recovery appears on Germany's Nuclear Energy List of March 25, 1988. That list of items needing an export license is an annex to Germany's Foreign Trade Ordinance.

The U.S. also discussed with Bonn reports that nuclear trader Alfred Hempel may have been working to assist PAEC is acquiring material for an unsafeguarded reactor.

According to a German government report, citing "friendly intelligence," Hempel, in late 1986, made an offer to PAEC through the firm Ventron GmbH for supplying boron carbide, an absorber material used in reactor construction. U.S. officials told Bonn that "it is well known that Pakistan is developing an indigenous, unsafeguarded reactor" and advised export officials to intervene. In November 1987, German officials advised the U.S. embassy in Bonn that boron exports to Pakistan would require an export license and that none would be given.

Based on other intelligence information, the U.S. Arms Control and Disamament Agency (ACDA) had requested in 1980 that the West German government investtigate several dealings of Nuken GmbH with PAEC.

According to a German government report prepared at ACDA's request, Nukem officials, in 1973, were negotiating the sale of 8 metric tons (MT) of heavy water to the Pakland Corporation, which, according to intelligence sources, was a purchasing arm of PAEC. In the same year, Nukem discussed selling PAEC an undisclosed amount of uranium metal. German officials said that in 1977 the U.S. Energy Research & Development Administration, DOE's predecessor agency, approved the export by Nukem of materials testing reactor (MTR) "reprocessing and transport" technology to the unsafeguarded Pinstech reprocessing facility in Rawalpindi.

The report also says that Nukem sent 30 kilograms of UF6 of unspecified enrichment to PAEC via the Pakistan embassy in Paris in 1978. In the same year, Nukem officials negotiated delivery of "waste liquid vaporizing technology" to PAEC for New Labs, another unsafeguarded reprocessing facility, as well as melting crucibles and 145 kg of depleted uranium.

Nukem officials, according to the report, said only the UF6 was sent to Pakistan. Three additional exports planned for 1979—MTR reflector material to Pakistan, tritium targets to PAEC, plus beryllium metal and beryllium oxide to the Pakistan Directorate of Industrial Liaison—were "held up" by U.S. reexport requirements, Nukem officials were quoted as saying in the report.

The U.S. will not pay more attention to proliferation concerns in Germany, Western diplomatic sources in Bonn said. However, the sphere of influence of U.S. proliferation officials in Germany will be limited because other foreign policy issues—primarily modernization of Lance missiles stationed in Germany—will take precedence.

U.S. officials are also said to be taking a wait-and-see attitude regarding German pledges to tighten nuclear export controls (Nucleonics Week, 5 Jan., 3).

While proposed export restrictions might "put smaller fry like NTG out of business," one source said, non-proliferation officials are skeptical that larger nuclear establishment firms—such as Leybold Heraeus GmbH—will be penalized. The future prosecution of Leybold Hereaus management for its role in exporting sensitive high-enriched uranium centrifuge equipment to Pakistan in 1987 is viewed by U.S. officials as a litmus test of German will to punish nuclear proliferators, sources said. The U.S. "will keep bringing up this case," one source said. German justice officials said the case is presently mired by problems of international law surrounding the alleged theft of Urenco enrichment know-how.

Diplomatic sources also said that the U.S. is looking for an avenue to exert "more direct influence" on officials in the Economics Ministry responsible for export control. One 1986 interoffice memo penned by an Economics Ministry official said that U.S. communiques warning of planned nuclear exports to South Asia "usually land in my wastepaper basket."

---

GERMAN FIRM'S EXPORTS RAISE CONCERN ABOUT PAKISTAN'S NUCLEAR CAPABILITIES

(By Mark Hibbs)

Information obtained by Nuclear Fuel about West German nuclear exports to Pakistan provides indirect evidence of intensified nuclear weapons research by the Pakistan Atomic Energy Commission (PAEC), Western experts said.

Because Pakistan does not appear to possess technology to detritlate heavy water, German criminal justice officials are puzzled about the purpose of a tritium gas storage and purification plant provided in 1987 by the German firm NTG Nukleartechnik GmbH (NTG), now called NTG Neuetechnik, (NF, 6 Feb., 7). "It is a subject we have been thinking about every day," said Hanau prosecuting attorney Reinhard Huebner.

According to western experts, however, Pakistan may want to irradiate lithium-6 targets—perhaps in an unsafeguarded research reactor—to obtain weapons-significant amounts of tritium gas. The plant provided by NTG, they said, would be capable of purifying this tritium gas to 98% as alleged by suspects' confessions in the case.

In amounts of about 4 to 5 grams, tritium, the heaviest hydrogen isotope, is used as a booster in a fission nuclear weapon.

Information obtained by Nuclear Fuel about the plant design indicates that the tritium facility erected and tested in Pakistan would not be capable of separating hydrogen isotopes present in impure tritium gas extracted from heavy water. This "effectively eliminates" the possibility that the

plant is used to purify gas obtained by detritiating heavy water from the Kanupp reactor, one expert said.

In addition to the tritium isotope of hydrogen, "dirty" tritium gas obtained by detritiating heavy water contains large amounts of deuterium, as well as normal hydrogen. The three hydrogen isotopes must be separated in order to extract pure tritium.

Although U.S. proliferation officials repeatedly warned Germany about Pakistani intentions to acquire heavy water detritiation technology and although German export control officials indeed approved an application by NTG to export a heavy water detritiating plant to Pakistan (NF, 26 Dec. '88, 1), justice officials have no evidence that such a plant was exported to Pakistan.

The plant confirmed to be in Pakistan could, however, purify the gas product obtained from irradiated lithium-6 targets, since separation of hydrogen isotopes would not be required. Bombarding lithium-6 with neutrons produces an end product of tritium, large amounts of helium-3 and helium-4. "Pakistan is irradiating lithium targets," one U.S. expert said, "the German plant could give them a basically pure tritium product."

Western experts said that U.S. proliferation officials have been concerned for several years about the possibility that Pakistan was interested in procuring targets or lithium-tritium technology. A U.S. note to the German Foreign Office from March 13, 1986 expressed the concern that Pakistani agents in Germany were operating on the "international market" to be able to procure "tritiated targets" which could be used "at the Pinstech plant in Rawalpindi" to extract pure tritium.

Export documents indicate that prior to this date German officials approved exports of sub-kilogram amounts of lithium metal and lithium aluminum hydride to Pakistan and India. But according to officials from the Federal Ministry of Research & Technology (BMFT), which evaluated the export applications, the quantities exported were too small to have nuclear application.

Production of tritium via lithium requires bombarding the lithium-6 isotope with neutrons in a reactor. Western experts said, however, that it was not likely that PAEC would use the Kanupp heavy water reactor, which is under IAEA safeguards, for this purpose.

An official at the IAEA said that while heavy water at Kanupp is safeguarded along with reactor fuel, the control rods are not explicitly checked. "From a safeguards point of view irradiation of lithium at Kanupp would be a theroretical possibility," a U.S. safeguards official said.

But experts queried said circumstantial evidence points instead to the possibility that Pakistan may want to irradiate lithium-6 at an unsafeguarded, unknown research reactor. Because of the low melting point of the aluminum used in target cladding, irradiation in a Candu reactor core—where temperatures above 500 degrees F obtain—would also be undesirable, experts said.

One expert recently at PAEC said that Pakistan might be building a 50-MWt research reactor which could produce plutonium with a few high-enriched uranium "driver" rods in the core, but which could also be used to irradiate lithium targets. PAEC is "very proud" of its present capabilities in enrichment, reactor technology, and fuel fabrication, the source said. "I have no doubt PAEC has the means" to build the plant, he said.

Indirect evidence for the plant is provided by testimony in the NTG affair obtained by NuclearFuel.

Confessions of key suspects and documentary evidence indicates that NTG supplied "know-how for design and constuction" of a "small, pool-type" research reactor which prosecutors said might not yet have been completed or erected. In 1987, NTG also supplied aluminum rods and tubes for this reactor.

According to information from Bonn export officials, during 1987, Inam Ul-Haq, identified by intelligence sources as a buyer for PAEC, attempted to buy 30 metric tons of aluminum tubing for the firm Multinational Incorporation in Lahore, Pakistan. A German firm unsuccessfully attempted to export the tubing to Pakistan via Italy, sources said.

Western experts said that the aluminum obtained by PAEC would be useful as cladding material for lithium-6 targets. Aluminum tubes are used for cladding because lithium-aluminum bondings are more chemically stable than lithium-zircaloy bondings.

Western experts believe that it would not be difficult for Pakistan to acquire the technologies to enrich the lithium-6 isotope in lithium metal (over 90% of which naturally occurs as lithium-7) and then bond the cladding to the lithium. The process technology for the final step prior to purification—extraction of tritium gas from irradiated targets—calls for melting the targets in a high-temperature vacuum oven. Details are considered classified information in established weapons states, but engineers in Pakistan "could figure it out without too much difficulty," one weapons expert said.

According to documents, NTG exported to PAEC a high-temperature vacuum oven in 1987.

Beyond expertise for an unsafeguarded reactor, documents also reveal that PAEC also illegally obtained from NTG about 7,000 kilograms of fuel cladding material for Kanupp, the document indicate. This was procured in India and then shipped via Germany to Pakistan, falsely declared as stainless steel tubing and not reported to German export control officials. Because of the word "nuclear" in the full name NTG, Pakistani agents "expressly requested" that the tube transfers be handled by Physikallsch-Technische Bundesanstalt (PTB), a consulting firm under contract to NTG, according to the West German documents.

---

[From Der Spiegel, Feb. 20, 1989]

NUCLEAR EXPORTS TO PAKISTAN REPORTED

Pakistan has the ability to build the atom bomb. West German firms supplied parts and know-how.

The laboratory is hidden in a desert at the foot of the Kashmir mountains. Anti-aircraft artillery protects the area, soldiers guard the doorways into and out of the laboratories, storehouses, and underground vaults.

In the laboratory, generators whir, selected scientists operate highly sensitive aggregates; measuring instruments, vacuum pumps, and automated precision tools work around the clock.

In the nuclear plant, which forms part of the nuclear center of Pinstech near Rawalpindi, elements for the Islamic bomb are produced in strict secrecy—with machinery made in Germany.

The German equipment—for the time being the last delivery—was tested on site by Peter Finke, 45, on behalf of the Gelnhausen-based firm New Technologies (NTG). In July last year, the physicist showed his Pakistani colleagues for 2 weeks how to operate the complicated glove-compartment plant for the recovery of tritium.

Since then the scientist ("I am a pacifist") has had pangs of conscience; possibly the equipment could be "converted," he says. He stresses that anyway, a "pure training plant" was supplied—allegedly, in order to clean the tritium-contaminated Pakistani nuclear reactor in Karachi, which is, however, 1,100 km away.

Radioactive tritium is sold on the international black market of weapons-grade nuclear products at even higher prices than plutonium. A few grams of this gas are sufficient to increase the power of an explosive "substantially," says nuclear weapons scientist Gerhard Locke, 56, of the Euskirchen Fraunhofer Institute. Therefore, "the second bomb generation of the lighter type" cannot do "without tritium," he says.

However, the artificially produced superheavy hydrogen decomposes quickly into helium. Therefore, it must be constantly renewed.

That is precisely what the NTG plant can do: Every day, five grams of tritium can be recovered—a quantity which according to Locke is "incredibly large." That is why Albert Farwick, chief of the Nanau public prosecution which is investigating NTG, considers "some civil use practically inconceivable."

There is no doubt that Munir Ahmed Khan, chief of the Pakistan Nuclear Authority, with whom Finke already had a cup of tea, has secretly developed his country into a nuclear power; the bomb puzzle is complete. He had many individual parts—ranging from transformer sheets to uranium conversion—supplied by small West German firms, using a network of agents to this end.

The special pipes and supersolid steel from Singen and Saarbruecken, the mass spectrometers and magnets from Bremen and Bonn were made-to-measure for Khan's program which is carried out in a number of nuclear centers:

In Rawalpindi, where in addition to the bomb plant, a 24-year-old U.S. research reactor is in operation and a reprocessing plant produces about 20 kg of plutonium every year;

In Kahuta, Abdil-Kadir Khan, who is admired as "the new Einstein," meanwhile has produced more than 100 kg highly enriched weapons-grade uranium, using ultra-high-speed centrifuges;

At the Dera-Ghazi-Khan center, natural uranium is pulverized and converted into uranium hexafluoride, the initial product for further processing, in three conversion plants supplied by the Freiburg businessman Albrecht Migule for DM15 million.

The Pakistani "atom shopping" has often had Bonn's official approval. The Federal Economics Office (BAW) in Eschborn approved the export of an electronically controlled milling machine of the Munich-based Friedrich Deckel AG, which a secret U.S. study assesses as "extremely useful" for the "production of elements of a nuclear explosive system;" the Economics Ministry rejected as "unacceptable and irrelevant" the U.S. demand to guarantee that the machine not be used in the nuclear industry.

The export of a special press to compact hard-metal powder, which was supplied by

Dieffenbacher GmbH & Co in the Swabian town of Eppingen in 1985, was also approved, even though the purpose of the machine (price DM1.3 million) was not kept secret. The responsible officials knew that the isostatic hot press was intended "for use in an ammunition factory for the manufacture of heavy-metal cores for projectiles."

What types of cores could be meant was discovered post facto by experts of the Federal Research Ministry: "A highly efficient nuclear explosive" must be compressed to the largest possible extent, and "the easiest way" to achieve this is by using a press that is hardly different from the Dieffenbacher model.

The press and the milling machine, made in Germany, were so-called dual-use goods that can also be used for peaceful purposes and are therefore not contained in the embargo lists. However, the U.S. Administration had warned Bonn in time about such deals. U.S. intelligence services reported in 1979 that with the blueprints that he stole in Almelo, in the Netherlands, Abdil Khan was now in a position to build a uranium enrichment plant. To this end, he would buy "equipment on the European market," they said.

U.S. President Jimmy Carter wrote to Chancellor Helmut Schmidt at the time that "we must be careful and prevent this program from beng completed." U.S. experts specifically went to Bonn to instruct the responsible officials. They told them that two firms, the Hanau-based Leybold-Heraeus and the Renningen-based Team Industries, were already "doing business."

Several weeks later, two managers of the enterprises mentioned informed the Economics Ministry that the deals had been carried out. Team Industries had just shipped 31 frequency converters to Pakistan, highly sensitive instruments that are used for the power supply of uranium centrifuges. Leydold-Heraeus manager Gotthard Lerch reported that his firm had supplied valves, vacuum pumps, brazing furnaces, measuring instruments, and a gas purifying plant "in the past 3 years"—together "worth DM1.3 million."

Lerch also said that of course, "it cannot be totally ruled out" that such instruments are useful in a uranium enrichment plant. He said that in the future he will "keep an eye on the aspect of possible use."

He did so. Meanwhile, the Cologne public prosecution is investigating Lerch, because he allegedly smuggled cases of blueprints for the building of a uranium centrifuge out of the Federal Republic. At the same time, he had a number of special instruments copied in Switzerland, the investigators say. The individual parts, which were declared "cooper pipes, boilers, and crane girders," were transported across the French border by truck and were shipped in Air France planes from Lyon via Dubai to Pakistan.

The deal attracted attention after Swiss customs officers seized three specially large vacuum containers, so-called autoclaves.

The proceedings against Lerch have been dragging on for 2 years now. Only one West German exporter has been punished because of illegal nuclear exports to Pakistan: Albrecht Migule.

Quoting the Nuclear Nonproliferation Treaty, the judges said at the time that "owing to a law enforcement deficit, the FRG must accept being accused of having failed to meet its contractual obligations." They added that "the goals" of the nuclear nonproliferation treaty have been "attacked," because the authorities made it so easy for Migule that he did not have to proceed "particularly cleverly."

SPD Bundestag Deputy Hermann Bachmaier says that "the motto by which people in the Federal Economics Ministry work appears like a red thread in the files: You never hear anything, you never see anything—and in particular, you never block anything." Bachmaier, who heads the Bonn Nuclear Investigation Commission, says: "Our doors are just open."

The Karlsruhe Nuclear Research Center (KFK), which is 90 percent government-owned, also was involved in unrestrained exports. The KFK scientists supplied to their colleagues in Rawalpindi parts of a mass spectrometer, without which it is impossible to determine the degree of uranium enrichment. They trained Pakistani scientists, and even allowed one of them to visit their sanctuary—the "hot cells" where plutonium is separated, and they passed on valuable know-how.

Even the Economics Ministry found the close contacts between Karlsruhe and the Pinstech laboratories "astounding." The ministry said that whereas "constant efforts are being made to inhibit the Pakistani nuclear program," the KFK "maintains very close contacts with relevant Pakistani authorities to convey know-how for just this nuclear program." No conclusions were drawn.

The same thing happened when roughly 100 kg of specially hardened steel was shipped from Bremerhaven to Karachi on 9 August 1985. The hot goods on board the "Nedloyd Everest" were just being shipped across the Red Sea, when it dawned on the German authorities that it might perhaps be the so-called maraging steel of Arbed Saarstahl, which is subject to approval and is indispensable for the inside casing of uranium centrifuges, the rotors. The investigators later wondered why "so much fuss" was made about the shipment which involves a number of minor order addresses; however, the proceedings were discontinued.

No matter whether computer systems where involved that can be used for the "control of weapons systems," highly sensitive electronic hardware or ring magnets which according to reports of the Federal Intelligence Service just corresponded to the dimensions of the Pakistani high-speed gas centrifuge of the second type (German version). A coincidence? The officials in the Bonn Economics Ministry always felt pestered, instead of feeling challenged to intensify their checks, when the Foreign Ministry passed on secret documents of U.S. intelligence services warning about planned deliveries.

Such "anonymous papers usually end up in my wastebasket," Buenter Welzien of the Federal Economics Institute furiously wrote to the Economics Ministry, wondering whether Bonn had "ever bombarded the Department of Commerce in a similar way?" Even when the Americans asked Bonn to find out about negotiations conducted by German firms on the possible sale of so-called cryotons—tiny electronic elements with which the time a bomb detonates can be determined with an accuracy of one-millionth of a second—the Federal Economics Ministry's reaction was particularly rough. A responsible official called Spies scribbled on a piece of paper: "I reject such employment measures on principle."

However, the request had not been that absurd, after all. Rudolf Maximilian Ortmayer, at the time NTG manager, reportedly also negotiated in Pakistan with a man called Sulfikar Ahmed Butt—the very Pakistani who had attracted attention in the United States when he was trying, via agents, to purchase 50 cryotrons from EG & G Inc. Wellesley, Massachusetts, the only producer in the world. Butt, who is considered to be the chief buyer for the Pakistani bomb builders, reportedly presented to Ortmayer a comprehensive wish-list.

However, the negotiations were only more specific regarding tritium: Butt ordered 10 grams.

The nuclear buyer soon was not interested any more in the heavy water clearing plant that the Pakistanis initially planned to buy, although Ortmayer had engineered everything so nicely to legalize the deal. He invited the responsible official of the Federal Economics Institute, Manfred Ruck, and the Bonn expert spies to see him in Gelnhausen. Having a glass of sherry, the gentlemen discussed the export wishes.

Ruck wrote to his colleague Spies that the plant is absolutely harmless, comparable, "in a figurative sense, to a drinking water treatment plant."

The application was approved.

---

[From Defense & Foreign Affairs Weekly, May 15-21, 1989]

PAKISTAN PERFECTS N-DETONATOR, CHINA HELPS

Sources close to the Pakistani nuclear program have revealed that Pakistani scientists have now perfected detonation mechanisms for a nuclear device. Islamabad has successfully produced bomb casings which can withstand the buffetting of high speed flights. Such as device, it is learned, can be delivered by Pakistan's F-16s. It has been further learned that China is making arrangements for a Pakistan nuclear test, most likely at its Lop Nur testing ground. Over the past two years Pakistani scientists have been producing enriched uranium at the Kahuta plant. Pakistan's success has been made possible to a large degree by China. Informed sources have told the *Weekly* that China continues to help Islamabad in its nuclear ambitions. Chinese scientists have been visiting Kahuta and Pakistani scientists have been reciprocating the visits.

U.S. CANNOT HALT INDIAN, ISRAELI MISSILE PROGRAMS

US Assistant Secretary of State Allen Holmes has told the Senate subcommittee on defense industry and technology that Washington can do little to rein in the Indian and Israeli missile programs. Holmes is reported to have said that both New Delhi and Tel Aviv had developed indigeneous missile programs, with marginal external support and Washington would have little or no leverage over the two respective programs. Meanwhile Senator Jeff Bingaman has been pressing US Commerce Secretary Robert A. Mosbacher to bar the sale to India of US ballistic missile testing equipment that he fears will directly aid that country in the development of its *Angi* ballistic missile, which has a range of 1,500 miles. The *Weekly* has learned that missile proliferation will be a major issue to be discussed between Secretary of State James Baker in his meetings with Soviet Foreign Minister Eduard Shevardnadze in Moscow later this week. Washington is expected to press the USSR to reconsider joining a seven nation Western undertaking to end the sale of ballistic missile technology to developing nations. The Bush administration is taking the missile proliferation issue very

seriously and Washington is expected to remind Moscow that the Soviet Union has been "primarily responsible" for the delivery of thousands of Soviet-made *Scud* missiles over the past decade to Iran, Egypt, Libya and Syria. US officials are hopeful that Moscow will agree to impose unilateral restraints because of growing Soviet concern about the proliferation of missiles capable of reaching Soviet territory in a number of countries including Israel, Saudi Arabia, Iraq and Iran.

---

[From Nuclear Fuels Magazine, Feb. 6, 1989]

GERMAN FIRMS EXPORTED TRITIUM PURIFICATION PLANT TO PAKISTAN

(By Mark Hibbs)

Two West German firms exported to Pakistan between 1985 and 1987 a plant for storage and purification of large amounts of tritium gas, according to German federal prosecuting attorneys. The firms, Ncue Technologien GmbH (NTG) and Physikalisch Technische Beratung (PTB), have been under investigation since late last year on suspicions they violated German law (NF, 26 Dec.'88, 1).

Tritium gas can be used in nuclear fission weapons as an igniter or as a booster—the latter typically using about four grams of tritium gas. In microgram amounts, tritium also has civilian uses, such as in the watch industry and in medical research.

Industry experts queried by NuclearFuel, concurring with German prosecutors, said a civilian use for such a plant in Pakistan is difficult to imagine.

Moreover, 0.8 gram of tritium was exported illegally from Germany to Pakistan via Hong Kong to be used to leak-test the tritium plant. Part of that tritium was of Soviet origin, while the rest was produced from U.S.-origin heavy water in a German reactor.

Reliable sources said that prior to startup of the purification plant, Pakistani agents had tried unsuccessfully to import from a German firm at least 300 liters of tritium gas corresponding to about 65 grams of pure tritium at standard temperature and pressure.

Alfred Farwick, senior federal prosecuting attorney in Hanau, revealed details of the plant export January 26 in a closed session of the Bundestag (parliamentary) committee investigating the activities of German nuclear firms.

Hanau prosecutors have been investigating nuclear exports since they received information last fall that top officials from at least two companies, NTG and PTB, were believed to have violated the German Foreign Trade Act by exporting sensitive nuclear equipment and nuclear-related material to several non-NPT countries.

The plant installed in Pakistan can purify tritium gas contaminated with helium-3, oxygen, and deuterium, sources said. Experts explained that "dirty" tritium gas, stored on large absorber beds, is heated and passed through a uranium filter that captures the impurities by forming metal hydrides, yielding 98% pure tritium on the other side of the filter.

According to information obtained by German prosecutors, the total holdup capacity of the purification plant sent to Pakistan is 100,000-240,000 curies of tritium gas. Industry sources suggested that the daily throughput of the plant would be approximately 5,000-10,000 curies, the equivalent to production of 0.5-1.0 gram/day of pure tritium gas. One source said this would be an "enormous amount for a country like Paskistan."

The plant would be able easily to purify all the tritium gas—estimated to range anywhere from 200,000 to 2-million curies—present in the heavy water moderator system of the 137-MW Kanupp reactor—Pakistan's sole official potential source of tritium.

The large size of the plant is fanning speculation that Pakistan may have sources of unsafeguarded heavy water, since purification of tritium gas distilled from all Kanupp's heavy water would take only 200 days at the plant's nominal throughput of 10,000 curies/day. Experts said it would be extremely unusual to detritiate an entire heavy water inventory in a single step. The plant, one industry official alleged, would be "big enough to accommodate" the western world's total annual civilian requirement for pure tritium gas. "I can't believe that a plant that size can have a peaceful use in Pakistan," he said.

Western experts are puzzled, however, about the absence of direct evidence that Pakistan has acquired the technology necessary for detriatiating heavy water—a key link in the process chain which starts with tritium-contaminated heavy water and ends with "clean" heavy water and purified tritium gas as a byproduct.

When heavy water is used as a moderator for natural uranium reactors, it becomes contaminated with tritium over time and must be decontaminated using cryogenic distillation technology—a "sophisticated affair," one western engineer said. "Pakistan would have little use for a tritium gas purification plant if it didn't have the upstream technology to detritiate heavy water," he said.

So far there is only indirect documentary evidence that Pakistan has acquired heavy water detritiating technology. In 1984, NTG informed the Bonn government it planned to export a "heavy water purificiation plant" to Pakistan (Nucleonics Week, 5 Jan., 3). Sources said the matter led to a dispute between the Economics Ministry, which controls nuclear exports, and Foreign Office officials who had been asked by the U.S. government to intercede, after U.S. intelligence got wind of the planned export. Washington believed two firms—Linde AG and Sulzer—may have been involved in the planned export to Pakistan.

Despite the U.S. appeal, in September 1985, the Federal Economics Office (BAW) ruled officially that a license was not required for export of a "heavy water purification plant" to Pakistan.

While prosecutors said the tritium plant in Pakistan cost about DM 2.5-billion ($1.4-million), a Bonn legislator said the total value of the planned tritium technology export was about DM 13-million ($7.2-million). The difference might be accounted for by the more expensive upstream detritiating equipment, an industry source said.

According to prosecutors, although PTB director Peter Finke went to Pakistan to test-operate the completed facility, Finke said he was never told, and could not ascertain, the facility's precise location. Finke said he concluded, however, that it was not in the vicinity of the Kanupp reactor.

Prosecutors are now investigating the German source of Pakistan's tritium technology. The staff of one German nuclear research center may have been involved, as well as a former employee of Nukem GmbH who had access to tritium process technology because of a previous tritium joint venture. A scientist at the Maz Planck Institute for Plasma Physics in Garching is also said to have contributed to Pakistan's tritium expertise.

The 8,000 curies of pure tritium gas used to test-operate the plant in Pakistan were obtained for PTB from a German heavy water reactor and from the USSR by two other firms: Gutekunst, a manufacturer of liminous paints in Schwennigen, Germany, and chemical isotopes company Radium-Chemie AG of Teufen, Switzerland.

Sources said it is unclear where Pakistan might obtain impure tritium gas to feed into the purification plant. Large amounts of deuterium in the "dirty" gas would point to an unsafeguarded heavy water supply in Pakistan, one expert said. Large amounts of oxygen in the feed gas, however, would indicate that Pakistan is producing tritium gas by bombarding lithium-6 targets in a reactor with alpha particles—a technology used by nuclear weapons states. This could mean, according to one source, that Pakistan has constructed a secret unsafeguarded reactor.

---

GERMANY MAY HAVE APPROVED EXPORTS BY PROSECUTOR TO BE ILLEGAL

(By Mark Hibbs)

Some nuclear-related exports from West Germany to non-signatories of the Nuclear Non-Proliferation Treaty (NPT) apparently were offically sanctioned by the German bureaucracy amd supported by legislators in the Bundestag. At least two of the items originally alleged to have been exported illegally—a tritium extraction plant sent to Pakistan and an ultrasound fuel testing device sent to South Africa—may have left Germany quite legally, the latest information indicates.

On December 21, the senior federal prosecuting attorney in Hanau, Alfred Farwick, announced that suspects from the firm NTG-Neue Technologien GmbH (NTG) and the nuclear consulting firm Physikalisch-Technische Beratung (PTB), "illegally exported nuclear technology to Pakistan without the required permits" from the Federal Economics Office (BAW), an arm of the Federal Ministry of Economics in Bonn (NF, 26 Dec. '88, 1; Nucleonics Week, 5 Jan., 3). NTG was known until 1986 as NTG-Nukleartechnik GmbH. The firms were said also to have exported various nuclear equipment and technology to India and South Africa.

Since then, more suspects have signed confessions and the official investigation has widened to other parties, reliable German sources said.

Last week, Federal Minister of Environment and Nuclear Safety (BMU) Klaus Toepfer suspended the nuclear licenses of a third firm, Gutekunst, after Hanau prosecutors said it may have been involved in procuring tritium gas and nuclear technology for PTB and NTG, possibly in another country.

According to confessions leaked to the conservative daily Die Welt last week, another small trading company called Rieckermann in Hamburg served as an NTG broker with Pakistan. In addition, former directors of NTG and PTB were said to have been in Pakistan about 20 times until agreement was reached on terms for the export of tritium extraction equipment and 300 liters of tritium gas. According to officials from BMU, much less tritium—about 8,000 curies, or just under one gram—was actually delivered from Germany.

U.S. officials knowledgeable about nuclear weapons technology said that one gram of

tritium would be far more than Pakistan would require for commercial purposes, but just under the quantity needed for use in a nuclear weapon.

Officials in Bonn called on the Pakistan embassy last week, after suspects alleged that the former Pakistan ambassador to Germany acted as a courier between the exporting firms and agents in Pakistan. A spokesman for Chancellor Helmut Kohl said that as the present Pakistan ambassador claimed he knew nothing of the matter, Bonn would not take further diplomatic action for the time being.

The ultrasound device for fuel fabrication exported to South Africa—termed "measuring technology" in the prosecutors' original report on December 21—appears to be a fuel clad quality control device manufactured and supplied by Nukem GmbH.

The so-called ROTA-25 ultrasound testing device, used to check the neutron porosity of zircaloy fuel cladding, was supplied by Nukem to yet another small German firm, GASA, which did a large volume of business with South Africa before filing for bankruptcy last fall. According to company officials, Nukem knew the equipment was destined for South Africa and assisted in making the device operable after it was delivered. Nukem cleared the sale with federal export control officials at BAW, who ruled on March 8, 1985 that no export permit was necessary.

Nukem officials said direct military use of the Nukem technology by South Africa is "out of the question."

The export of a tritium extraction plant to Pakistan may also have been legal. According to information obtained by Nuclear Fuel, NTG informed Bonn in 1984 of its plans to export heavy water purification technology to Pakistan. The planned sale led to a dispute between the export-promoting Economics Ministry and the Foreign Office, responsible for ensuring Gemany's commitment to nonproliferation.

A senior U.S. State Department official told Nuclear-Fuel last month that Germany "has always shared our concern about the potential for illegal exports to unsafeguarded programs and has been fully cooperative." However, documents in the case show that Washington's plea to block the export of tritium technology was rejected by the German bureaucracy.

In a message dated March 13, 1986, the State Department said an export of such technology to Pakistan from a U.S. firm "would not have been approved" and urged Bonn to block the sale. The German Foreign Office, fearing the export would damage Germany's nonproliferation credentials, encouraged the Economics Ministry to block the export.

An Economics Ministry note dated April 25, 1986, said that NTG management had requested the firm not be named in discussions of the delicate export license matter. They said NTG management feared terrorist reprisal if it became known the firm was negotiating to export nuclear technology to Pakistan.

Nonetheless, NTG's planned export of tritium technology to Pakistan appears to have been no secret to federal legislators. On May 7, 1985, a Christian Democratic (CDU) Bundestag MP from the state of Hesse (where the firm is located), wrote to Rudolf Sprung, parliamentary state secretary in the Economics Ministry, urging support of the NTG export to Pakistan in the interest of local jobs.

[From Hamburg DPA, Jan. 30, 1989]

FIRM SAID TO EXPORT MISSILE COMPONENTS TO LIBYA

KARLSRUHE (DPA)—Highly valuable missile components have been transported to Libya according to a report in the "BADISCHE NEUESTE NACHRICHTEN" (BNN) via a firm in northern Baden. As the newspaper, which is published in Karlsruhe (Tuesday edition) [31 January] reports, quoting Gustav Eduard Michaelis the president of the Karlsruhe Finance Office, this illegal export was discovered last year by customs investigators. An investigation was started on the possible violation of the law on the control of weapons of war.

Out of concern for the enquiries which were still in progress, the Karlsruhe Higher Financial Directorate refused to give further details on the extent of the arms dealing. The name of the firm was also not given. This is not the only occurrence of transportation of weapons to Libya through northern Baden, the paper quotes Michaelis as saying.

---

[From Hambury Der Spiegel, Jan. 30, 1989]

COMPANIES EXPORTED BERYLLIUM TO INDIA

[Excerpts] Bonn authorities permitted the export of beryllium to nuclear-weapons-possessing India in 1984. Beryllium is used for constructing bombs. [passage omitted]

According to sub-paragraph 0112 of Bonn's "export list B," which is intended to prevent exports of nuclear goods that can be used for the production of weapons to problematic countries, the export of beryllium is classified as strictly requiring an export license. However, as is coming to the surface now, in the spring of 1984, the Hanau-based Degussa company is suspected of having exported 95 kg to India, of all countries, a country that has nuclear weapons-and Bonn had "non objections."

The deal which was authorized by the authorities of the then Economic Minister Otto Graf Lambsdorff (FDP), and Foreign Minister Hans-Dietrich Genscher, might become the cause of new irritations in FRG-U.S. relations. As can be learned from the application papers, which Der Spiegel has, the bulk of the material came from the United States; as middleman, Degussa passed the hot goods on to India.

The transaction took place at a time when, internationally, the rumor was growing stronger that, after its atomic bomb, India was about to develop its own hydrogen bomb. The delivery was forwarded to an address, which, according to FRG nuclear researcher Gerhard Locke, is "most suspicious": The Bhabha Atomic Research Centre (BARC) in Trombay, north of Bombay.

This center likes to boast its nuclear developments in the fields of medicine and agriculture. However, the Indians are less ready to supply information concerning the military part of their research.

International safeguard controls have no access to information regarding the amount of plutonium—the stuff of which the bomb is made of—the nuclear reactors in Trombay breeds. What is certain is that the material for India's first nuclear explosion in 1974 was provided by Trombay. U.S. experts estimate its present plutonium production at some 25 kg per year.

What is strange is that by consenting to the Degussa deal on 15 May 1984 with a specific form, the ministries in Bonn discarded any "suspicion of abuse of beryllium for nuclear purposes." Last week, Degussa itself, parts of the shares of which are held by a subsidiary of the Henkel Washing Powder Company and Dresdner bank, did not find anything objectionable to the deal with India. According to company spokesman Joachim Nimtz, the delivery "was carried out with the permission of the authorities."

On 21 October 1983 the Federal Economic Office (BAW) accepted the first of two applications for exports by the Hanau enterprise. Only 4 months previously, in June 1983, the Reagan Administration had stopped all U.S. deliveries of this kind to India—at that time secret intelligence services noticed intensive efforts by India to start a second nuclear test, possibly with a hydrogen bomb.

Similar reports were spread by the Federal Intelligence Service (BND) almost 2 years later. The "BARC Nuclear Research Center In Trombay," the BND warned in a classified report of May 1985, has been ordered by the Indian Defense Ministry to "continue work on developing a nuclear fusion weapon (hydrogen bomb)."

In its application for exports, Degussa put under the heading "use" "research and development work" in smelting, compressing, and casting of beryllium, which is often used for alloys. Material of "high purity"—at least 98 percent—had been ordered. Degussa added a telex of the Indian Nuclear Ministry [title as published] to the documents for the application. In this telex a government representative claimed that India does "not have any program for the production of nuclear weapons."

According to experts, the amount of beryllium ordered at that time makes sense: 95 kg—this is "a manageable amount for about 20 bombs," arms researcher Locke says.

In building a hydrogen bomb, the metal can be put around the radioactive core as a sheath. The desired effect: According to Locke, the neutron-multiplying properties of the relatively cheap beryllium reduce the demand for valuable plutonium "by a factor of about two."

The Bonn experts cannot have ignored this possibility of use: experts of the FRG Research Ministry expressly warned against the fact that the metal can "be used as a neutron reflector for the construction of nuclear weapons," when they had to deal with an application for the export of 60 kg of beryllium nitrate to India in February 1980.

Only because—as the BAW calculated—"at the most 2.637kg" of pure beryllium can be produced from the nitrate was the permit issued at that time.

The Research Ministry experts noted that for the building of bombs India needs "amounts ranging in kilograms". These were delivered 4 years later—almost 100kg.

---

[From the New York Times, May 7, 1989]

NORWAY DETAILS HOW HEAVY WATER WENT TO INDIA

(By Sanjoy Hazarika)

NEW DELHI, May 6.—Norwegian investigators say they have evidence that material that could be used in the manufacture of atomic weapons was illegally shipped to a Bombay company in 1983. The company is listed in the Bombay telephone directory as an affiliate of the Indian Government's Department of Atomic Energy.

The Norwegian investigators say their evidence of the shipment, involving 21 tons of deuterium oxide, or heavy water, is a document and a statement from a witness. But the chairman of India's Atomic Energy

Commission, M. R. Srinivasan, denied that such a transaction had taken place.

"At no stage have we bought heavy water from Norway," Dr. Srinivasan said in an interview. "We do not know the veracity of these documents; we have not had anything to do with Norway. We are one of the most important producers of heavy water in the world and we do not have any imports except from the Soviet Union."

It has been previously reported that India obtained heavy water from Norway and the Soviet Union, but this is the first time that Norway has given details of the company that they said received the shipment at Bombay.

Norwegian officials say they have the original flight document that traces the shipment from Oslo to Basel in Switzerland and then to Dubai in the United Arab Emirates and finally to Bombay. They are also relying on testimony by a man hired by a West German company to accompany the cargo.

Under the Nuclear Nonproliferation Treaty, shipments of more than one ton must be reported to the International Atomic Energy Agency and put under safeguards if shipped to countries like India, which has not signed the treaty. That was not done in the case of the 1983 shipment.

Heavy water is used in reactors to slow the neutrons emitted in nuclear fission to a speed at which they cause additional fissions. Ordinary water can also be used, but it absorbs neutrons and therefore requires use of enriched uranium, which is expensive and difficult to make. With heavy water, reactors can run on natural uranium. Reactors using uranium produce plutonium, a bomb fuel, as a byproduct.

Plutonium is also used to start new atomic reactors, and Dr. Srinivasan, the nuclear official, has said that critics who say that India is diverting the material to a nuclear arms program overlook this point. In an interview last year, he said that 50 kilograms of plutonium were used in 1985 to start up a new "fast breeder" test reactor that uses raw material available in India.

Although most of India's nuclear plants are not open to international inspection, New Delhi has denied having a secret weapons program. Its capability of building a nuclear weapons system was shown, however, when it exploded what it called a peaceful nuclear device in 1974.

Norway said a West German company, Rohstoff Einfuhr, bought 15.18 tons of heavy water from Norway in 1983, flew it to Basel in Switzerland by West African airlines. Then, with the addition of six tons of Soviet heavy water, it was flown to Dubai and India. The consignment landed in Bombay, the Norwegians said, about Dec. 7, 1983.

The Chief Public Prosecutor for Oslo, Anstein Gjengedal, who is leading the investigation of the shipment, said in a telephone interview that he did not know whether the destination was an Indian Government department.

"All I have is an address in Bombay, not a name, and we have found this address on a freight document written in West Germany and we still do not know if this is the end user," he said.

Mr. Gjengedal said the address on the freight consignment document listed the Directorate of Purchase and Stores at Palton Road in Bombay as the consignee. He quoted a West German national who reportedly accompanied the flight to India as saying that the consignment was "handed over to this address."

A visit to the address given by the Norwegians showed that the department had moved. A security official at the Directorate's office said the office was move "three or four years ago." The Bombay telephone directory lists the Directorate under a listing for Central Government offices of the Atomic Energy Dpartment.

---

[From Jane's Defence Weekly, Apr. 22, 1989]

CONTROLLING THE SPREAD OF BALLISTIC MISSILES

(By Barbara Starr)

CIA Director William Webster predicts that by the year 2000, at least 15 nations will be producing their own ballistic missiles.

"Although missiles being developed by these countries are somewhat crude and inaccurate, many of them have capabilities well beyond battlefield range and can strike in a matter of minutes," Webster said.

He did not identify the 15 countries, in a speech following Congressional testimony in which he warned of the proliferation of nuclear, chemical, and biological weapons, especially in the Middle East.

Webster says as many as 20 nations are developing chemical weapons and 10 countries are working to produce biological weapons.

As missile attacks on cities in the Gulf War accelerated in the 1980s, seven industrial nations announced a new effort in April 1987 to curb the transfer of technology that could enable other nations to develop ballistic missile systems.

Yet since the formation of that Missile Technology Control Regime (MTCR), a seemingly unstoppable number of nations have continued to proceed with development of long-range missiles capable of derlivering nuclear warheads, as well as chemical or biological weapons.

The MTCR attempts to control missile technology exports through the co-ordination of the seven member nations: the United States, Canada, France, the UK, Italy, Japan and West Germany. The Soviet Union, China and Israel are not signatories.

Non-proliferation advocates say Third World nations have to go to these 10 suppliers for reliable and usable technology.

The MTCR has had only moderate success as a limiting force. Yet, as Webster said, it does not include "key players in today's missile and advanced technology market.

"The agreement also does not reduce the incentive or ability of Third World nations to develop ballistic missile technology on their own."

Moreover, critics say the MTCR does not take a strong enough stand against export of so-called dual use items, such as components which could easily be transferred from a space programme to a missile programme.

For example, US officials are keeping a close eye on whether India is using technology gained in its space programme for its ballistic missile test programme. India is reportedly planning the first test launch of its Agni medium-range ICBM, said to have a 2000 km range, next month.

The MTCR is not an official treaty, and there is no ruling body to administer sanctions or controls. Each member nation must develop its own laws to control exports restricted under the MTCR.

"The only enforcement mechanism is if the CIA finds out a nation is doing something it shouldn't," says Gary Milhollin, a former nonproliferation consultant to the Pentagon. "The MTCR is not going to stop the spread of ballistic missiles to the Middle East. It is too little, too late."

The regime does provide for a detailed system of regulating the export of certain materials and components that could be used in ballistic, as well as cruise missiles.

Under the terms of the agreement, an envelope is established whereby there is a strong "presumption of denial" to export items capable of delivering at least a 500 kg payload to a range of at least 300 km.

According to the official text of the regime, this means member nations will generally agree not to export "complete rocket systems (including ballistic missile system, space launch vehicles and sounding rockets) and unmanned air vehicle systems (including cruise missile systems, target drones, and reconnaissance drones)" that fall within those capability parameters.

Also not to be exported are individual rocket stages, re-entry vehicles designed for non-weapons payloads, some solid or liquid fuel rocket engines, some types of guidance sets, and arming, fuzing and firing mechanisms.

Another category of items is established where exports are more readily permitted if it is determined on a case-by-case basis that the components will not be used for ballistic or cruise missiles.

These include lightweight turbojet and turbofan engines, ramjet and scramjet engines, some liquid fuel control systems and propellants.

This complex regime has yet to stop some key nations, however. For example, recent reports indicate that Egypt is co-operating with Argentina and Iraq on the development of the SS-1C Condor II with a range of up to 1000 km.

The Condor programme has experts around the world worried. It is a potential threat to Israel—but the UK is also worried that Argentina could use it against the Falklands (Malvinas).

A report in the Argentinas newspaper suggests however that Israel is pressing Argentina to end the relationship with Cairo, in return for which Israel will deliver 12 promised A-4Q aircraft.

In response to international pressure, the West German Government has been taking a closer look at missile technology exports. But many in the US Congress are critical.

Rep. Howard Berman alleged recently that West Germany's largest aerospace firm Messerschmitt-Bölkow-Blohm (MBB) has played a key role in Condor II and that Fiat's SNIA-BPD is also contributing components. "There is also reliable evidence that MBB is participating in a separate Iraqi missile project in the northern city of Mosul, the suspected site of Iraqi chemical weapons development," he said.

Berman, and a bipartisan coalition of four other Congressman, have introduced legislation to strengthen the MTCR.

The legislation would require the President to impose at least one of the following sanctions on any company he finds in violation of the MTCR: denial of US export licenses; denial of US Government contracts; and/or a ban on imports into the USA.

"Perhaps our allies have done as much as they politically can. But by enacting this legislation, the United States can do more. Companies engaged in these projects will be forced to forego their business with us if they continue to pursue the profit gained by this extremely risky and ill-advised business," says Berman.

[From International Defense Review, 1989]

INDIAN IRBM DETAILS REVEALED

For the first time, India has officially admitted the existence of the Agni surface-to-surface IRBM. IDR understands that its first firing will take place shortly from the Interim Test Range at Baliapal in Onssa State. Agni (Fire) is the biggest and longest-range missile being developed by the Defense Research & Development Laboratory (DRDL) at Hyderabad under the Integrated Guided Missile Program launched in 1983. Its design team was headed by Dr. A.P.J. Abdul Kalam, Director of DRDL, who had also been in charge of the earlier Prithvi program (see IDR 5/1988 p. 478).

Significantly, the first stage of Agni is the solid-propellant first stage of the SLV-3 satellite launch vehicle. The four-stage SLV-3 was also designed by Dr. Abdul Kalam, while at the Indian Space Research Organisation (ISRO). It has a three-segment polybutadene acrylic acid acrylonitrile (PBAN) solid-propellant charge. The 10m-long. 1m-diameter stage weighs 10,000 kg. While its thrust and burning time are not given, the thrust should be over 20t, since the complete SLV-3 weighed 17t at lift-off.

For the first time, India has thus used a component of its purely civilian space research program for a military application. (Under former Chairman Dr. Satish Dhawan, ISRO had consistently opposed any military application for its SLV-3 or any other product).

The Second of Agni's two stages has a storable liquid propulsion system. While the 250km-range Prithvi, first test-fired on 25 February 1988, has a low-energy propellant combination of RFNA and xylidene and the same could also very likely be used on the Agni upper stage. India also has the $N_2O_4$/UDMH technology in hand.

Press accounts state that the Agni will have a "twin-microprocessor-based missile-guidance computer with interrupt-driven real-time software". Design work on the control and guidance system was also undertaken at DRDL, with collaboration from researchers at the Indian Institute of Science, Bangalore, under the Joint Advanced Technology Program. The earlier Prithvi has an advanced inertial navigation and guidance system, as well as an onboard mission controller.

The Agni, with a range probably exceeding 2,000 km. is expected to have a conventional warhead. While no details have been released, the warhead is likely to be extremely heavy, and there may be various types for deep strikes against high-value targets.

---

[From Hamburg Der Spiegel, Mar. 27, 1989]

FIRMS INVOLVED IN IRAQ MISSILE PRODUCTION

Iraq is building its own missile production. Technology and know-how for the research center were delivered by German companies.

On 5 August 1987 at 1602 telex machine "298078 Con MIK" starts to rattle. Telex number 3368 goes "to Gipro site office" and starts with a call for help:

"Since at the moment it is hardly possible to reach a competent person at project Saad 16," the "very esteemed gentleman" Nitsche and Isele are asked to convey the "list of training companies with the appertaining dates of the courses."

The telex line belongs to the Vienna Consultco Limited. In Al Thakafiya Street [spelling as published] in the north of the Iraqi university town of Mosul this Austrian construction company has a joint office with the Bielefelder Gildemeister Projecta Limited (Gipro).

Gipro is the general contractor for Saad 16—a project for which "laboratories and workshops comparable with facilities for technical colleges and test institutes" are being built, according to the Gipro management.

The comparison is misleading; In reality Saad 16 is the currently largest and most secret armament project in Iraq. Documents and eyewitness reports available to DER SPIEGEL are substantiating the suspicion: The facilities being constructed on the northern rim of the town on the Tigris River are certainly not the harmless institute that "is to be operated in cooperation with Mosul University," as the Gipro management claims.

Telex number 3368 proves: German companies are involved much more in the project than has been assumed to date.

Dozens of FRG companies have delivered technology and know-how for the "Technology Center," in which—according to intelligence information—missiles and chemical weapons are to be developed. The Iraqis are basing their work on preliminary work done by Egypt and Argentina—the Condor 2 missile project. Its goal is the development of a precise intermediate-range missile whose range could cover the entire Middle East.

The beneficiary of FRG business efficiency is a dictatorship, which is striving for regional supremacy after 8 years of war in the Gulf, which tried to break the resistance of its own Kurdish minority in the north of the country with cowardly poison gas attacks in violation to international law, and which has recently been accused by the human rights organization Amnesty International of systematically torturing even children.

A structural diagram from the documents of a company involved in Saad 16, which was published in the previous edition of the Austrain magazine PROFIL, proves FRG influence on the DMI.5-billion project: According to this, 5 years ago the state-owned Iraqi company Saad General Establishment contracted Gildemeister Projecta in contract number 16/1/84 as the general contractor for "technology" and Consultco as subcontractor for the "civilian parts" of the project—overground workings and foundation work as well as transportation and insurance.

The most important deliverer of technology of the planning company Gipro became Messerschmidt-Boelkow-Blohm (MBB), a Munich aircraft company, which has been developing various kinds of flying armament for decades—from the Tornado fighter bomber to the Fighter 90, from antitank missiles to large-scale missiles. MBB is participating in the Mosul deal with DM77 million. The people from Munich and Bielefeld hired several other subcontractors. "As a German company," the Gipro management assured DER SPIEGEL, "we tried to contract German producers for the delivery of equipment if it was possible in any way." Obviously with success.

From the German BP to Carl Zeiss, from Degussa to Tesa—renowned companies are working for the Saad 16 project: 38 FRG companies are dealing with a comprehensive training program for Iraqi experts, which are to be trained in operating chemical laboratories and electronics workshops, wind tunnels, and physical test facilities.

The list of contractors in a monthly Gipro report also contains companies which have repeatedly been suspected of dubious arms deals.

Fritz Werner Industrial Equipment Limited provided a universal drilling machine. The company from Geisenheim, which is 10-percent state owned has been conducting profitable arms deals for years, also with Iran, Iraq's enemy in the Gulf war.

By far, the most comprehensive monthly delivery in July 1987 was ordered at Karl Kolb Company. The public prosecutor is currently investigating this laboratory equipment company because of the suspicion that the Hesse firm delivered poison gas facilities to Iraq.

The Rheinmetall cannon production company is involved via its subsidiary Aviatest, providing two wind tunnels; and with the Mauser gun manufacturer another FRG arms producer is listed in Gipro's order books.

There is even a direct missile trace from MBB to Iraq, which has now been retraced by PROFIL journalists Herbert Langsner and Alan George. The Munich company has been involved in the Argentine Condor I Project since 1979, which first was allegedly destined to build a weather research rocket. Soon it turned into a "multipurpose" missile.

Not quite 2 years ago, when it had long become clear that the Argentines were working on a military missile program, MBB had to cease cooperation upon pressure by Bonn. MBB engineers, which were hired by partners of the Munich company in the Condor project, remained in business—and with them the technical know-how of the Bavarians.

Insiders believe that the old Condor crew are now providing their technical knowledge to Iraq for serial production of those weapons that are developed near Mosul. Europeans report from Baghdad that a top secret production facility is currently being established somewhere in northern Iraq.

Gildemeister is able to present a clearance certificate for the dubious deals—clearance number 48422 of the Federal Economic Office.

"For presentation to the customs authorities" the Federal Economic Office attests to Gildemeister Projecta Limited that "according to current rules, machinery, electrical equipment, regulation, measuring, and testing instruments for a research, development, and training institute with eight main sections, name: Project Saad 16, do not need an export permission."

The subcontractors also stress that their deliveries were legal. Peter Resz Czynski of the Hamburg Koerber AG assures that Blohm company, a member of the concern, has in no way delivered computer-controlled grinding facilities, which are subject to export permission, to Iraq. In 1985 and 1986 three standard grinding machines, type HFF 512 and Hanseat 11, "older model" (Resz czynsik) were ordered. Operators were trained for these machines in Germany and Iraq. "Everything completely harmless," Resz Czynski says.

MBB spokesman Udo Philipp also wants to give this impression. Testing centers "for surface analysis" and calibration labs were sent to Iraq. However, Philipp admits, "something like this" can "also be used for military purposes."

Gipro, too, does not want to absolutely exclude the possibility that the technology center, all of which will be handed over to Iraq "by mid-1989," could be used militarily: "In general, all universal products and fa-

cilities can often be used for several purposes."

However, what eyewitnesses have seen on site and what is proved by construction plans, goes far beyond the mere possibility of military utilization. Saad 16, located in a valley 1 km off the transit road to Sachu [spelling as published], is strictly guarded with electronics and video cameras by the military.

The more than 3.3-km-long fence is equipped with watchtowers, the main entrance is equipped with quick-action barriers. Mercedes Unimog vehicles, which are equipped with radar antennas, are patrolling between the buildings. Bungalows for managers, a first-aid station, a fire brigade, and an independent energy supply stress the isolation from outside.

Camouflage and bunkers emphasize the military character of the facility, whose center is a more than 100-meter-long hall for the construction of prototypes. In the northern part of the area a 120-meter-long subterranean shooting gallery—4 meters wide and 4 meters high—was tunneled into the mountain. The walls, insulated with noise-proof naps, look as if a chicken farm had donated its annual stock of egg cartons to this.

In a side valley to the west, there are 28 so-called resistance buildings, which have particularly stable roofs that are slanting down on one side and three stable walls, the fourth wall, on the other hand, is made only of wood. Thus, in case of laboratory accidents, the pressure of an explosion is purposefully directed into a harmless direction. Most of the 58 chemical laboratories are located there.

Adjacent, protected by walls on all sides, there is a missile test stand with control rooms and climate chambers. The buildings with measuring laboratories (from MBB), which are close by, are also protected by a 150-meter-long wall against the chemical laboratories.

Several times the speed of sound can be stimulated in the 12-meter-long wind tunnels, and the 27 electronics laboratories have a nonechoing room built by Siemens.

"Only if one is inside this room," an insider says ironically, "can one overlook that this is a military project."

---

[From the Washington Post, May 3, 1989]

U.S. FIRMS HELPED IRAQ GAIN ABILITY TO MAKE MISSILES, OFFICIALS SAY

(By David B. Ottay)

Before U.S. export restrictions in 1987, some American companies sold equipment that helped Iraq build a military-industrial complex capable of developing missiles, U.S. officials disclosed yesterday.

"We're aware of the fact that American technology was sold to the Saad 16 complex," said a U.S. official, who described the facility near Mosul in northern Iraq as "a defense-industrial establishment" involved in engineering and manufacturing missiles, planes and other military items.

The disclosure came amid a U.S. diplomatic drive to get West European nations to crack down on companies selling technology and expertise to Third World nations seeking to build missiles or chemical and biological warfare plants.

The United States imposed a ban in 1980 on the sale by U.S. companies of all military equipment and so-called "dual-use" items—those with civilian or military application—to Iraq and Iran during their 1980-88 Persian Gulf war.

Whether the American equipment at the Saad 16 complex were "dual-use" items was not immediately clear. But U.S. officials insisted no U.S. export laws were violated by the American firms.

The officials refused to disclose the firms' names, but said the equipment provided to the Iraqis was "relevant to missile production" and sold "directly or indirectly" to the Saad 16 complex.

A spokesman for Hewlett-Packard Co., the California computer firm, said in a telephone conversation last night in 1985-86, the company had delivered "electronic equipment of various types" to the German company, Messerschmitt-Boelkow-Blohm (MBB), under a license authorized by the German government and the U.S. Department of Commerce.

"The end-user on the license was shown as the State Organization for Technical Industries-Saad General Establishment," Hewlett-Packard spokesman Richard Harmon said. He added that the Iraqi organization was described as "an institute for higher learning."

He added, "In summary, anything delivered to Saad was done through MBB and subject to a specific authorization."

A spokesman for another U.S. firm, Wiltron Co., in Morgan Hill, Calif., which makes electronic test and measuring instruments, confirmed that in early 1987 Wiltron had sold a $50,000 "scalar analyzer system" to its subsidiary in Germany, which in turn provided it to MBB for the Saad complex. Peter Chalfont said the firm had obtained a Commerce Department license indicating that the Saad site was the end user.

In testimony yesterday before a Senate Armed Services subcommittee, W. Seth Carus, an expert on missile proliferation at the Washington Institute for Near East Policy, referred to recent reports in West German and Austrian media that U.S. companies "may have supplied 40 percent" of the equipment for the Saad 16 complex.

State Department officials confirmed U.S. involvement in building the complex but said "it was not clear" on what the 40 percent estimate was based.

They said it was legal for U.S. companies to obtain export licenses to sell certain high-tech items abroad until restrictions were imposed by the Missile Technology Control Regime (MTCR) signed by the United States, Canada, France, West Germany, Italy, Japan, and Britain in April 1987.

The regime bans export of missiles or their components and any technology or equipment related to the production of ballistic and cruise missiles capable of delivering a payload of at least 500 kilograms to a distance of 300 kilometers or more.

"They [U.S. firms] obtained export licenses and nothing illegal was done," one U.S. official said.

However, congressional sources said that in 1985, two years before it formally committed the U.S. to the MTCR, the Reagan administration had begun adhering informally to the regime. They questioned whether licenses should have been issued in the 1985-87 period.

U.S. officials said while the United States had sought to adhere to the MTCR terms since March 1985, the Commerce Department had no legal basis for halting such sales as those involved in the Saad 16 complex until the regime went into effect in 1987.

The officials said they were unaware of any U.S. sales to the Iraqi complex since April 1987.

Carus said that in addition to MBB, West German and Austrian news reports had identified a German-Austrian company, Gildemeister, as the principal builder of the Saad 16 complex. He said the reports named two U.S. firms besides Hewlett-Packard and Wiltron which allegedly provided equipment to it.

The two others were Tektronix Inc. of Beaverton, Ore., a manufacturer of computer graphics terminals and measuring instruments, and Scientific-Atlanta Inc. of Atlanta, which makes telecommunications and satellite ground station equipment.

A spokesman for Tektronix said yesterday the firm was searching records for sales to Iraq or the Gildemeister firm. A person at Scientific-Atlanta said offices were closed for the day.

Carus testified that "a variety" of West German firms were involved in building the Saad 16 complex, in which Iraq had invested more than $200 million. He described it as a research and development facility to build "a variety of different types of missiles, including both ballistic and cruise missiles."

But U.S. officials said they thought the complex would also be involved in the production of various weapons, including missiles.

The West German magazine Stern said Hewlett-Packard had provided computers for more than 50 laboratories in the complex.

---

[From the London Financial Times, 12 Apr. 1989]

PROSECUTOR LAUNCHES INQUIRY INTO MBB'S CONDOR MISSILE LINKS

(By Simon Henderson and David Goodhart in Bonn)

The Munich city prosecutor is investigating reports that a subsidiary of the West German aerospace concern Messerschmitt-Bölkow-Blohm (MBB) broke export control laws by delivering parts for a DM70m missile system to Iraq.

MBB would make no comment on the allegations but did confirm yesterday that its subsidiary MBB-Transtechnica was being investigated.

Western officials say that a group of 16 companies in Europe, known as the Consen Group, is using West German rocket designers and other specialists to help Egypt, Argentina and Iraq develop a 1,000km-range missile capable of carrying nuclear and chemical warheads. The companies are registered in Monaco, Switzerland, Austria, West Germany, and Argentina.

MBB is one of six big European companies named in documents as being "most important in co-operation and as sub-contractors".

Western officials expressed concern at the activities of the Consen Group, which they say is acting as a "European missile management company", buying in expertise for the missile, the Condor II, particularly on propellants and guidance systems, using predominantly West German engineers.

One Consen company, the IFAT Corporation of Zug, Switzerland, was quoted last year in US court documents as sending more than $1m to an Egyptian-born American citizen now awaiting trial in California charged with conspiring to export missile parts to Egypt without a license.

Another company in the group, Desintec, also of Zug, attempted to buy missile nozzles from the US in 1984 for the Argentine Air Force.

Western officials describe the Condor II as a two-stage, solid fuel rocket. They say

that it was due to be tested in Argentina in October but was delayed by technical problems. Development is being conducted in parallel in both Egypt and Argentina, with Iraq funding part of the Egyptian programme. Deployment is not expected until 1992.

Washington and London are leading a diplomatic effort to stop the development of the missile. In 1987 they agreed with other Western European nations and Japan on a Missile Technology Control Regime which tightened export controls on sensitive items. The UK is worried that the Condor II will have the range and accuracy to hit the airfield on the Falklands from Argentina. The main US concern is the impact in the Middle East.

Israel, which has already test-fired its own long-range missile, the Jericho II, is developing its own anti-missile missile. Western intelligence officials credit the Israeli secret service, Mossad, with causing three explosions in Europe seeking to break up the Consen operation, including one last May when the car of Consen's general manager was blown up on the French Riviera.

MBB has admitted helping Argentina develop an earlier missile, Condor I, but says it is not involved in Condor II. But its subsidiary MBB Transtechnica is a sub-contractor to another West German company, Gildemeister, on a project in Iraq known as Saad 16. Last week West German investigators seized files from Gildemeister.

---

[From Mid East Markets (MEM), Apr. 17, 1989]

CONDOR II: AN ISSUE TO TEST US-EGYPT TIES

A reference to a new missile in MEM on February 6, 1989 set off a whole series of articles elsewhere and brought into the open a simmering diplomatic row. MEM understands that when President Mubarak was in Washington he was asked about Egypt's intentions concerning the missile which it is building with Argentina's technical help and Iraqi finance. The Israeli Prime Minister, Yitzak Shamir, also asked the US what was going on, and last week the Israeli Foreign Minister, Moshe Arens, asked the West German Defence Minister, Rupert Scholz, about the involvement of West German companies.

Although still to be flight-tested the Condor II missile is state-of-the-art. It has two solid-fuel stages and will fly a 700kg payload over 1000km. It is likely to have terminal guidance to make it accurate to within 100m. Existing missiles in Arab arsenals are antiquated by comparison and hardly accurate enough to hit even a city. The Soviet-supplied Scud is a version of the Nazi V-2 missile from World War Two. It has a single-stage liquid-fuelled motor which means that the missile must be accompanied by tankers containing highly volatile fuel to top up the missile.

The new Iraqi missiles—Al Hussein (range 650km) and Al-Abbas (range 860km)—are merely enhanced Scuds with a longer range obtained by using less warhead and more fuel. The Saudi missiles obtained from China are also liquid-fuelled and probably unserviceable most of the time: imagine storing and handling the fuming nitric acid and industrial alcohol fuels in desert temperatures of over 40°C!

CONSEN

Argentina and Egypt agreed to cooperate on Condor II in the early 1980s, with Iraq helping Egypt under a secret exchange agreement believed to be known as Badr 2000. All three countries have been helped by a mysterious collection of European companies known as the Consen Group. One Consen company, the Ifat Corporation, financed an attempt to buy missile technology last year in the US for which an Egyptian-born US citizen is awaiting trial. The man, Abdel Kader Helmy, is described by his lawyer as being a childhood friend of the Egyptian Defence Minister, Abdel Halim Abu Ghazala, who is also implicated in the attempt to break US export laws.

Another Consen company, Desintec, tried to buy rocket nozzles for the Condor II from a California company in 1984. They were to be sent to the Argentine air force. Plans for the nozzles are shown here, including a cross-section of the missile with its internal star shape to ensure best burning of the propellant. (Consen declined to comment on its involvement with Condor II.) [Graphs not reproducible.]

The Consen Group has used West German rocket engineers and other specialists to help Egypt and Argentina, and may also have helped Iraq in its Scud enhancement programme, which tilted the balance in the Gulf war when the modified missiles started to rain down on Tehran last year.

The Egyptian missile production facilities are being readied at Military Factory 90 in the Abu Zabaal area outside Cairo. This is also where reports claim that Egypt has a chemical weapons plant, and where Field Marshal Abu Ghazala wants to build a production line for the US Abrams tank.

Iraq's Scud modification plant is thought to be at the Sa'ad 16 complex near Mosul, although there is another programme, designated Project 395, which is considered more closely linked to the Condor II. There have been direct contacts between the Iraqi Technical Corps for Special Projects (Teco), the organisation responsible for Project 395, and the Argentine Institute of Aeronautical and Space Research, which co-ordinates work on the Condor. Teco, which also drafts experts into oilfield work and other non-military areas, comes under the direct authority of President Saddam Hussein, although it is run by his son-in-law, the Minister for Industry and Military Industrialisation, Brig. Hussein Kamel Majid.

During recent weeks West German officials have started investigating the activities of a subsidiary of the aerospace giant, Messerschmitt-Bolkow-Blohm (MBB) which is involved with another West German company, Gildermeister Projecta, at Sa'ad 16 in Iraq. Yet other West German companies are linked to Military Factory 90 in Egypt.

---

SUBSTANCE TO NUCLEAR ALLEGATIONS AGAINST IRAQ

Although the US Government was annoyed when Israeli officials leaked reports that Iraq was trying to develop a nuclear weapon, the denials of the more knowledgeable officials were more qualified than much of the press noticed.

The assertion of the Washington Post was that Israeli officials thought that Iraq was between two and five years from making an atomic bomb. The newspaper also claimed that the device was intended to put on the Condor II missile being developed in conjunction with Egypt and Argentina (see separate story).

The more conventional estimate for Iraq achieving membership of the nuclear club is 10 years. Nuclear status might have been reached eight years ago, but the destruction caused by an Israeli bombing raid on the Tuwaitha nuclear centre in 1981 was so total that the possibility of using a research reactor to produce plutonium had to be abandoned.

Present concern about Iraq is based on increasing efforts that the country is trying to build a uranium enrichment plant using the centrifuge principle. Highly enriched uranium is an alternative weapon material to plutonium, but can only be produced using an elaborate and sophisticated industrial plant. Western officials have noted over the years the number of Iraqi students being sent abroad to study the two basic principles of uranium enrichment diffusion and centrifuges. Recently, they say, it became clear that Iraq had opted for the centrifuge route in which uranium, in a gaseous form, is pumped through hundreds of linked high-speed centrifuges.

USA officials confirm that $400,000 worth of vacuum pumps destined for Iraq, and suspected to be destined for a nuclear plant, were recently stopped from being shipped. What had caught the attention of US agents was that the pumps in question were designed for use with vegetable oil but were being ordered by the State Company for Oil Projects, Iraq's main oil equipment purchase body. When asked to explain the order by the US, Iraqi officials were not able to give an adequate answer.

There are very few centrifuge plants in the world, and most produce low enriched uranium for power stations. The only one in the developing world is in Pakistan which, despite denials, has been producing enough highly enriched uranium to make between four and six bombs a year for the last two years. The Pakistan plant uses techniques similar to those developed by the Urenco consortium of the UK, the Netherlands and West Germany to produce uranium for their power stations.

Pakistan took 10 years to build and start operating its plant, overcoming foreign export controls and technical difficulties, hence the time frame for Iraq. The difference, western officials say, is that Iraq is putting considerably more money and effort into its buying programme. Maybe the Israelis were right after all.

---

SAUDI CONCERN OVER CHEMICAL CLAIM

The Saudi Government is showing its usual sensitivity: this time on the delicate subject of chemical weapons. A fairly innocuous reference in a long series on the subject in the Chicago Tribune elicited from Saudi officials a denial that was considerably longer than the original claim.

The Chicago Tribune on April 4 listed 25 countries it said were known or suspected by US intelligence officials to possess or be developing chemical weapons. The Middle East countries included were Israel, Egypt, Libya, Syria, Iran and Iraq. The Tribune then added: "Suspected of being in the next echelon of those who have an interest in a possible access to resources needed to build chemical weapons are Saudi Arabia, Pakistan, India, Thailand, Brazil, Argentina, Chile and Peru, according to these sources."

This was the sole reference to Saudi Arabia in a cluster of articles and background pieces on chemical warfare published by the Tribune and totalling more than 10,000 words. But it was enough to prompt a statement from the official Saudi Press Agency that the kingdom had issued a categorical denial of the report's allegation that it was a country with the potential to produce chemical weapons.

"A responsible Saudi source told the Saudi Press Agency here today that what had been published by the Chicago Tribune is merely baseless and fabricated," the agency said in a report issued on April 6. The kingdom had declared, and again reiterated, its opposition to the production of chemical weapons. The agency's report then drew attention to the kingdom's recent ratification of the Nuclear Non-Proliferation Treaty.

This was the important point, because the denial was as much aimed at scotching reports in the US press that Riyadh had agreed to help Iraq underwrite the financial costs of refurbishing its Osirak nuclear facilities at Tuwaitha outside Baghdad—bombed by Israel in 1981—as at replying to vague assertions that the kingdom possessed some potential for chemical weapons manufacture.

The episode is also instructive because it underscores the strong sensitivity of the Saudis on the delicate issue of unorthodox weapons of any kind. Having received their medium-range East Wind missiles from China, the Saudis are taking pains to make it clear to the US that there is no question of them being equipped with anything other than conventional warheads.

UNDERSTANDING WITH ISRAEL

For more than a year the US has been engaged in discreet but parallel talks with the Saudis and the Israelis aimed at preventing either a pre-emptive strike—presumably by Israel—or any wedding of chemical weaponry to existing missiles—presumably with regard to the Saudis. (Western intelligence officials say that the Chinese missiles delivered to the kingdom have had their range reduced to between 1200-1400 km. In Chinese service the missile carried a nuclear warhead; indeed it was the missile used to test China's fourth nuclear bomb, the design of which was subsequently passed on to the Pakistanis, the officials say.)

For the Saudis, much is at stake. The kingdom is currently seeking assurances from the Bush Administration that the US will agree to a major sale of some 315 General Dynamics Land Systems Division M1-A1 main battle tanks, together with between 50 and 100 replacement aircraft for its aging fleet of 110 F-5 reconnaissance aircraft and interceptors. The Saudis are also seeking to secure the tracked Multiple Launch Rocket systems (MLRS) battlefield rocket and 2,000 of the Mark-84 aerial bombs. US companies concerned with the potential sales are engaged in a major campaign to inform Congress of the importance of these arms deals. They are basing their case not so much on Saudi Arabia's defence needs, but on the economic costs to the US if these deals, which are potentially worth several billion dollars, fail to go through.

ADMINISTRATION'S VIEW

The Bush Administration—and in particular the new Director of Policy Planning at the State Department, Dennis Ross—remains particularly concerned about the growing political acceptability of chemical weapons in the Middle East following Iraq's successful use of chemical weapons in both its campaigns against Iran and in its repression of Iraqi Kurds. The Saudis therefore need to counter this impression if they are to secure the weapons systems they favour.

US defence industry officials have told MEM that the Saudis are again looking to the US for military aircraft, because it is complicated enough having to introduce one totally unfamiliar aircraft into their inventory—the British Aerospace Tornado—and they would feel comfortable if the replacement for their F-5s were to come from the US.

Ideally, they would like a further 50 McDonnell Douglas F-15 interceptors, which could then be incorporated into the Saudi arsenal with relative ease as the Royal Saudi Air Force already possesses 60 F-15s. Failing that, they would choose to replace their 110 F-5s on a one-for-one basis with General Dynamics F-16s or McDonnell Douglas F/A-18s.

---

[From the New York Times, Feb. 23, 1989]

THOSE CHINESE MISSILES

(By William Safire)

WASHINGTON.—If you keep tugging on a loose thread, the Hong Kong tailors warn, your whole suit could fall apart.

Here's a loose thread: In Chicago, consular representatives of the People's Republic of China are now forbidden to travel in their consular cars outside the environs of Cool County. Public transportation, yes; private cars, no.

Tug gently on that stray fact. Why can't these Chinese diplomats travel in their own vehicles to catch whatever is playing in Peoria? What are we afraid they may see?

Nothing. It's part of a proper tit-for-tat policy, begun last Oct. 24, reciprocating for a seemingly weird policy of the Chinese Government. For some reason, American diplomats in Shenyang, a large city between Beijing and the border of North Korea, are forbidden to drive unaccompanied to see what's happening along the border.

Tug again. What might our officials in China want to eyeball, and perhaps photograph or ask questions about, along that road that has the Chinese so sensitive? We know from our satellites that no top-secret military or research installation is hidden there.

The road we cannot travel unaccompanied runs from Beijing alongside the railroad line to Dandong, on the Yalu River. That is where the train crosses into North Korea, delivering missile-length boxes first fo Sinuiju and later to the port of Nampo.

Keep tugging. These are the ports from which North Korea exports missiles and missile-support electronics to Iran, Libya and Syria. Some American officials, whose suspicions are pooh-poohed in our State Department, believe that these IRBM's are built in China, sent by rail to North Korea and transshipped to the Middle East terrorist nations.

A company of great interest to international missile-watchers is Poly-technology, which is affiliated with Citic, the Chinese trading-banking-industrial development combine. Polytech is said to be staffed by the sons and daughters of China's leading political families, whose prestigious rice bowls will be hard to break.

The P.R.C. officially denies selling Silkworm missiles to Iran, or any missiles to Libya, Iraq or Syria that might be used to deliver locally produced poison-gas warheads. The Chinese do not deny—indeed, proudly assert—a deal made last year to supply Saudi Arabia with its CSS-2 East Wind missiles, with a range up to 2,000 miles.

That Chinese-Saudi missile deal stunned Washington, which mistakenly thought that neither Beijing nor Riyadh would alter the balance of power in the Middle East without at least checking with the U.S.

Frank Carlucci, then Secretary of Defense, was dispatched to the Chinese capital last September to seek assurances that no missilery would be sold to the Terrorist Club.

Now here is where at least some of the suit falls apart, Secretary Carlucci, operating without Presidential supervision or senatorial oversight, may have thought he had assurances from the Chinese to stop the dangerous spread of missiles, in return for secret promises to more U.S. technical aid. He passed the word around pre-election Washington: Not to worry.

But the Chinese are proud to compete with superpowers on rocketry, and are the subtlest negotiators. They may be keeping their word, if such was given, not to export missiles to the Middle East—but that would not include weaponry to North Korea, which may be falsely promising not to transship from Nampo. Equally important, the Chinese leadership may believe it is free to sell the equipment and knowhow to any nation seeking to make missile systems on its own soil.

The embarrassing question President Bush will hate to ask, when he visits China this weekend, is this: Is a Chinese company on the verge of a deal to supply Colonel Qadhafi, or anyone, with the technical package needed not only to produce but to launch and guide missiles?

Mr. Bush should not put his personal inclination to be a polite visitor above America's national interest. He can hope, with delicacy but with firmness, that Chinese missile support systems—using such hot stuff as cable digital communications, pulse width modulation or microcomputer technology—are not for sale to dictators endangering world peace.

Deng Xiaoping will catch his drift: without a credible and reportable agreement to restrict missile delivery systems, China can expect no further U.S. technological cooperation.

With that understood, the two leaders can clink glasses, reminisce, pose in front of the Great Wall and otherwise pre-empt the visit of Mr. Gorbachev.

---

U.S. PRODS IAEA ABOUT SAFEGUARDS FOR NORTH KOREAN NUCLEAR PLANTS

(By Ann MacLachlan)

The U.S. complained to the February meeting of the IAEA Board of Governors about North Korea's delay in submitting its nuclear facilities to agency safeguards. The Peoples Democratic Republic of Korea (PDRK) signed and ratified the Nuclear Nonproliferation Treaty (NPT) several years ago in anticipation of a nuclear plant deal with the USSR (Nucleonics Week, 2 Jan. '86, 7) However since that action, the Asian nation has neither consummated the purchase of Soviet PWRs nor concluded the required safeguards agreements with the IAEA.

The U.S. and even more so the Republic of Korea which is still technically at war with the PDRK, are doubly concerned because satellite photographs have shown that North Korea is operating a magnox reactor. North Korea, which does not maintain diplomatic relations with the U.S., is also believed to be building a reprocessing plant near the magnox reactor.

A senior IAEA official said that following the U.S. complaint, the North Koreans were "reminded" of their obligation under the NPT to conclude a general safeguards agreement and facility attachments covering any nuclear installations containing material that comes under * * * safeguards. The U.S., said a well-informed source, has said it will

take its real complaint about the two clandestine facilities formally to the IAEA board, satellite photos included, if the North Koreans continue to foot-drag in concluding the safeguard agreement.

The satellite photos show, the source said, that Pyongyang has set up a virtual replica of the 60-MW Calder Hall magnox reactor, Britain's first, which started up in 1956. The North Koreans, he said, appear to have built a reactor themselves based on the declassified design of Calder Hall. They also may have purified indigenously the graphite used as moderator block, but the uranium is assumed to be imported, the source said. The reactor started operating a year and a half ago, he said.

The reprocessing plant is observed to be under construction across a river in central North Korea.

Not surprisingly, the facilities have caused consternation across the border in South Korea, which tried to buy a reprocessing plant 10 years ago from France but was stymied by stiffening of French nonproliferation policy.

The Calder Hall reactor is still operating at British Nuclear Fuel's Windscale works, producing electricity and materials for the U.K. nuclear defense program.●

## STEEL USERS FOR VRA's

● Mr. ROCKEFELLER. Mr. President, there has been a lot of discussion in the press and elsewhere lately about the steel Voluntary Restraint Agreement Program. Extension of the program has been opposed by some steel consumers. Their complaints about the program have gotten considerable attention. What's not been reported is the growing numbers of steel users who support the VRA's. They realize a strong, healthy, competitive steel industry is good for steel users, the steel industry and for America.

To cite one major example, recently the board of directors of the Shipbuilders Council of America unanimously adopted a resolution to support the extension of VRA's for steel. I ask that a copy of the resolution be printed in the RECORD as well as a list of members of the council.

The Shipbuilders Council of America is the national trade association representing 94 percent of America's shipbuilders and ship repairers as well as manufacturers of marine equipment. These segments of the maritime industry are significant users of steel plate and structurals. As almost all of this steel is produced domestically, a healthy American steel industry is important to our shipbuilding and ship repair businesses.

Under the steel VRA Program, the American steel industry has made excellent progress toward its goal of retaining its competitiveness. Costs have been lowered sharply, labor productivity has been increased dramatically and production quality has been improved greatly. Despite this progress, much more remains to be done. Substantial new investment and modernization, on a sustained basis—approximately $2 to $3 billion per year—is needed if the steel industry is to maintain its competitiveness with leading foreign producers. After sustaining losses in excess of $12 billion between 1982 and 1986, the industry's financial gains of the past 18 months are not adequate to complete its comeback. In a world in which steel trade is dominated by foreign government intervention, failure to extend the VRA mechanism of dealing with unfairly traded steel imports will abort the industry's restructuring.

The Shipbuilder's Council is only the latest in an expanding list of steel-using manufacturers who support an extension of the VRA Program. Lee Iacocca, in a letter to U.S. Trade Representative Carla Hills urging that the VRA's be extended, praised the "American steel industry for its efforts to revive a devastated industry, one without which we (the Chrysler Corporation) would have great difficulty surviving ourselves". Maytag Corp., another large steel consumer, has stated that "the VRA Program has had minimal impact on prices and has not resulted in difficulties in obtaining steel * * *" Over 375 companies that are steel users echo those sentiments. These companies constitute a significant majority of American steel users.

These steel consumers have formed a coalition called Coalition for a Competitive America/Steel Users for VRA's. I had the pleasure of introducing the leaders of this group last week at a press conference here in the Capitol. With me were representatives of Chrysler, Milton Can Co., Valmont Industries, Crown Cork and Seal, Thompson Steel, Corey Steel, Jernberg Corp., and UNR-Leavitt.

The list of members illustrates the breadth and depth of this coalition. Companies all over the country have joined. In the discussion of the future of U.S. steel trade policy, it is important to remember that the needs of all steel consumers must be considered.

The material follows:

### SHIPBUILDERS COUNCIL OF AMERICA RESOLUTION

Whereas, the steel industry of the United States has been victimized by unfair international competition;

Whereas, that competition was driven by foreign government subsidy practices that distorted the international market;

Whereas, the United States Government, in order to combat those practices, established a Voluntary Restraint Arrangements on steel imports, allowing the steel industry to modernize its plant, retrain its work force and institute new management systems;

Whereas, the process of modernization has allowed the steel industry to improve its competitive position in the world market;

Whereas, the existence of state-supported aid has *not* been eradicated and the process of modernization has *not* been completed; Therefore, be it

*Resolved*, That the Shipbuilding Council of America supports the extension of the steel industry's Voluntary Restraint Arrangements unless, and until, international aid and support programs are terminated allowing for the unfettered functioning of a free and open international steel market.

### COALITION FOR A COMPETITIVE AMERICA/ STEEL USERS FOR VRA'S

#### REGULAR MEMBERS

ADDSCO Industries, Inc., Mobile, AL.
The American Ship Building Co., Tampa, FL.
Avondale Industries, Inc., New Orleans, LA.
Bath Iron Works Corp., Bath, ME.
Bethlehem Steel Corp., Marine Construction Group, Bethlehem, PA; Beaumont, TX; Sparrows Point, MD.
Capital Marine Corp., Chester, PA.
Continental Maritime Industries, Inc., San Francisco, CA.
General Dynamics Corp., Pierre Laclede Center, St. Louis, MO. Electric Boat Division, Groton, CT, and Quonset Point, RI.
General Ship Corp., East Boston, MA.
Ingalls Shipbuilding, Inc., Pascagoula, MS.
Intermarine U.S.A., Savannah, GA.
Jacksonville Shipyards, Inc., Jacksonville, FL.
The Jonathan Corp., Norfolk, VA.
Marine Hydraulics International, Inc., Norfolk, VA.
Marinette Marine Corp., Marinette, WI.
McDermott Corp., New Orleans, LA.
Metro Machine Corp., Norfolk, VA.
National Steel & Shipbuilding Co., San Diego, CA.
Newport News Shipbuilding, Newport News, VA.
Norfolk Shipbuilding & Drydock Corp., Norfolk, Va.
Northwest Marine Iron Works, Portland, OR.
Peterson Builders, Inc., Sturgeon Bay, WI.
Robert E. Derecktor of Rhode Island, Inc., Middletown, RI.
Southwest Marine, Inc., San Diego, CA.; San Francisco, CA.; San Pedro, CA.
Textron Marine Systems, New Orleans, LA.
Todd Shipyards, Corp., Seattle, WA.; Galveston, TX.; Los Angeles, CA.

#### ALLIED INDUSTRIES MEMBERS

Alcoa/Tre, Santa Ana, CA.
Bird-Johnson Co., Walpole, MA.
Centrico, Inc., Northvale, NJ.
Colt Industries, Inc., Washington, DC.
Combustion Engineering, Inc., Windsor, CT.
Dresser Pump Division, Dresser Industries, Inc., Harrison, NJ.
Eaton Corp., Cutler-Hammer Products, Baltimore, MD.
General Electric Co., Washington, DC.
Hopeman Brothers, Inc., Waynesboro, VA.
IMO Delaval, Inc., Lawrenceville, NJ.
Jamestown Metal Marine Sales, Inc., Boca Raton, FL.
Jered Brown Brothers, Inc., Troy, MI.
Lake Shore, Inc., Iron Mountain, MI.
Raytheon Service Co., Arlington, VA.
Sperry Marine, Inc., Charlottesville, VA.
SPD Technologies, Philadelphia, PA.
Westinghouse Electric Corp., Sunnyvale, CA.
York International Corp., York, PA.

#### AFFILIATE MEMBERS

The Bingham Group, Arlington, VA.
Colton & Co., Washington, DC.
PacOrd, Inc., National City, CA.
Peterson & Co., New York, NY.
Poten & Partners, Inc., New York, NY.
Seacoast Electric Supply Corp., Rye, NY.

NAVAL ARCHITECT MEMBERS

JJH Inc., Cherry Hill, NJ.

John J. McMullen Associates, Inc., New York, NY.

M. Rosenblatt & Son, Inc., New York, NY.

ASSOCIATION MEMBERS

New York and New Jersey Dry Dock Association, Brooklyn, NY.

South Tidewater Association of Ship Repairers, Inc., Chesapeake, Va.●

## FACILITATING ALUMNI INVOLVEMENT IN SCHOOLS

● Mr. SIMON. Mr. President, recently, I read an article by Marciene S. Mattleman in Education Week, about getting alumni of elementary and secondary schools involved in those schools.

We work on alumni in higher education, but we have not done the same in elementary and secondary education.

It is an unusual concept that ought to be spread. Miss Mattleman is a senior professor of education at Temple University and executive director of Philadelphia Futures.

I urge my colleagues in the Congress to read the article, which appeared in Education Week.

I ask that the article be printed in the RECORD.

The article follows:

[From Education Week, Mar. 1, 1989]

FACILITATING ALUMNI INVOLVEMENT IN SCHOOLS

(By Marciene S. Mattleman)

Major reports in this decade have made it eminently clear that the current generation of young people in this country differs substantially from previous generations. A much greater proportion of today's young face serious socioeconomic barriers that may hamper their successful completion of school.

Overcoming these barriers has rightfully been seen as a task not simply for educators but for the entire community. And in that spirit, philanthropic groups and individuals, such as the New York City industrialist Eugene M. Lang, have created incentive programs that help some of these so-called "at risk" young achieve their dreams of meaningful work and a good education.

In Philadelphia, a new program along these lines hopes to broaden the base of public involvement while increasing the number of students helped. It is called "Philadelphia Futures," and it seeks to tap a source of support that has long been a staple of the higher-education community school pride and nostalgia.

The central strategy of Philadelphia Futures, which operates as an independent, nonprofit clearinghouse, is to assist alumni of the city's schools—public and parochial—in providing support for students currently attending their alma maters. It also enlists the aid of other segments of the community, including corporate, religious, cultural, and governmental groups.

Other programs aimed at motivating students to stay in school, such as Mr. Lang's "I Have a Dream" Foundation, now operating in 24 cities, yield great and praiseworthy benefits for the students they serve. But, as critics have noted, the generous spirit behind them often operates like a lottery, dispensing good fortune unequally among classes within a selected school or even among siblings.

Philadelphia's program recognizes that, to reach the vast majority of those in need, intervention must be broader. It must go beyond the mere provision of fiscal resources, finding creative ways to channel the energies and concerns of average citizens.

Philadelphia Futures is working to open up more options for the city's young by, first, connecting them to resources already available and then, creating new sources of support from people who may never before have been asked to lend a helping hand: the schools' alumni.

Though higher education has traditionally depended on alumni involvement, such support has not been widely sought below the college level. The psychological basis for this kind of appeal is the premise—corroborated by sociologists—that as our society becomes more mobile, we seek our roots; we grow more nostalgic. Programs like Philadelphia Futures can turn that nostalgia into positive action.

The project's method is information and referral. Using media outreach and promotion, it facilitates access for those who wish to volunteer as tutors, mentors, or role models, or who want to create incentives such as prizes and scholarships encouraging students to remain in school. Through a control telephone number, the program links those willing to intervene with those in need.

An advisory group of state and local leaders—including Mayor W. Wilson Goode, Pennsylvania's secretary of education, Thomas Gilhood, and the superintendents of Philadelphia's public and parochial schools—has provided the visability needed to raise funding for start-up operations.

Since the project was officially launched in January, several promising initiatives have taken shape. They suggest the range of support activities such programs can provide:

Twenty mentors and tutors have been placed with schools and community-based organizations. These volunteers range from a newspaper reporter to a corporate lawyer. The program also is providing role models through career days in schools.

In each of these activities, Philadelphia Futures is fulfilling its role as a broker in servicing existing programs.

Ten alumni have pledged to provide financial aid for college to individual students from their high schools. Two committees have been formed to work with donors on such matters as the criteria for and selection of recipients.

Fifteen other graduates have established small prizes in their favorite subjects and grade levels. These awards—which may take the form of cash, subscriptions to magazines, or cultural-center memberships—are a way of recognizing current students for outstanding achievement or effort.

In response to queries about the cost of such involvement, the staff suggests that $250 in the bank will assure a $25 prize for a number of years.

A scholarship directory developed by the program was published by the *Philadelphia Daily News* in February. Two local businesses have paid for 40,000 copies—to be distributed to high-school juniors and seniors throughout the city, as well as to community-based organizations and churches.

The purpose of this project is not only to encourage other donors, but to ensure that existing scholarships are used. Millions of dollars in private college-aid money are overlooked nationally each year.

Another newspaper publication, a comprehensive directory of local incentive programs, is in preparation. No such compilation currently exists.

The guide will include listings of summer activities, stipends, contests, and other programs that have become part of the public agenda of corporations, libraries, civic organizations, and private schools. This effort is intended both to improve accessibility to these opportunities and promote them as exemplars.

Several area colleges have developed plans for further involvement with high schools. One university is organizing a summer computer camp; others are planning orientation programs to entice students into the sciences.

Through such programs, colleges can raise the expectations of disadvantaged students while introducing them to their own institutions in the hope of later recruitment.

A weekly hotline for college financial-aid information will soon be giving parents and other citizens a chance to talk informally with a college-admissions financial counselor. A local bank—PSFS—has funded the service, and college-based personnel are being asked to volunteer on a rotating basis.

And a group of college-admissions officers, along with recently graduated Philadelphia high-school alumni, will soon begin visiting local schools. Informal panel discussions will be aimed at creating among students a sense of expectation and greater motivation to further their schooling.

None of these initiatives is easily achieved; each takes networking, meetings, agreements, and flexibility. Each also requires staffing—and for a low-budget enterprise, that means office volunteers are needed.

But the alternative is to throw up our hands and label the problems of today's young people "someone else's business."●

## NATIONAL DIGESTIVE DISEASE AWARENESS MONTH

Mr. DIXON. Mr. President, I ask unanimous consent that the Judiciary Committee be discharged from further consideration of House Joint Resolution 170, a joint resolution to designate May 1989 as "National Digestive Disease Awareness Month," and that the Senate proceed to its immediate consideration.

The PRESIDING OFFICER. The joint resolution will be stated by title.

The legislative clerk read as follows:

A joint resolution (H.J Res. 170) designating May 1989 as "National Digestive Disease Awareness Month."

The PRESIDING OFFICER. Is there objection to the present consideration of the joint resolution?

There being no objection, the Senate proceeded to consider the joint resolution.

The joint resolution was ordered to a third reading, was read the third time, and passed.

The preamble was agreed to.

Mr. DIXON. Mr. President, I move to reconsider the vote by which the joint resolution was passed.

Mr. LUGAR. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

## MEASURE PLACED ON CALENDAR—SENATE JOINT RESOLUTION 135

Mr. DIXON. Mr. President, on behalf of Senators PELL, KASSEBAUM, and GORE, I ask unanimous consent that Senate Joint Resolution 135, a joint resolution to establish a National Commission on Human Resources Development, introduced earlier today, be placed on the calendar.

The PRESIDING OFFICER. Without objection, it is so ordered.

## ORDER FOR STAR PRINT—SENATE RESOLUTION 119

Mr. LUGAR. Mr. President, I ask unanimous consent that Senate Resolution 119 be star printed to reflect the following changes, which I send to the desk on behalf of Senator WILSON.

The PRESIDING OFFICER. Without objection, it is so ordered.

## ORDERS FOR WEDNESDAY

### ORDER OF PROCEDURE

Mr. DIXON. Mr. President, I ask unanimous consent that the majority leader, after consultation with the minority leader, may at any time turn to the consideration of either the conference report on the budget, House Congressional Resolution 106, or the supplemental appropriations bill expected to arrive from the House later this week.

The PRESIDING OFFICER. Without objection it is so ordered.

### ORDER FOR RECESS

### MORNING BUSINESS

Mr. DIXON. Mr. President, I ask unanimous consent that when the Senate completes its business today, it stand in recess until 1 p.m., Wednesday, May 17, and that following the time for the two leaders, there be a period for morning business not to extend beyond 2 p.m., with Senators permitted to speak therein for up to 5 minutes each.

The PRESIDING OFFICER. Without objection it is so ordered.

## PROGRAM

Mr. DIXON. Mr. President, for the information of Senators, on tomorrow, the Senate will turn to the conference report on the minimum wage bill, H.R. 2, at 2 p.m. under a time limitation of 2½ hours. Under the unanimous-consent agreement, a vote on the conference report will occur not later than 4:30 p.m. tomorrow.

## RECESS UNTIL 1 P.M. TOMORROW

Mr. DIXON. Mr. President, if the distinguished acting Republican leader has no further business and if no Senator is seeking recognition, I now ask unanimous consent that the Senate stand in recess under the previous order until 1 p.m., Wednesday, May 17, 1989.

Mr. LUGAR. We have no further business.

There being no objection, the Senate, at 7:39 p.m., recessed until Wednesday, May 17, 1989, at 1 p.m.

## NOMINATION

Executive nomination received by the Secretary of the Senate after the recess of the Senate on May 12, 1989, under authority of the order of the Senate of January 3, 1989:

### NATIONAL LABOR RELATIONS BOARD

JERRY M. HUNTER, OF MISSOURI, TO BE GENERAL COUNSEL OF THE NATIONAL LABOR RELATIONS BOARD FOR A TERM OF 4 YEARS, VICE ROSEMARY M. COLLYER, TERM EXPIRED.

## NOMINATIONS

Executive nominations received by the Senate May 16, 1989:

### DEPARTMENT OF JUSTICE

JAMES FRANKLIN RILL, OF MARYLAND, TO BE AN ASSISTANT ATTORNEY GENERAL, VICE CHARLES F. RULE, RESIGNED.

E. BART DANIEL, OF SOUTH CAROLINA, TO BE UNITED STATES ATTORNEY FOR THE DISTRICT OF SOUTH CAROLINA FOR THE TERM OF 4 YEARS, VICE VINTON DEVANE LIDE, RESIGNED.

### DEPARTMENT OF LABOR

ROBERT P. DAVIS, OF VIRGINIA, TO BE SOLICITOR FOR THE DEPARTMENT OF LABOR, VICE GEORGE R. SALEM, RESIGNED.

### DEPARTMENT OF EDUCATION

NELL CARNEY, OF VIRGINIA, TO BE COMMISSIONER OF THE REHABILITATION SERVICES ADMINISTRATION, VICE SUSAN S. SUTER, RESIGNED.

### DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

JOHN C. WEICHER, OF THE DISTRICT OF COLUMBIA, TO BE AN ASSISTANT SECRETARY OF HOUSING AND URBAN DEVELOPMENT, VICE KENNETH J. BEIRNE, RESIGNED.

### DEPARTMENT OF COMMERCE

JOHN MICHAEL FARREN, OF CONNECTICUT, TO BE UNDER SECRETARY OF COMMERCE FOR INTERNATIONAL TRADE, VICE W. ALLEN MOORE, RESIGNED.

### IN THE AIR FORCE

THE FOLLOWING CADET, U.S. AIR FORCE ACADEMY, FOR APPOINTMENT AS A SECOND LIEUTENANT IN THE REGULAR AIR FORCE, UNDER THE PROVISIONS OF SECTIONS 9353(B) AND 531, TITLE 10, UNITED STATES CODE, WITH DATE OF RANK TO BE DETERMINED BY THE SECRETARY OF THE AIR FORCE.

ROBERT J. FRINK, xxx-xx-xxxx

THE FOLLOWING-NAMED OFFICERS FOR PERMANENT PROMOTION IN THE U.S. AIR FORCE, UNDER THE PROVISIONS OF SECTION 628, TITLE 10, UNITED STATES CODE, AS AMENDED, WITH DATES OF RANK TO BE DETERMINED BY THE SECRETARY OF THE AIR FORCE.

### CHAPLAIN

*To be major*

GREG W. CARLSON, xxx-xx-xxxx
ROBERT E. CRUTHIRDS, xxx-xx-xxxx
RICHARD G. ELLIOTT, JR., xxx-xx-xxxx
STEPHEN L. FRICK, xxx-xx-xxxx
CHARLES R. ROWLAND III, xxx-xx-xxxx
JOHN S. SANDERS, xxx-xx-xxxx

THE FOLLOWING OFFICER FOR APPOINTMENT IN THE REGULAR AIR FORCE UNDER THE PROVISIONS OF SECTION 531, TITLE 10, UNITED STATES CODE, WITH A VIEW TO DESIGNATION UNDER THE PROVISIONS OF SECTION 8067, TITLE 10, UNITED STATES CODE, TO PERFORM THE DUTIES INDICATED, PROVIDED THAT IN NO CASE SHALL THE FOLLOWING OFFICER BE APPOINTED IN A GRADE HIGHER THAN MAJOR.

### CHAPLAIN

ROBERT E. CRUTHIRDS, xxx-xx-xxxx

### IN THE MARINE CORPS

THE FOLLOWING NAMED OFFICERS OF THE MARINE CORPS FOR PERMANENT APPOINTMENT TO THE GRADE OF MAJOR UNDER TITLE 10, UNITED STATES CODE, SECTION 624:

ACKER, WILLIAM E., xx...
ACKERMAN, RAYMOND F., xx...
ADAMS, BENNY L., xx...
ADAMS, JAMES R., xx...
ALBO, MICHAEL C., xx...
ALDRICH, JAMES V., xx...
ALLEN, BERNAL B., JR., xx...
ALLEN, GEORGE J., xx...
ALTMAN, CHARLES B., xx...
AMMERMAN, LARRY D., xx...
AMYX, TERRY D., xx...
ANAL, JAMES G., xx...
ARBOGAST, STEVEN M., xx...
ASPEN, KRISTIAN O., xx...
ATHENS, ARTHUR J., xx...
BAILEY, JOSEPH A., xx...
BAILEY, RONALD L., xx...
BAKER, JAMES P., xx...
BAKER, JOHN J., JR., xx...
BAKER, ROBERT G., xx...
BANN, PETER L., xx...
BARBER, DAVID R., xx...
BARILE, DAVID J., xx...
BARND, DANIEL J., xx...
BARRERA, JOHN T., xx...
BARTON, LORNA M., xx...
BATY, ROGER L., xx...
BEDWORTH, DAVID, xx...
BELL, RUSSELL H., xx...
BENNETT, DREW A., xx...
BENNETT, RONALD R., xx...
BENSON, TIMOTHY P., xx...
BERGMAN, INGRID E., xx...
BERRIER, MICHAEL R., xx...
BIXLER, DAVID B., xx...
BIZZELL, BARRY B., xx...
BLEWIS, ROBERT J., xx...
BLUM, JOHN A., xx...
BOLITHO, KIM D., xx...
BOLLES, ELLIOT F., xx...
BOULET, JAMES L., xx...
BOWDEN, JAMES C., xx...
BOYD, DENNIS, G., xx...
BRADY, ROBERT M., xx...
BREAKFIELD, WAYNE E., xx...
BREAULT, CHRISTIAN G., xx...
BREDEN, WILLIAM O., xx...
BRINKMAN, JAMES L., xx...
BRISTOL, PATRICK M., xx...
BROWN, ROBERT L., JR., xx...
BROWN, WILLIAM N., JR., xx...
BROWN, WILLIE J., xx...
BRUSH, DANNY L., xx...
BUCHER, STEPHEN A., xx...
BUMGARDNER, SHERROD L., JR., xx...
BUNNING, KENNETH R., xx...
BURKE, DONALD E., JR., xx...
BURNETT, ROBERT M., xx...
CALLEROS, SALVADOR J., xx...
CALLIHAN, WILLIAM M., xx...
CARDOZA, ANTHONY A., xx...
CARTER, TANDY P., xx...
CATLIN, BRIAN D., xx...
CAVANAUGH, THOMAS E., xx...
CHRISTBURG, CHARLES A., JR., xx...
CHRISTIE, RICHARD A., xx...
CLARK, CARL F., xx...
CLEVELAND, WILLIAM R., xx...
CLINE, BOBBY J., xx...
COBURN, ROBERT A., xx...
COMBS, MICHAEL L., xx...
COMER, DOSIE O., xx...
CONE, WALTER A., xx...
COOKE, JOSEPH M., xx...
CORBETT, ARTHUR J., xx...
CORBETT, THOMAS M., xx...
CORBIN, PAUL T., xx...
CORCORAN, MICHAEL A., xx...
CREAMER, CRAIG W., xx...
CROISETIERE, PAUL, xx...
CRONIN, ROBERT B., xx...
CRONIN, ROBERT F., xx...
CRONIN, WILLIAM R., xx...
CROOK, ALAN C., xx...
CRUSH, RICHARD J., xx...
CUNNINGHAM, WALTER D., xx...
CURRY, JAMES V., xx...
CUSHING, DANIEL E., xx...
CVRK, CHARLES C., xx...
DALLAS, GEORGE M., xx...
DAMBRA, CRAIG W., xx...
DAMM, DAVID C., xx...
DANCHAK, RICHARD, xx...
DANIELS, EUGENE T., JR., xx...
DAVIDS, RAYMOND M., xx...
DAVIS, BILLY H., xx...
DAVIS, CLETIS R., xx...
DAVIS, DIANNE S., xx...
DAVIS, EDWARD V., JR., xx...

DEMEYERE, RUSSELL A., XX...
DEWEESE, JEFFREY L., XX...
DEWEY, HENRY C., III, XX...
DLUZNESKI, PAUL K., XX...
DODD, STEPHEN P., XX...
DODSON, RONALD G., JR., XX...
DONIGAN, HENRY, J., III, XX...
DOUGHERTY, CHRISTOPHER E., XX...
DOYLE, JOSEPH G., XX...
DRURY, JOEL A., XX...
DUDA, JOHN S., XX...
DUDEN, JO L., XX...
DULING, THOMAS M., XX...
DUNKIN, JOHN S., XX...
DUNLAP, RICHARD C., XX...
DUNNUM, KENNETH L., XX...
DUNPHY, JAMES D., XX...
EDELEN, RUSSELL M., XX...
EDWARDS, DONALD P., XX...
EDWARDSON, DALE R., XX...
EISENMANN, GARY A., XX...
ESTRIN, JOEL S., XX...
FAY, MATTHEW E., XX...
FEBUARY, WILLIAM S., XX...
FIEDER, EDWIN, E., XX...
FINLEY, DANIEL M., XX...
FIROVED, KENNETH N., XX...
FISHER, MARC W., XX...
FLEMING, RICHARD A., III, XX...
FLORES, RICHARD A., XX...
FLORYSHAK, DANIEL M., XX...
FLOYD, MOSE L., XX...
FOLEY, SYLVESTER R., III, XX...
FONDAW JEFFREY E., XX...
FORAND, STEPHEN L., XX...
FORDE, MARY L., XX...
FRANCIS, DAVID C., XX...
FUSCA, VINCENT J., XX...
GABLE, LAWRENCE R., XX...
GAILLARD, JOHN D., XX...
GANDY, BRUCE A., XX...
GARDINER, KENNETH P., XX...
GARDNER, ROBERT J., XX...
GARRETT, GEORGE P., XX...
GARRETT, LESLIE E., XX...
GAVIN, JOHN C., XXX...
GEIGER, BRADLEY K., XX...
GENSIC, ANTHONY W., XX...
GERARDI, WILLIAM P., JR., XX...
GERENCSER, LADISLAUS P., XX...
GIBESON, NOEL D., XX...
GLEASON, PHILLIP B., XX...
GORDON, MICHAEL S., XX...
GRAFF, JOSEPH W., XX...
GRAGAN, DAVID P., XX...
GRAHAM, ROBERT B., XX...
GREGORY, MICHAEL L., XXX-...
GREGORY, THOMAS E., XX...
GRISIER, DARCY E., II, XX...
GROTZKY, CRAIG L., XX...
GUDDECK, WILLIAM J., XX...
GUILMAIN, RODNEY A., XX...
GUMBEL, JOHN D., XX...
HAAG, DENNIS N., XX...
HABBESTAD, GORDON B., XX...
HABEL, JOHN X., XX...
HAMIL, DAVID C., XX...
HAMLIN, WILLIAM A., XX...
HAMM, WALTER B., XX...
HANIFEN, TIMOTHY C., XX...
HANKS, THOMAS L., XX...
HANSON, JAMES A., XX...
HARDY, WILLIAM E., XX...
HARRIS, THOMAS R., XX...
HASLAM, ANTHONY M., XX...
HASTINGS, THOMAS M., XX...
HAYES, MARK L., XX...
HELLAR, ROBERT E., XX...
HENDRICKSON, ALAN G., XX...
HENLEY, JOHN D., XX...
HENRY, DAVID K., XX...
HIBBERT, RICHARD E., XX...
HILDEBRAND, DONALD H., JR., XX...
HILL, JAMES J., JR., XX...
HILL, RANDOLPH L., XX...
HOEY, KEVIN A., XX...
HOLDORF, WILLIAM E., XX...
HOLM, RANDALL W., XX...
HOLT, JOSEPH P., XX...
HORNE, RONALD O., XX...
HOSTETTER, MARY L., XX...
HOWARD, TIMOTHY B., XX...
HOWE, ROSE M., XX...
HUCKO, CHRISTOPHER, XX...
HUDSON FRED S., JR., XX...
HUNTER, ROBERT D., XX...
INHOFF, KENNETH G., XX...
INSERRA, GLEN A., XX...
ISLEIB, DOUGLAS R., XX...
JACOBSON, LAURIE G., XX...
JAVOROSKI, WILLIAM, XX...
JEFFCOAT, MICHAEL L., XX...
JOHNSON, DANIEL P., XX...
JOHNSON, GARY W., XX...
JOHNSON, MARK W., XX...
JOHNSON, MICHAEL K., XX...
JOHNSON, PRESTON B., XX...
JONES, CHARLES A., XX...
JONES, KEVIN L., XX...
JONES, ROBERT F., XX...
JORDAN, STEVEN H., XX...
JOSSERAND, JEFFERY J., XX...
KALLELIS, BERNARD F., XX...
KANE, COLEMAN J., XX...
KARLS, DANIEL L., XX...
KARWOWSKI, RICHARD A., XX...
KASSAB, TERRANCE L., XX...
KATZ, ELLIOT S., XX...
KAVANAUGH, STEPHEN J., XX...
KEADLE, JAMES R., XX...
KEARNS, DARIEN L., XX...
KELLEY, DAVIDE A., XX...
KIDD, DANIEL W., XX...
KING, ALLEN W., XX...
KINNERUP, JAMES J., III, XX...
KLATT, EMIL H., III, XX...
KLEPAC, ERIC L., XX...
KLIPPERT, BERNIE C., XX...
KNIGHT, DARRYL E., XX...
KNIGHT, LESTER H., XX...
KNOTTS, KENNETH J., JR., XX...
KOCOUREK, MARK A., XX...
KOLANO, EDWARD P., XX...
KOLB, TIMOTHY J., XX...
KOLEOS, DANIEL J., XX...
KOOISTRA, ARTHUR R., XX...
KOONTZ, THOMAS F., XX...
KRATZER, DALE L., JR., XX...
KURTZHALTS, MARK W., XX...
KVIGNE, KELLY W., XX...
LABOUBE, THOMAS D., XX...
LALUNTAS, NANCY J., XX...
LAMONT, ROBERT W., XX...
LANDRUM, GLENN E., XX...
LANE, LAWRENCE B., XX...
LARKIN, EDWARD L., III, XX...
LASHLEE, SCOTT R., XX...
LEBRESCU, RHONDA G., XX...
LEDFORD, LEE A., XX...
LEE, RAYMOND T., III, XX...
LEE, SHELTON, JR., XX...
LEE, WILLIAM K., XX...
LEER, COLLEEN M., XX...
LEEVY, JOHN C. XX...
LINDBOE, DONALD T., XX...
LOBB, MICHAEL J., XX...
LOCKETT, KEITH V., XX...
LONGCOY, LAWRENCE W., XX...
LOVE, ROBERT E., XX...
LOVEJOY, JAMES D., JR., XX...
LUCENTA, WILLIAM, XX...
LYONS, GERARD J., XX...
MAHAFFEY, MARK D., XX...
MAHANY, ROY J., XX...
MAHONEY, JOHN L., XX...
MAMZIC, CURTIS E., XX...
MANION, STEPHEN P., XX...
MARAFINO, ANDREW, JR., XX...
MARLETTO, MICHAEL P., XX...
MARR, JERRY D., XX...
MARTIN, STEVEN J., XX...
MARTINEZ, ADOLFO, XX...
MASCARENAS, MICHAEL M., XX...
MASON, THOMAS A., XX...
MATHERN, DANIEL P., XX...
MAYO, COLIN F., XX...
MCBRIDE, LANCE R., XX...
MCBRIDE, MICHAEL E., XX...
MCCABE, KEVIN H., XX...
MCCULLOCH, WILLIAM F., II, XX...
MCENROE, LAWRENCE J., JR., XX...
MCFARLAND, RONNEL R., XX...
MCGRATH, KURTIS J., XX...
MCGUIRE, TERRANCE B., XX...
MCKNIGHT, JOHN E., III, XX...
MCLAWHORN, DAVID W., XX...
MCLEAN, JOHN E., II, XX...
MCMILLAN, BRIAN L., XX...
MERRIAM, BRET C., XX...
MEURER, DANIEL J., XX...
MIKOLAJCZAK, FRANK E., XX...
MILES, WILLIAM J., XX...
MILLARD, DEAN A., XX...
MILLER, NORMAN G., JR., XX...
MILLER, THOMAS D., XX...
MITCHELL, CHARLES F., XX...
MITCHELL, J. S., XX...
MOCK, THOMAS E., XX...
MOHR, MITCHELL A., XX...
MOORE, TIMOTHY E., XX...
MORRIS, PHILLIP D., XX...
MOSELEY, CHARLES T., XX...
MOSES, VERNON J., XX...
MOTZ, DWIGHT R., XX...
MUEGGE, RICHARD A., XX...
MULVIHIL, PAUL J., XX...
MUNLEY, KEVIN C., XX...
MYERS, DAVID M., XX...
NAPERKOWSKI, JOHN K., XX...
NEDDERSEN, STEVE A., XX...
NELSON, JAMES L., JR., XX...
NELSON, LAURENCE H., XX...
NEWLAND, KEVIN J., XX...
NORTHAM, STEVEN W., XX...
NORTHING, JAMES H., XX...
OKEEFE, KEVIN P., XX...
OLMSTEAD, STEPHEN G., JR., XX...
ONEIL, BERNARD E., XX...
OSTROM, JOHN E., XX...
OTTO, STEPHEN W., XX...
OURSO, FREDERICK J., JR., XX...
PANGBURN, CHARLES H., III, XX...
PASCO, JONATHAN T., XX...
PEECOOK, MARK S., XX...
PELLISH, RICHARD B., XX...
PENCZAK, GREGORY J., XX...
PERRY, STEVEN E., XX...
PETERS, DANIEL G., XX...
PETERSON, DAVID D., XX...
PHILLIPS, ROY E., XX...
PIANTINO, PRESTON E., XX...
POLLOCK, JOHN B., XX...
POMEROY, STEPHEN M., XX...
PONTANI, VINCENT, JR., XX...
POWELL, GARY B., XX...
POWERS, THOMAS E., XX...
PRICE, LARRY L., XX...
PTAKOWSKI, JOHN C., XX...
QUINLAN, MICHAEL W., XX...
RAFTERY, RICHARD J., XX...
RALPH, MICHAEL P., XX...
PANOWSKY, GEORGE F., II, XX...
RATHGEBER, DAVID G., XX...
RAY, DANNY D., XX...
RAY, JONATHAN S., XX...
READ, RALPH K., XX...
REBMAN, MICHAEL J., XX...
REECE, RICK L., XX...
REED, JOHN M., XX...
REED, RICHARD M., XX...
REEDER, THOMAS A., XX...
REEVES, DAVID E., XX...
REINHART, JOSEPH N., III, XX...
REMPHER, AARON L., XX...
RICHMOND, MARCUS E., XX...
RILEY, VICTOR J., III, XX...
RODRIGUEZ, STEVEN, XX...
ROSS, JAMES G., XX...
ROWAN, JAMES R., XX...
RYAN, JAMES T., XX...
SALTER, DAVID J., XX...
SAMSON, RUSSELL W., XX...
SANDERS, MIKE W., XX...
SANDLIN, PAUL M., XX...
SAPP, VERNON T., III, XX...
SASSER, JAMES L., XX...
SAVARESE, MARK R., XX...
SAWYERS, WILLIAM A., XX...
SCHARFEN, JONATHAN R., XX...
SCHNEIDER, LOUIS G., XX...
SCHOEPFLIN, HAROLD E., XX...
SCHOOLFIELD, DONALD J., XX...
SCHRADER, ERNEST L., JR., XX...
SCHUSTER, DANIEL J., XX...
SCHWARTZ, RAYMOND E., III, XX...
SCOTT, JOHN F., XX...
SECREST, LLOYD D., XX...
SEIFERT, DANIEL R., XX...
SESSIS, STEVE M., XX...
SHARP, JOHN C., XX...
SHARP, WALTER G., XX...
SHAW, GARY P., XX...
SHELTON, DAVID L., XX...
SHOULTS, EUGENE E., JR., XX...
SHUMWAY, STANLEY G., XX...
SHUSKO, JOSEPH C., XX...
SHUTT, DAVID H., XX...
SIDERS, RANDY S., XX...
SIMPSON, ROCKY D., XX...
SLOGIC, FRANK W., XX...
SMITH, COLBY B., XX...
SMITH, GARY W., XX...
SMITH, NICHOLAS J., XX...
SMITHBERG, FRED M., XX...
SNYDER, WILLIAM R., XX...
SPILLERS, KEVIN P., XX...
SPROUL, ALAN C., XX...
SPURGEON, DONOVAN J., XX...
STEELE, MICHAEL L., XX...
STEPHENS, KENNON Q., XX...
STONE, SHIMON, XX...
STREET, ROBERT S., XX...
STRINGER, WILLIAM F., XX...
SUBLETT, STEPHEN W., XX...
SUMMERS, PATRICIA A., XX...
SWEPSTON, JERRY W., XX...
TAKEHARA, MARK R., XX...
TARBUTTON, WILLIAM R., XX...
TARPEY, DANIEL F., JR., XX...
TART, WALLACE L., JR., XX...
TAYLOR, JAMES F., JR., XX...
TAYLOR, ROBERT W., XX...
TEXIDOR, JOSE L., JR., XX...
THALHOFER, PAUL T., XX...
THOMAS, JOHN A., XX...
THOMAS, SCOTT R., XX...
THOMAS, THOMAS W., II, XX...
THOMPSON, MARK I., XX...
THOMPSON, RONALD S., XX...
THOMPSON, STEVEN J., XX...
THOMSEN, DANIEL C., XX...
THORN, PATRICIA S., XX...
TIBBITS, KEITH A., JR., XX...
TILLOTSON, JOSEPH, JR., XX...
TOBIASSEN, DAVID S., XX...
TOMLINSON, PAUL L., XX...
TOMON, ROBERT F., XX...
TONNACLIFF, BRIAN L., XX...
TRESSLER, TIMOTHY, M., XX...
TROTT, RICHARD W., XX...
TULLY, ROBERT S., XX...
UPTON, STEPHEN C., XX...
VALORE, JOSEPH P., JR., XX...
VANDENBOUT, PHILIP, A., XX...
VANDYKE, ANTHONY E., XX...

VANPEURSEM, DENISE R., xx...
VEST, WENDELL N., JR., xx...
WALKER, CARL L., xx...
WALKER, RAYMOND L., xx...
WALLEN, CRAIG L., xx...
WALLENBURN, DAVID L., xx...
WALLS, DAVID W., xx...
WALSH, CHARLES J., xx...
WALSH, FRANK E., xx...
WALSH, RORY J., xx...
WAMPLER, TERRY L., xx...
WARNER, JAMES S., xx...
WASHINGTON, CLIFTON E., xx...
WASIELEWSKI, MARTIN J., xx...
WATSON, DAMON T., xx...
WEBB, BILLY P., JR., xx...
WEBER, ERIC C., xx...
WELDON, CHRISTOPHER M., xx...
WENTWORTH, CHARLES W., JR., xx...
WESTERN, THOMAS F., xx...
WESTMEYER, REX L., xx...
WHEELER, CHARLES G., JR., xx...
WHITE, JOHN C., JR., xx...
WIENERS, ROBERT B., xx...
WILLIAMS, DAVID T., xx...
WILLIAMS, DOUGLAS G., xx...
WILLIAMS, JOHN D., xx...
WILLIAMS, WILLIAM J., xx...
WILLS, PATRICK E., xx...
WILSON, DAVID C., xx...
WINGARD, JOSEPH R., xx...
WINSTON, DAVID P., xx...
WINTERS, FREDERICK, xx...
WISSLER, JOHN E., xx...
WITTLE, STEPHEN B., xx...
WOMACK, GUY L., xx...
WOODARD, BRUCE R., xx...
WOODS, CARL J., xx...
YANKOV, JORDAN D., xx...
YODER, RICHARD W., xx...
ZARTMAN, JAMES D., xx...