The militants do not lack for leadership. At most campuses, the revolutionaries are led by SDS—Students for a Democratic Society. What a travesty upon semantics is here! A "democratic" society is the last ambition of these totalitarian gangs. They cannot be distinguished from the booted student Nazis of Adolf Hitler's day.

The problem lies rather in the absence of leadership among the law-abiding students, professors, administrators, alumni, and public officials. What in the world is wrong with them? Are they gutless? Afraid? Apathetic? It is absurd to suppose that the 99 percent of the students who want a peaceful education are incapable of dealing with the one percent whose purpose is deliberate disruption.

But it ought not to be the responsibility of the nonviolent students to protect their rights with fists and clubs. Such protection is the duty—the primary duty—of the presidents, trustees, and the established agencies of law enforcement.

When do they stop playing pat-a-cake? It ought not to be a matter of great difficulty to obtain TV tapes and motion picture film of the terrorist groups. Such evidence, one assumes, would establish actions and identities beyond a reasonable doubt.

If the violent demonstrators turn out to be students, the course ought to be clear: Expel them. If they are nonstudents, the course is equally clear: Arrest them; take them to court; prosecute to the limit of the law. This same clear-headed policy should be applied to those professors who aid and abet the violence: Fire them. Fire them out of hand, and turn a deaf ear to blubberings of "tenure" and "academic freedom."

Timid voices may be heard to say that such an approach would "destroy a university." Nonsense! It is only in this fashion that a true academic community may be preserved. Let the motto be carved in stone: The essence of freedom is order. Discipline is the foundation of learning. Without order, without discipline, the educative process falls to the level of children's games.

A number of university administrators understand these elementary truths. At Notre Dame, the Rev. Theodore M. Hesburgh has issued a notice that rings of his determination to act decisively against violent disturbance. Any student or professor who seizes a building at Notre Dame will be given 15 minutes "of meditation to cease and desist." Those who pursue their criminal course will then be suspended, expelled, or arrested. Thereafter, "the law will deal with them."

This is the only approach to be taken now. There is, of course, a companion effort that has to be exerted also—to anticipate trouble, to remedy valid grievances, to maintain clear channels for the effective handling of requests and complaints. It is merely common sense to pursue policies of fire prevention. But the greater need at the moment is simply for the restoration of order; and this cannot be accomplished by "negotiating" with young extortionists.

HOUSE OF REPRESENTATIVES—*Wednesday, February 26, 1969*

The House met at 12 o'clock noon.

The Chaplain, Rev. Edward G. Latch, D.D., offered the following prayer:

He who is of God hears the words of God.—John 8: 47.

O God, whose strength supports us in our labor and whose spirit sustains us in our work, give us a new and a fresh realization of Thy presence as we wait upon Thee in prayer. Grant unto us patience when we demand too much too soon and decisions do not go our way; courage in the face of apparent defeat that we may still believe in the ultimate victory of the good for the good of all; and love when we falter in fear and fail in faithfulness that we may have the steady assurance that Thou art with us loving us unto the very end and strengthening us for every noble endeavor.

Deliver our Nation from the spirit of discord and disunity and lead us in the paths of peace and prosperity, for Thy name's sake. Amen.

THE JOURNAL

The Journal of the proceedings of yesterday was read and approved.

MESSAGE FROM THE SENATE

A message from the Senate by Mr. Arrington, one of its clerks, announced that the Senate agrees to the amendments of the House to a bill of the Senate of the following title:

S. 17. An act to amend the Communications Satellite Act of 1962 with respect to the election of the board of the Communications Satellite Corp.

The message also announced that the Vice President, pursuant to Public Law 86–417, appointed Mr. HRUSKA as a member of the James Madison Memorial Commission in lieu of Mr. Carlson, retired.

The message also announced that the Vice President, pursuant to Public Law 89–81, appointed Mr. MURPHY to the Joint Commission on the Coinage in lieu of Mr. Kuchel, retired.

APPOINTMENT AS MEMBERS OF U.S. DELEGATION OF CANADA-UNITED STATES INTERPARLIAMENTARY GROUP

The SPEAKER. Pursuant to the provisions of section 1, Public Law 86–42, the Chair appoints as members of the U.S. delegation of the Canada-United States Interparliamentary Group the following Members on the part of the House: Mr. GALLAGHER, Chairman; Mr. MURPHY of Illinois, Mr. JOHNSON of California, Mr. ST GERMAIN, Mr. KEE, Mr. SLACK, Mr. RANDALL, Mr. ANDREWS of North Dakota, Mr. STAFFORD, Mr. THOMSON of Wisconsin, Mr. BROOMFIELD, and Mr. LANGEN.

CIVIL DISOBEDIENCE: DESTROYER OF DEMOCRACY

(Mr. ASPINALL asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. ASPINALL. Mr. Speaker, each passing day seems to bring us new reminders that there are serious problems facing our Nation, the solutions to which cannot be put off much longer. We have not lacked for theories on cause and effect and each proponent of a solution seems to have his dissenter. Too often that dissent, instead of adding to constructive dialog, has magnified the problem by generating civil disobedience. Why should the right of dissent—a heritage of our democratic system—become a part of the problem? There is strong evidence that some basic values of our democratic way of life have been obscured, if not subverted. One of the most thought-provoking discussions of dissent and civil disobedience that I have read in some time is the subject of an article written by Lewis H. Van Dusen, Jr., 1968 chancellor of the Philadelphia Bar Association and published in the February issue of the American Bar Association Journal.

I earnestly recommend this article to my colleagues, as follows:

CIVIL DISOBEDIENCE: DESTROYER OF DEMOCRACY

(By Lewis H. Van Dusen, Jr.)

As Charles E. Wyzanski, Chief Judge of the United States District Court in Boston, wrote in the February, 1968, *Atlantic:* "Disobedience is a long step from dissent. Civil disobedience involves a deliberate and punishable breach of legal duty." Protesters might prefer a different definition. They would rather say that civil disobedience is the peaceable resistance of conscience.

The philosophy of civil disobedience was not developed in our American democracy, but in the very first democracy of Athens. It was expressed by the poet Sophocles and the philosopher Socrates. In Sophocle's tragedy, Antigone chose to obey her conscience and violate the state edict against providing burial for her brother, who had been decreed a traitor. When the dictator Creon found out that Antigone had buried her fallen brother, he confronted her and reminded her that there was a mandatory death penalty for this deliberate disobedience of the state law. Antigone nobly replied. "Nor did I think your orders were so strong that you, a mortal man, could overrun the gods' unwritten and unfailing laws."

Conscience motivated Antigone. She was not testing the validity of the law in the hope that eventually she would be sustained. Appealing to the judgment of the community, she explained her action to the chorus. She was not secret and surreptitious—the interment of her brother was open and public. She was not violent; she did not trespass on another citizen's rights. And finally, she accepted without resistance the death sentence—the penalty for violation. By voluntarily accepting the law's sanctions, she was not a revolutionary denying the authority of the state. Antigone's behavior exemplifies the classic case of civil disobedience.

Socrates believed that reason could dictate a conscientious disobedience of state law, but he also believed that he had to accept the legal sanctions of the state. In Plato's *Crito*, Socrates from his hanging basket accepted the death penalty for his teaching of religion to youths contrary to state laws.

The sage of Walden, Henry David Thoreau, took this philosophy of nonviolence and developed it into a strategy for solving society's injustices. First enunciating it in protest against the Mexican War, he then turned it to use against slavery. For refusing to pay taxes that would help pay the enforcers of the fugitive slave law, he went to prison. In Thoreau's words, "If the alternative is to keep all just men in prison or to give up

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slavery, the state will not hesitate which to choose."

Sixty years later, Gandhi took Thoreau's civil disobedience as his strategy to wrest Indian independence from England. The famous salt march against a British imperial tax is his best-known example of protest.

But the conscientious law breaking of Socrates, Gandhi and Thoreau is to be distinguished from the conscientious law testing of Martin Luther King, Jr., who was not a civil disobedient. The civil disobedient withhold taxes or violates state laws knowing he is legally wrong, but believing he is morally right. While he wrapped himself in the mantle of Gandhi and Thoreau, Dr. King led his followers in violation of state laws he believed were contrary to the Federal Constitution. But since Supreme Court decisions in the end generally upheld his many actions, he should not be considered a true civil disobedient.

The civil disobedience of Antigone is like that of the pacifist who withholds paying the percentage of his taxes that goes to the Defense Department, or the Quaker who travels against State Department regulations to Hanoi to distribute medical supplies, or the Vietnam war protestor who tears up his draft card. This civil disobedient has been nonviolent in his defiance of the law; he has been unfurtive in his violation; he has been submissive to the penalties of the law. He has neither evaded the law nor interfered with another's rights. He has been neither a rioter nor a revolutionary. The thrust of his cause has not been the might of coercion but the martyrdom of conscience.

WAS THE BOSTON TEA PARTY CIVIL DISOBEDIENCE?

Those who justify violence and radical action as being in the tradition of our Revolution show a misunderstanding of the philosophy of democracy.

James Farmer, former head of the Congress of Racial Equality, in defense of the mass action confrontation method, has told of a famous organized demonstration that took place in opposition to political and economic discrimination. The protesters beat back and scattered the law enforcers and then proceeded to loot and destroy private property. Mr. Farmer then said he was talking about the Boston Tea Party and implied that violence as a method for redress of grievances was an American tradition and a legacy of our revolutionary heritage. While it is true that there is no more sacred document than our Declaration of Independence, Jefferson's "inherent right of rebellion" was predicated on the tyrannical denial of democratic means. If there is no popular assembly to provide an adjustment of ills, and if there is no court system to dispose of injustices, then there is, indeed, a right to rebel.

The seventeenth century's John Locke, the philosophical father of the Declaration of Independence, wrote in his *Second Treatise on Civil Government:* "Wherever law ends, tyranny begins . . . and the people are absolved from any further obedience. Governments are dissolved from within when the legislative [chamber] is altered. When the government [becomes] . . . arbitrary disposers of lives, liberties and fortunes of the people, such revolutions happen . . .".

But there are some sophisticated proponents of the revolutionary redress of grievances who say that the test of the need for radical action is not the unavailability of democratic institutions but the ineffectuality of those institutions to remove blatant social inequalities. If social injustice exists, they say, concerted disobedience is required against the constituted government, whether it be totalitarian or democratic in structure.

Of course, only the most bigoted chauvinist would claim that America is without some glaring faults. But there has never been a utopian society on earth and there never will be unless human nature is remade. Since inequities will mar even the best-framed democracies, the injustice rationale would allow a free right of civil resistance to be available always as a short-cut alternative to the democratic way of petition, debate and assembly. The lesson of history is that civil insurgency spawns far more injustices than it removes. The Jeffersons, Washingtons and Adams resisted tyranny with the aim of promoting the procedures of democracy. They would never have resisted a democratic government with the risk of promoting the techniques of tyranny.

LEGITIMATE PRESSURES AND ILLEGITIMATE RESULTS

There are many civil rights leaders who show impatience with the process of democracy. They rely on the sit-in, boycott or mass picketing to gain speedier solutions to the problems that face every citizen. But we must realize that the legitimate pressures that won concessions in the past can easily escalate into the illegitimate power plays that might extort demands in the future. The victories of these civil rights leaders must not shake our confidence in the democratic procedures, as the pressures of demonstration are desirable only if they take place within the limits allowed by law. Civil rights gains should continue to be won by the persuasion of Congress and other legislative bodies and by the decision of courts. Any illegal entreaty for the rights of some can be an injury to the rights of others, for mass demonstrations often trigger violence.

Those who advocate taking the law into their own hands should reflect that when they are disobeying what they consider to be an immoral law, they are deciding on a possibly immoral course. Their answer is that the process for democratic relief is too slow, that only mass confrontation can bring immediate action, and that any injuries are the inevitable cost of the pursuit of justice. Their answer is, simply put, that the end justifies the means. It is this justification of any form of demonstration as a form of dissent that threatens to destroy a society built on the rule of law.

Our Bill of Rights guarantees wide opportunities to use mass meetings, public parades and organized demonstrations to stimulate sentiment, to dramatize issues and to cause change. The Washington freedom march of 1963 was such a call for action. But the rights of free expression cannot be mere force cloaked in the garb of free speech. As the courts have decreed in labor cases, free assembly does not mean mass picketing or sit-down strikes. These rights are subject to limitations of time and place so as to secure the rights of others. When militant students storm a college president's office to achieve demands, when certain groups plan rush-hour car stalling to protest discrimination in employment, these are not dissent, but a denial of rights to others. Neither is it the lawful use of mass protest, but rather the unlawful use of mob power.

Justice Black, one of the foremost advocates and defenders of the right of protest and dissent, has said:

"Experience demonstrates that it is not a far step from what to many seems to be the earnest, honest, patriotic, kind-spirited multitude of today, to the fanatical, threatening, lawless mob of tomorrow. And the crowds that press in the streets for noble goals today can be supplanted tomorrow by street mobs pressuring the courts for precisely opposite ends." [1]

Society must censure those demonstrators who would trespass on the public peace, as it must condemn those rioters whose pillage would destroy the public peace. But more ambivalent is society's posture toward the civil disobedient. Unlike the rioter, the true civil disobedient commits no violence. Unlike the mob demonstrator, he commits no trespass on others' rights. The civil disobedient, while deliberately violating a law, shows an oblique respect for the law by voluntarily submitting to its sanctions. He neither resists arrest nor evades punishment. Thus, he breaches the law but not the peace.

But civil disobedience, whatever the ethical rationalization, is still an assault on our democratic society, an affront to our legal order and an attack on our constitutional government. To indulge civil disobedience is to invite anarchy, and the permissive arbitrariness of anarchy is hardly less tolerable than the repressive arbitrariness of tyranny. Too often the license of liberty is followed by the loss of liberty, because into the desert of anarchy comes the man on horseback, a Mussolini or a Hitler.

VIOLATIONS OF LAW SUBVERT DEMOCRACY

Law violations, even for ends recognized as laudable, are not only assaults on the rule of law, but subversions of the democratic process. The disobedient act of conscience does not ennoble democracy; it erodes it.

First, it courts violence, and even the most careful and limited use of nonviolent acts of disobedience may help sow the dragon-teeth of civil riot. Civil disobedience is the progenitor of disorder, and disorder is the sire of violence.

Second, the concept of civil disobedience does not invite principles of general applicability. If the children of light are morally privileged to resist particular laws on grounds of conscience, so are the children of darkness. Former Deputy Attorney General Burke Marshall said: "If the decision to break the law really turned on individual conscience, it is hard to see in law how [the civil rights leader] is better off than former Governor Ross Barnett of Mississippi who also believed deeply in his cause and was willing to go to jail." [2]

Third, even the most noble act of civil disobedience assaults the rule of law. Although limited as to method, motive and objective, it has the effect of inducing others to engage in different forms of law breaking characterized by methods unsanctioned and condemned by classic theories of law violation. Unfortunately, the most patent lesson of civil disobedience is not so much nonviolence of action as defiance of authority.

Finally, the greatest danger in condoning civil disobedience as a permissible strategy for hastening change is that it undermines our democratic processes. To adopt the techniques of civil disobedience is to assume that representative government does not work. To resist the decisions of courts and the laws of elected assemblies is to say that democracy has failed.

There is no man who is above the law, and there is no man who has a right to break the law. Civil disobedience is not above the law, but against the law. When the civil disobedient disobeys one law, he invariably subverts all law. When the civil disobedient says that he is above the law, he is saying that democracy is beneath him. His disobedience shows a distrust for the democratic system. He is merely saying that since democracy does not work, why should he help make it work. Thoreau expressed well the civil disobedient's disdain for democracy:

"As for adopting the ways which the state has provided for remedying the evil, I know not of such ways. They take too much time and a man's life will be gone. I have other affairs to attend to. I came into this world not chiefly to make this a good place to live in, but to live in it, be it good or bad.[3]

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[1] Dissenting in *Cox* v. *Louisiana*, 379 U.S. 536, 575, 584 (1965).

[2] *The Protest Movement and the Law*, 51 VA. L. REV. 785 (1965).

[3] Thoreau, *Essay on Civil Disobedience*, in PEOPLE, PRINCIPLES AND POLITICS (Meltzer ed. 1963).

Thoreau's position is not only morally irresponsible but politically reprehensible. When citizens in a democracy are called on to make a profession of faith, the civil disobedients offer only a confession of failure. Tragically, when civil disobedients for lack of faith abstain from democratic involvement, they help attain their own gloomy prediction. They help create the social and political basis for their own despair. By foreseeing failure, they help forge it. If citizens rely on antidemocratic means of protest, they will help bring about the undemocratic result of an authoritarian or anarchic state.

How far demonstrations properly can be employed to produce political and social change is a pressing question, particularly in view of the provocations accompanying the National Democratic Convention in Chicago last August and the reaction of the police to them. A line must be drawn by the judiciary between the demands of those who seek absolute order, which can lead only to a dictatorship, and those who seek absolute freedom, which can lead only to anarchy. The line, wherever it is drawn by our courts, should be respected on the college campus, on the streets and elsewhere.

Undue provocation will inevitably result in overreaction, human emotions being what they are. Violence will follow. This cycle undermines the very democracy it is designed to preserve. The lesson of the past is that democracies will fall if violence, including the intentional provocations that will lead to violence, replaces democratic procedures, as in Athens, Rome and the Weimar Republic. This lesson must be constantly explained by the legal profession.

We should heed the words of William James:

"Democracy is still upon its trial. The civic genius of our people is its only bulwark and . . . neither battleships nor public libraries nor great newspapers nor booming stocks: neither mechanical invention nor political adroitness, nor churches nor universities nor civil service examinations can save us from degeneration if the inner mystery be lost.

"That mystery, at once the secret and the glory of our English-speaking race, consists of nothing but two habits. . . . [O]ne of them is habit of trained and disciplined good temper towards the opposite party when it fairly wins its innings. The other is that of fierce and merciless resentment toward every man or set of men who break the public peace.[4]

GILBERT ELECTORAL REFORM LEGISLATION

(Mr. GILBERT asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. GILBERT. Mr. Speaker, I have introduced House Joint Resolution 474 to amend the Constitution to provide for the direct popular election of the President and Vice President. It is my belief that the electoral college no longer has a place in our system. My amendment proposes a runoff election if no candidate gets as much as 50 percent plus one of the votes cast. As I recently pointed out in testimony before the Judiciary Committee, I have severe reservations about the 40-percent provision recommended by President Nixon. I believe it could set a disturbing precedent which could easily pass into more commonplace political practice. We are a country that has always been governed by majority rule and I believe very deeply that we should stay that way. I call to the attention of the House my testimony, which follows, and I ask my colleagues in the House to support my proposal:

STATEMENT OF CONGRESSMAN JACOB H. GILBERT, OF NEW YORK, BEFORE THE HOUSE JUDICIARY COMMITTEE, FEBRUARY 21, 1969

Mr. Chairman, I appreciate the opportunity to bring to bear my views on this very important constitutional issue. I know that no question is more vital to the stability of our society than the integrity of our Presidential elections.

I want it clearly understood that I endorse the principle of the popular election of the President. I think the electoral college no longer has a place in our system. It is inherently undemocratic and, more important, structurally flawed. It stands as an ever present threat to the smooth functioning of our governmental processes.

I do, however, feel compelled to take issue with some of the details of the O'Hara-Bayh amendment, which seeks to achieve the popular election of the President. Because I concur with the objective of this amendment, I would like to raise certain questions about its methods.

Mr. Chairman, I have severe reservations about the provision that would elect a President with forty per cent of the popular vote. I recognize and respect President Nixon's endorsement of this principle, but I do not agree with it. I regard it as inherently unwise to build into our Constitution a provision for the election of our highest public official with less than a majority of votes. I think it is an unhealthy departure from the traditional American principle that the majority rules. I believe it will set a disturbing precedent, which—given its association with the highest office in the land—could easily pass into more commonplace political practice. We are a country that has always been governed by majority rule, and I believe very deeply that we should stay that way.

I have other reservations about the forty per cent provision. I think it will encourage the growth of splinter parties and stand constantly as a sword over the head of the two-party system. I suspect it will give undue power to small groups. I think it will enable, far more easily than with a majority requirement, the election of a President who appeals to some transitory passion. A demagogue will more easily get forty than fifty per cent of the vote. The forty per cent principle means that sixty per cent of the voters might support the stability that the two traditional parties have always given our society—while a minority is temporarily diverted by some folly. I have great faith in the long-term wisdom of the American people but I have, even in my own lifetime, seen instances when a substantial minority has had its head turned by the siren songs of irresponsible would-be leaders. I think the amendment, as it currently is written, will serve the ambitions of a demagogue, while putting the solid majority of Americans at a severe disadvantage.

Let me go a step further and say that the institution of a minority President will do a disservice to good government. In these days of enormous social problems, we need a strong man in the White House, one who is uncontestably the master of his administration. We know how difficult it can be for the President to exercise control over entrenched interests inside the government—the vast Federal bureaucracy, the military, the intelligence agencies, the regulatory commissions. These fiefdoms inevitably are strengthened by the feeling that the President represents less than the majority of voters. Any sign of weakness in the Presidential office, it seems to me, diminishes the responsiveness of these entrenched forces to necessary change. We contribute nothing but potential disorder to the processes of government, in my view, if we build into the Constitution the institution of a minority President.

What I propose is the resort to a run-off election, which the amendment already contemplates if no candidate obtains a plurality of 40 per cent. My amendment would provide for a run-off if no candidate gets as much as 50 per cent plus one of the votes cast. I recognize that this could entail added expense, both for candidates and the election districts, but I think the expenses could be kept to a minimum. If the run-off election were held one, or perhaps, two weeks at most from the original election day, there would be little additional campaigning. And since this would be a head-to-head contest, with only two names on the ballot, I would think that administrative expenses would be minimal. Other countries and several of our states find the run-off system quite feasible. I do not think the technical handicaps are serious. I prefer this system because it is far more democratic than acquiescence to a minority president. I believe that the integrity of our system demands that our President be the choice of a majority of Americans.

Mr. Chairman, I prefer the O'Hara-Bayh amendment to no reform at all. But I would like to caution my colleagues against institutionalizing a constitutionally sanctioned minority President—and I would like them to consider seriously the device of the run-off election to preserve the confidence of the people and keep our system strong.

ROONEY CALLS FOR INVESTIGATIONS OF MAGAZINE SALES

(Mr. ROONEY of Pennsylvania asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. ROONEY of Pennsylvania, Mr. Speaker, at this moment all across this Nation hundreds of Americans are being fast talked into an unbelievable array of unwanted purchases, staggering financial obligations, and inestimable heartache and mental suffering. These hundreds of Americans are being victimized at this moment by unscrupulous individuals who wear the guise of legitimate business representatives. Within 24 hours, these victims will increase in number to thousands. Before the end of 1969, a million or more Americans may be duped of sums of money totaling billions of dollars. Many will gain a great deal of experience but at a staggering cost. Others will lose not only precious dollars but even more precious good credit ratings. Others, caught in a quicksand of intolerable debt, will lose perhaps all that they have scrimped and saved in a lifetime.

Each of us in Congress is aware of the growing number of schemes and frauds being devised to victimize the American consumer. As the legislative body for this Nation, we have taken many concrete steps to protect the American consumer against the unscrupulous merchant in what we term the "marketplace." But what of the unscrupulous merchant who plies his wares at the consumer's doorstoop or in the comfort of the consumer's living room.

We are familiar with the home improvement rackets, the debt consolidation rackets, the dance instruction rackets, the easy credit rackets and many more. Today, I would like to invite my colleagues' attention to another racket which has reached such staggering proportions that Americans are going into

[4] JAMES, PRAGMATISM 127–128 (1907).

debt by many millions of dollars annually for unwanted, long-term, high-cost, magazine subscriptions.

There are some 50 major magazine subscription sales organizations operating throughout the United States. Several of these are directly affiliated with some of the largest and most prominent newspaper and magazine publishing chains in the country. And some, if not all of these subscription agencies prey upon the immature, the elderly, and the unsuspecting like vultures.

Although the methods used by the magazine subscription sales companies vary slightly from company to company and from locale to locale, I have noticed a basic pattern in most of the cases I have reviewed. These cases were brought to my attention by Action Express, a public service feature of the Easton Express newspaper, published in Easton, Pa., and serving readers in Pennsylvania and New Jersey. Action Express has been exploring dozens of complaints from victims of the magazine subscription racket over a period of many weeks. Their perception and investigation already have led to the disclosure that one firm fraudulently used the name of a popular television personality, Johnny Carson, to lend an air of legitimacy to its scheme. A spokesman for Mr. Carson made it clear to Action Express that the use of his name was totally unauthorized and has indicated the entertainer may begin legal action against the offending firm.

Action Express, through its disclosure of incident after incident of consumer duping in this magazine sales scheme, has attracted the attention of investigative agencies in two States. In my own State, Attorney General William Senett has designated his deputy, Benjamin Kirk, to head an investigation of the magazine sales racket and "to proceed at once with steps to stop operations in Pennsylvania."

In New Jersey, with the help of the bureau of consumer fraud, an investigation has been launched by Deputy Attorney General Douglas Harper.

And although I know of no investigation underway in that State, Maryland's Attorney General Bill Birch told Action Express his office has received several dozen similar complaints.

Most of the victims in the Easton Express circulation area discovered belatedly that they had been duped into signing innocent-appearing forms which in reality were contracts for $150 worth of magazines. And when they realized they had been taken for an expensive ride, their problems multiplied. Efforts to cancel their unwanted installments led to astonishing collection pressures from the magazine subscription sales companies, from credit agencies, lawyers, and threatening telephone calls that roused some of the victims from their beds.

The pattern I have observed shows that the initial contact with the intended victim is a telephone call. The caller advises the prospective victim that he has been chosen from the local telephone book or some other random means, to receive a gift. In some cases, the victims were led to believe they had won a new car, a color television set, or some other major prize. In other cases, the intended victim supposedly had won free magazine subscriptions but existing laws required that the recipient first agree to pay nominal wrapping and mailing costs.

The telephone caller invariably suggested an appointment at the victim's home at some later date to complete arrangements for the victim to receive his gift, or free magazines or whatever. Moments later, without regard to the appointment arrangements which generally provided for a personal contact days later, the victim heard a knock at his door and the magazine sales representative already was on the scene. "I just happened to be in the neighborhood," is the excuse offered.

Awestruck, the supposed prizewinner soon falls victim to the fast-talking salesman, rattles off a list of preferred magazines which the salesman jots on a form, produces the nominal good-faith deposit, signs the order slip offered by the salesman, and then heaps gratitude upon the bearer of good tidings and gifts as the salesman makes a hasty exit.

Later, after the victim reads in detail the fine print on the order form he has signed, and still later when the postman delivers a time-payment coupon book calling for long-term monthly payments substantially larger than anything the new subscriber had imagined possible, he recognizes that he has been victimized. But then it is too late.

Mr. Speaker, Congress has made a great deal of progress in recent years to protect the consumer. Here is an area which we have neither explored extensively nor acted upon effectively to prevent this type of consumer duping.

As I said, there are 50 recognized companies engaged in this type of magazine subscription sales. One of these which is subject of some of the complaints to which I have referred operates in 14 States and grosses $16 million annually. Many of the others carry on a business comparable in volume. How many resort to distortion and fraud in their business activities is uncertain. But it is obvious that a number of them do.

This type of sales activity, which is deserving of the label racket, must be brought under effective controls which will adequately safeguard the unsuspecting consumer.

I regret that I must report an effort at self-regulation by the magazine industry is a virtual failure, if in fact it is a sincere effort to wipe out unscrupulous tactics.

This self-regulatory agency is known as Central Registry. It is supported financially, not by these subscription peddlers, but by the magazine publishing companies themselves. In view of its performance, I cannot help but question the reliability and effectiveness of a regulatory agency which is financed by the very industry which benefits from the volume of magazine sales generated by these subscription companies, whether their sales methods be unscrupulous or not. I question whether the Nation's magazine publishing firms which support Central Registry will permit Central Registry to bite the hand that feeds the publishing industry.

Mr. Speaker, the efforts of Action Express to provide assistance to the victims of these schemes have served to underline the failure of Central Registry to regulate subscription sales. I find this particularly disappointing, in view of the fact that Mr. Earl Kintner, who serves as counsel for Central Registry and who, I have been informed, was instrumental in helping to draw up this self-regulating code of business conduct, was a Chairman of the Federal Trade Commission during the Eisenhower administration. I would have anticipated greater diligence of enforcement from a man of that background.

I want to make it clear that the self-regulating code for magazine subscription sales was implemented several years ago with the concurrence of the FTC after the Commission had investigated complaints of the very nature I have just cited. Aware of that prior investigation by the FTC, I last week submitted many samples of correspondence from victims to prove to the Commission that self-regulation within this industry has failed.

Further, I followed up that submission of evidence with an appeal today to Chairman Paul Rand Dixon of the Federal Trade Commission for a reopening of the FTC investigation with particular emphasis on the apparent failure of Central Registry to accomplish its objectives.

Also, Mr. Speaker, I am introducing today a resolution to authorize and direct the Committee on Interstate and Foreign Commerce, of which I am a member, to conduct a study and investigation of magazine sales promotion practices. While it is true that the States of Pennsylvania and New Jersey are moving forcefully ahead with efforts to halt this racket within their own State borders, the operations of these subscription sales companies extend to every State in the Nation. They are engaged in interstate commerce and must be prepared to conduct their business activities in a legitimate, straightforward manner which will guarantee that the prospective subscriber will not be duped.

In the near future, I intend also to introduce specific legislative proposals to place Federal controls on magazine subscription sales. I expect to include in these legislative proposals specific features of the self-regulatory code to which these magazine sales companies have verbally subscribed but factually flaunted. I see no reason why these subscription sales companies, if in fact they support the provisions of their own code, should have serious objection to its enactment as Federal law with adequate provision for strict enforcement.

If the American consumer deserves protection in the marketplace—and he does—he deserves equal protection on his doorstep and in his living room.

The text of the resolution follows:

H. Res. —

Resolution authorizing and directing the Committee on Interstate and Foreign Commerce to conduct a study and investigation of magazine sales promotion practices

Resolved, That the Committee on Interstate and Foreign Commerce, acting as a whole or by subcommittee, is authorized and directed to conduct a full and complete investigation and study of magazine sales and sales promotion practices, including tele-

phone solicitation, with particular emphasis on installment contracts.

For the purpose of carrying out this resolution the committee or subcommittee is authorized to sit and act during the present Congress at such times and places within the United States, including any Commonwealth or possession thereof, whether the House is in session, has recessed or has adjourned, to hold such hearings, and to require, by subpena or otherwise, the attendance and testimony of such witnesses and the production of such books, records, correspondence, memoranda, papers, and documents, as it deems necessary; except that neither the committee nor any subcommittee thereof may sit while the House is meeting unless special leave to sit shall have been obtained from the House. Subpenas may be issued under the signature of the chairman of the committee or any member of the committee designated by him, and may be served by any person designated by such chairman or member.

The committee shall report to the House as soon as practicable during the present Congress the results of its investigation and study, together with such recommendations as it deems advisable. Any such report which is made when the House is not in session shall be filed with the Clerk of the House.

CONGRESSMAN BINGHAM HAILED FOR URGING THAT GIRLS BE PERMITTED TO JOIN VARSITY HIGH SCHOOL SWIMMING TEAMS

(Mr. STRATTON asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. STRATTON. Mr. Speaker, as one who swam competitively in high school and later in college, I was interested to see in the February 1969 issue of Swimming World, a semiofficial journal of competitive swimming in both high school and college, an editorial commenting on some remarks made by our colleague, the gentleman from New York (Mr. BINGHAM).

Mr. BINGHAM, quite properly in my opinion, had objected to a ruling by the New York State Department of Education forbidding qualified girl swimmers, in high schools where no girls' swimming team existed, from joining a varsity team made up of boy swimmers.

Obviously Commissioner Allen, who made the ruling in question, has been out of touch with what the girls have been doing in sports lately, including swimming. Little 15-year-old Debbie Meyers, for example, this year's winner of the Sullivan Award, and a triple gold medal winner in the 1968 Mexico City Olympics, has been swimming far faster, especially in the 1,500 meter swim, than the top male Olympic swimmers when I was in college back in 1935. Why should girls with abilities like Debbie's not be allowed to swim against, and even beat, boys of her own age in high school?

Under leave to extend my remarks I include the editorial in question, and I commend the gentleman from New York (Mr. BINGHAM) for the stand he has taken.

The editorial follows:

CONGRESSMAN DECRIES LACK OF HIGH SCHOOL SWIMMING FOR GIRLS

NEW YORK, N.Y.—Congressman Jonathan B. Bingham, Democratic Representative from New York City believes girls who have the ability to swim competitively in a high school program should be allowed to compete, even if they must compete as a member of the boys' high school swimming team.

So strongly does Representative Bingham feel on the subject that he has written a strong letter of appeal to The Honorable James Allen, New York State Commissioner of Education calling for an immediate correction to the "19th century" regulation that participation of 16-year old Peggy Loewy in interscholastic swimming as a member of New York City's George Washington High School swimming team "violates the rules and regulations" and must be prohibited.

Peggy had made the team on her ability and had been accepted by her teammates. In two meets this year in New York's Public Schools Athletic League, the 16-year old senior competed directly against boys for the first time in local history. Her performances were not spectacular, but she scored a few points for her team.

The George Washington coach, Joe Pargament, allowed Peggy to compete after she has made the team on the basis of preseason time trials. At the last meet, she just watched.

At present there is no official interscholastic competition for girls in New York City. In fact there is a local regulation prohibiting it, according to the director of the Bureau for Health and Physical Education, Erwin Tobin.

While the value of sports competition in schools, and more important, participation among women, is gaining acceptance, there is a great deal of resistance to mixed sports acceptance.

As Congressman Bingham wrote, "I could understand such a regulation if there were a program for girls. But there is none. Peggy either competes with the boys or she does not compete."

New York City isn't the only area in the United States where a bankrupt high school swimming program is thrust upon the taxpayers. In only a few areas do state health and physical education boards permit high school girls to swim in a competitive interscholastic program, though the same school districts culminate their boys' competitive interscholastic swimming programs with a state championship meet. The facilities are okay for boys competition, but not for girls, though taxes for the facilities failed to delegate which sex was to enjoy a complete aquatic program.

Beginning in 1970, the American Association for Health, Physical Education and Recreation through their 60-year old Division for Girls and Women's Sports will sponsor and conduct an annual national intercollegiate swimming championship for junior college, college and univeristy women students.

For the last few years, the American Swimming Coaches Association attempted, with varying degrees of success, to foster interscholastic swimming for girls. However, the program was never accepted by the State High School Associations, and not more than a dozen or so states submitted the names of their girls for All America consideration. However, it was a start, but until there is an interscholastic swimming program in all 50 states, the girls who wish to enjoy the physiological, psychological, social contributions of aquatic sports will have to either join a private club or wait till they enter college. For some, the latter choice is too late.

AMERICA CANNOT FURTHER DELAY A FORTHRIGHT RESPONSE TO THE CHALLENGE POSED BY THE CURRENT COMMUNIST OFFENSIVE IN VIETNAM

(Mr. STRATTON asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. STRATTON. Mr. Speaker, one hesitates to advise the new administration on important military and foreign policy matters at a time when the President himself is out of the country. But the new Communist offensive in Vietnam is not a routine development. It represents a most serious challenge to and test of the will and determination of this Government and of the new administration. We cannot possibly ignore it or delay unduly in making our response to it.

Last November we ended all bombing in North Vietnam on the basis of several conditions or "understandings," two of which were that there would be no attacks on the major cities in South Vietnam, and that the DMZ would be kept demilitarized.

The current offensive constitutes a very grave violation of both conditions. A major battle is underway. American casualties have escalated sharply. Yet as of this hour, 3 days after the violations began, there has still been no American response, and one of our major defensive weapons, the retaliatory striking power of the U.S. Navy and Air Force, remains sheathed and grounded.

Mr. Speaker, in my judgment, this Nation of ours, however important the current conversations in Europe, cannot safely delay our response to this new challenge. To allow these violations to continue without even a verbal protest, would very seriously erode the credibility of the United States as an effective force for world law and order and very dangerously compromise our bargaining position at the Paris talks.

SELECTIVE SERVICE REFORM

(Mr. OTTINGER asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. OTTINGER. Mr. Speaker, I am very pleased to join in cosponsoring legislation today which will institute a number of vitally needed and long overdue reforms in our draft laws and remove many of the current inequities.

Although two distinguished panels studied and recommended drastic changes to the draft law 3 years ago, the Military Selective Service Act of 1967 did virtually nothing to enact their recommendations. I thus supported an amendment to limit extension of the law to just 1 year in 1967. Since then, the inequities have become even more glaringly apparent.

The current law is grossly unfair in many respects. It leaves all young men in a constant state of uncertainty, is disruptive to their pursuit of education and is, I think, a major contributor to the restlessness of young people on college campuses and elsewhere today. It is terribly damaging to our graduate schools and thus to our future supply of people with the kind of educational background needed to advance America's economic, social, and political interests in a highly complex and technological age. It is unfair to students who cannot pursue their educations for financial or other reasons.

The law is also arbitrary in many re-

spects. A draft registrant does not have the right to be represented by counsel before a local draft board despite the fact that complex legal questions often are raised by draft action. The bill we are introducing today, provides that a registrant is entitled to counsel in any appearance before the board and an indigent registrant may request free counsel. The current law's deficiencies in treatment of conscientious objectors are also corrected.

Perhaps the greatest evil of the current draft law is its uncertain application and unjust criteria for selection. The new bill provides that all youth of appropriate age will be eligible for the draft—except in cases of disability or hardship—and that those young men to be drafted be chosen through random selection, taking the youngest—19-year-olds—first. This system was used successfully through World War I. This random selection procedure will spread draft exposure equitably among rich and poor, black and white, student and nonstudent. It will do so without unduly disrupting our educational institutions. Military experts are also virtually unanimous that taking the youngest first will improve the quality of draftees selected. The bill also extends college deferments, but only so long as war casualties don't exceed 10 percent of the numbers drafted in any month. Under these circumstances, the registrant is given a choice of going into a prime selection group upon his high school graduation or waiting until he graduates from college or graduate school. But in either case, he will be notified upon graduation from high school or upon reaching age 19 as to his liability for service so he can plan his life sensibly.

Our bill requires the adoption of national standards and criteria in the administration of the draft law and their uniform application. All too often I have had brought to me situations in which one young man is granted a deferment by a local board in one location but another young man, in exactly the same position, is called for induction by a local board in another State—or even county or city. National standards and uniform application will eliminate such injustices.

Recently we have heard much discussion of the feasibility of a volunteer army. The bill I am introducing today calls for a thorough public study of the feasibility of a volunteer army as well as a National Service Corps, in which individuals seeking nonmilitary service might fulfill their obligation of service to the country.

Mr. Speaker, considerable time, effort, and thought have been devoted to the preparation of this bill by many Members of the House and Senate who participated in its drafting. I believe we owe it to our young people to give it our fullest and most careful consideration and attention.

Hopefully, the time may soon come when no more war ravages the earth and consumes the youth of our society. The time is not yet here. Nor is our knowledge yet sufficient to eliminate conscription as a means of raising armies for our current involvements. Until these highly desirable ends become feasible, it seems clear that the draft must be made as fair and certain as possible to our youth and our society. The bill I have joined in sponsoring today seeks to accomplish these important reforms. I urge that it be given prompt and favorable consideration.

TRIBUTE TO THE LATE LEVI ESHKOL, PRIME MINISTER OF ISRAEL

(Mr. REID of New York asked and was given permission to address the House for 1 minute and to revise and exteind his remarks.)

Mr. REID of New York. Mr. Speaker, I believe that all Members of this House would wish to express our sense of loss and deep concern over the passing of Prime Minister Levi Eshkol of Israel. He was a leader who over many years brought great promise and accomplishment to the state of Israel. He cared deeply about the land. He worked unceasingly as he saw it for peace. He said most recently that—

> I am ready to meet with the leadership of the U.A.R. anywhere and any time and I will not quarrel about procedure, agenda or the shape of the table.

Mr. Speaker, I had the privilege of knowing the late Prime Minister and working with him, particularly during the time when he was Minister of Finance. He did more, perhaps, than any other single Israeli to imaginatively strengthen the economy in the overall sense and for all Israelis. His leadership will be deeply missed.

Mr. ALBERT. Mr. Speaker, will the distinguished gentleman from New York yield?

Mr. REID of New York. I yield to the distinguished majority leader.

Mr. ALBERT. Mr. Speaker, I desire to join the distinguished gentleman from New York (Mr. REID), in what the gentleman has said about his service in Israel, because I once visited the gentleman while he was serving as the distinguished Ambassador from this country to the State of Israel.

Mr. Speaker, I join the gentleman also in what he said about the loss of Premier Eshkol, one of the great men of the free world. That loss is not only Israel's loss. It is the loss of everyone who seeks peace and freedom in this troubled world. To Mrs. Eshkol and her family and to all of the wonderful people of Israel I extend my deepest sympathy.

Mr. REID of New York. I thank the distinguished majority leader for his remarks.

Mr. GERALD R. FORD. Mr. Speaker, will the gentleman yield?

Mr. REID of New York. I yield to the distinguished minority leader.

Mr. GERALD R. FORD. Mr. Speaker, I am grateful that the distinguished gentleman from New York (Mr. REID) has yielded to me on this occasion. I wish to associate myself with his most appropriate remarks concerning the tragic passing of Prime Minister Eshkol.

Although I never had the privilege or honor of meeting the Prime Minister, I have admired him greatly for his efforts in leading a stanch and steadfast nation through a period of great difficulty. I have greatly respected his efforts to seek a solution to the many problems confronting his people and his country, and to achieve a fair and lasting peace in the strife-torn Middle East.

I know that his passing will be a great loss to his country. It will be a loss to those who are at this moment seeking to achieve an honorable settlement of the longstanding grievances and difficulties in the Middle East.

Mr. Speaker, I extend, as did the gentleman from New York, my deepest condolences to his family and to his country on his passing under these most unfortunate circumstances. The world has lost a great statesman and the United States has lost a fine friend.

Mr. REID of New York. I thank the distinguished minority leader for his most thoughtful remarks.

Mr. CELLER. Mr. Speaker, will the gentleman yield?

Mr. REID of New York. I yield to the very distinguished chairman of the Committee on the Judiciary.

Mr. CELLER. Mr. Speaker, Levi Eshkol, Prime Minister of the State of Israel, is dead. This is not only Israel's loss but the world's. Consider the nature of this man who came to Palestine in the year 1913; who served in the Jewish Legion of the British Army from 1918 to 1920; who was Director General of the Ministry of Defense of the State of Israel in the years 1948 and 1949; who was Minister of Agriculture and Development in the years 1951 to 1952; who was Minister of Finance in the years 1952 to 1963; and who was Prime Minister of the State of Israel since 1963. He was the chief of the main political party of Israel. Thus, his largeness of vision, his understanding, basic and realistic, grew out of a wealth of experience in every significant aspect of the structure of statehood. At the age of 73 he had achieved world eminence because of the knowledge and foresight no ordinary mortal can reach within his lifetime. He rescued Israel from the jaws of death. This intrepid modern David sought to doom the Arab Goliath of violence and hatred. He is gone from the scene at one of the most crucial moments in the history of the State of Israel. We are thus called upon to extend to Israel our most sympathetic understanding in its loss of such a man and such a leader. Our condolences go forth to his beloved wife, Miriam, and his dear children.

Mr. REID of New York. I thank the distinguished chairman of the Committee on the Judiciary for his pertinent and very thoughtful remarks.

Mr. BINGHAM. Mr. Speaker, will the gentleman yield?

Mr. REID of New York. I yield to the gentleman from New York (Mr. BINGHAM).

Mr. BINGHAM. Mr. Speaker, I thank the gentleman for yielding.

I would like to be associated with the very appropriate remarks made by my colleague, the gentleman from New York (Mr. REID) and by the distinguished chairman of the Committee on the Judi-

ciary, the gentleman from New York (Mr. CELLER).

Mr. Speaker, my wife and I had the honor and privilege of meeting with Prime Minister Levi Eshkol in his office in 1964. We were accompanied by Teddy Kollek, when in the Prime Minister's office, and now mayor of Jerusalem.

Prime Minister Levi Eshkol was a man of extraordinary strength, dignity, and wisdom. He will be sorely missed in Israel, in this country, and in many other parts of the world.

I extend to the Prime Minister's family and to the people of Israel my most profound sympathy.

Mr. REID of New York. I thank the gentleman.

Mr. GILBERT. Mr. Speaker, will the gentleman yield?

Mr. REID of New York. I yield to the gentleman from New York (Mr. GILBERT).

Mr. GILBERT. Mr. Speaker, I thank the distinguished gentleman from New York for yielding to me. I wish to associate myself with the remarks of my distinguished colleague from New York, Congressman REID, and my colleague from New York, Congressman CELLER.

The passing of Prime Minister Levi Eshkol is a great loss to humanity, and we all feel this loss very deeply and keenly. Mr. Eshkol was of the generation and type of Jewish pioneer who brought Israel into existence and increased her strength in the face of Arab hostility and belligerence. He was a man with a common touch. He began his career in Palestine in 1913 as a farmer and laborer. He was an accomplished economist and statesman, but he never lost his down-to-earth quality. His sense of humor shone through his speeches. He had thousands of friends, his visitors found it easy to strike a common cord with him. He was unpretentious and unassuming to the point of self-effacement—perhaps the most approachable of the world's dignitaries.

Above all, Prime Minister Eshkol was a man of peace. He dedicated his life to the development of land and to the welfare of humanity. He never ceased to hope that peace was within reach for his country and his Arab neighbors.

Mr. FARBSTEIN. Mr. Speaker, will the gentleman yield?

Mr. REID of New York. I yield to my colleague.

Mr. FARBSTEIN. Mr. Speaker, I too would like to associate myself with the remarks made by both gentlemen from New York in connection with the untimely passing of the head of state of Israel.

I had occasion to visit him immediately following the last 6-day war, and I truthfully can say from the conversation I had with him that all he sought was peace. He had no desire for conquest.

Mr. Speaker, the sudden and unexpected death of Israel's Prime Minister Levi Eshkol has saddened the entire world. All of us are diminished by his passing.

Mr. Speaker, Levi Eshkol was no ordinary man. He was a patriot who loved his country and served it well in positions of leadership and responsibility. He fought for the right of his people to be free and it can be truly said that he laid down his life for his country and for his fellow man.

Levi Eshkol was a man of compassion. During the difficult days through which his beloved country has been passing Levi Eshkol, in spite of extreme provocation, was a voice of moderation.

Although he realized that Israel could only survive by using firmness in protecting the nation from external attack, yet his desire for peace was such that he was satisfied to take a modest approach with those who threatened the integrity of his beloved country.

Mr. Speaker, I had the pleasure to speak with Prime Minister Eshkol immediately after the 6-day war in 1967. It was at that time that I learned of his desire for peace. He told me that everything that Israel had conquered during that war was negotiable except Jerusalem and the Golan Heights. These he deemed essential to the security of Israel and therefore not negotiable. He had no desire for conquest—only for peace.

Levi Eshkol brought to his nation the qualities of leadership and devotion to duty, as he saw his duty, that few men possess. As William Hazlitt once wrote:

> Death strips a man of everything but genius and virtue. It is a sort of natural canonization.

Mr. Speaker, Levi Eshkol is dead, but his memory will live on as long as men desire to be free. This is not death; it is immortality.

Mr. OTTINGER. Mr. Speaker, I am sure that people throughout our Nation share our feelings of sympathy and concern over the untimely death of Israel's premier, Levi Eshkol.

Premier Eshkol, Israel's second Premier during her 21-year history as a nation, was truly an outstanding statesman. He guided Israel wisely and well during the past 6 stormy years. He led with an unclouded vision of Israel's destiny. He led with firmness but with the ability to conciliate. He led with vigilance against the constant threats against Israel and her people, but he led also with compassion and understanding for the thousands of innocent victims of war.

Israel's loss is a loss to any person, any nation which values freedom and national integrity. I am sure we all hope that Levi Eshkol's successor will continue the outstanding tradition established by him and his predecessor, David Ben-Gurion.

Mr. Speaker, I ask unanimous consent to have the remarks that I made previously follow the remarks of the gentleman from New York (Mr. FARBSTEIN) and I join in those remarks as well as the remarks made by the gentleman from New York (Mr. REID), my colleague from Westchester County and our distinguished leader in the House, the gentleman from New York (Mr. CELLER).

The SPEAKER. Without objection, it is so ordered.

There was no objection.

Mr. McCORMACK. Mr. Speaker, will the gentleman yield?

Mr. REID of New York. I am happy to yield to the very distinguished Speaker of the House of Representatives, the gentleman from Massachusetts (Mr. McCORMACK).

Mr. McCORMACK. Mr. Speaker, we are sorry to learn of the death of Prime Minister Eshkol. He was one of the great statesmen of the world. Levi Eshkol was born in the Ukraine, educated in Poland and died in Israel. The course of his travels took him much farther than the distance between Velno and Tel Aviv, for the journey of Levi Eshkol spanned the centuries between the Roman conquest of the Jewish kindgdom to the rebirth of the State of Israel. His brave country has certainly been an example to the entire world of the will and of the desire of a free people to be free under their own law.

His leadership in behalf of the people of his country made a profound impression upon the entire world and particularly on the free world.

As Speaker of the House of Representatives, I have, for all of my colleagues, sent a telegram to the President of Israel conveying to the Government, to the President, and to the associates of the late Prime Minister, and to the people of Israel the profound sympathy of all Members of the House of Representatives in Congress.

I have also sent a telegram to the widow of the late Prime Minister, as your Speaker, conveying to her the deep sympathy of all Members of the House of Representatives in Congress, and I have also sent a telegram to the Ambassador from Israel in Washington conveying to him and through him to his Government and to the Speaker and the members of the Knesset, the parliament of Israel, the profound and deep sympathy that Members of the House of Representatives feel upon the death and the loss of their distinguished member of that body, who was Prime Minister of Israel.

The death of Prime Minister Eshkol leaves a vacuum and we, in America, and particularly in the free world will carefully watch the selection of his successor, knowing that the type of leadership that his successor will give will be of great importance in the years that lie ahead.

Again for myself as an individual and as Speaker of the House of Representatives, and I know I am speaking the sentiments of all Members of the House, I extend to the Government of Israel and to Mrs. Eshkol and her loved ones our deep sympathy in their great loss and sorrow.

Mr. REID of New York. I thank the most distinguished Speaker of the House for his remarks.

LEVI ESHKOL: THE QUIET, RETICENT MAN WHO MADE ISRAEL GROW

Mr. HORTON. Mr. Speaker, will the gentleman yield?

Mr. REID of New York. I yield to my colleague.

Mr. HORTON. Mr. Speaker, I thank the gentleman from New York for yielding to me on this occasion.

I am fortunate to have this opportunity to speak following the Speaker of the House of Representatives because it was by his designation I was privileged to represent the distinguished Speaker, along with other Members of the House

of Representatives, at the dedication of the Knesset in Jerusalem, Israel, in the fall of 1966.

On that occasion Mrs. Horton and I had the privilege and honor to meet Premier Eshkol and Mrs. Eshkol and other members of the Israel Knesset. I came to have a deep respect for Mr. Eshkol's leadership in Israel and a deep respect for Israel and for what it was doing for the leadership of the free world in the Middle East.

I shall never forget the lovely summer evening on one of the Jerusalem hillsides just as the heat of the day begins to disappear when we attended the reception given by Premier and Mrs. Eshkol for those at the Knesset dedication. We presented gifts from the people of Rochester and the 36th Congressional District to the Eshkols. Mr. Eshkol in a gracious and warm manner spoke highly of many of my friends from the Rochester area and of our great country. They were a wonderful couple, friendly, and happy, who gave great depth of leadership to a sturdy and struggling people.

It is particularly sad for Mrs. Horton and me to note the passing of Premier Eshkol. I think it comes at a very crucial time in the history of this great country. But I am sure the determination and the will of the people of Israel will carry them through this very trying time, as it has in the past.

So it is with deep sadness and great sympathy that I and my wife express our sincere sympathy to Mrs. Eshkol and to the Israel Government. I just finished speaking by telephone with the Israel Ambassador here in Washington and expressed to him my personal sympathy and regrets on this occasion.

A quiet, naturally reticent man, Premier Eshkol was an expert at conciliation. His lively sense of humor eased many tense moments for his colleagues and put his visitors at ease.

Born in Russia, he witnessed the terrible pogroms that marked the czarist nation in the early part of this century.

His interest in Zionism was stimulated by the harsh reality of life for a Jew in Russia and, in 1914 he moved to Palestine.

Immediately, he became an active force in the Jewish community, first as a member of the local workers council and later as a founder of 500 farm villages in the early days of Israel's existence.

During World War I he served in the British Army Jewish Legion. During the war he also became a member of Mapai, the Jewish Labor Party and afterward played a leading role in establishing various organizations well known today in modern Israel.

As Mr. Eshkol's career expanded, so did the strength and aspirations of the Palestinian Jews.

Their dream—and his—was a Jewish homeland, the Israel promised of old to them.

The Zionist leaders recognized Mr. Eshkol's exceptional abilities and soon had him promoting the interests of the Jews of Palestine at home and abroad. Mr. Eshkol did much to make a reality of the dream of an independent Israel.

He continued his active participation in national life—delegate to the founding conference of the Histradut, the General Federation of Labor; representative in the Palestine office of the Jewish agency in Berlin for transfer of Jewish people from Nazi Germany; director of Histradut corporations—settlement, water development, housing; secretary-general of Tel Aviv Labor Council.

Then came nationhood for Israel in 1948; and Mr. Eshkol was appointed Director General of the Ministry of Defense. Later years saw him take Cabinet posts as Minister of Agriculture and Development, Minister of Finance and Deputy Premier.

Mr. Eshkol was largely responsible for the development and economic policy of Israel during the past decade.

For years, Mr. Eshkol worked in the shadow of the beloved and great Israel leader, David Ben-Gurion. It was Mr. Ben-Gurion who chose Mr. Eshkol to succeed him as premier in June 1963. The people of Israel voiced their confidence in Mr. Eshkol during the national elections of 1965, by giving him a sound victory.

His skills in economics, administration, and diplomacy—which had helped the Jewish nation to come into being—nutured its growth since then.

His tenure in office was marked by a brief war and constant tension with Israel's Arab neighbors.

But the problems of the day did not prevent him from leaving his mark upon the nation—or from dreaming great things for its future.

A man of peace and vision, Levi Eshkol was a friend of the United States, a modern pioneer who helped to forge a great and flourishing nation from the ancient sands of an arid desert.

Mr. Eshkol was from that rare breed—his was the last of that generation of people who forged a new country out of the rocky slopes of a once barren land.

His leadership will be sorely missed at this crucial time in the history of Israel.

Mr. REID of New York. I thank the gentleman from New York. I yield to the distinguished gentleman from Maryland (Mr. LONG).

Mr. LONG of Maryland. Mr. Speaker, I too, join in expressing my deep sympathy and regret over the passing of Prime Minister Eshkol. I was privileged to meet with the Prime Minister for about an hour in late 1965 and to discuss with him the problems that faced Israel, particularly the coming confrontation with the Arab States. I was deeply impressed with the grasp this man had of the problems of the world and of his own country. My thoughts went back to the founding of our own Nation. At the time the United States was founded, at the time we developed our great Constitution, we had a population about that of Israel now.

We have all wondered, as we read our own history, how a small country could have assembled such a group of leaders and thinkers as we did at that time.

I reflect in the same vein on Israel. I have wondered where in the world today could a small country the size of Israel, not more than a couple of million people, the size of a small U.S. State now, have developed such a brilliant constellation of leaders. And none of them in the constellation has shown more brightly than did Prime Minister Eshkol. We all mourn his passing.

Mr. REID of New York. I thank the gentleman from Maryland.

I yield to the gentleman from New York (Mr. PODELL).

Mr. PODELL. Mr. Speaker, I, too, would like to join with my colleagues, with the great Speaker and the gentleman from Massachusetts, who spoke so eloquently on behalf of a dear, departed, free-world leader, Prime Minister Levi Eshkol. The free world shall suffer an irreparable loss in the passing of this man, who was a strong force in the preservation of democracy in the Middle East. People the world over will mourn this loss. We only trust that the State of Israel will continue in its efforts as a bulwark of democracy in the Middle East and that very soon we will have a lasting peace in that troubled region.

Levi Eshkol was a man with a dream and he was fortunate during his lifetime to see most of his dream turn into reality.

As a boy, first in his native Ukraine and later in Vilna, Poland, he wanted to go to Palestine, the promised land, to work on the land of his forefathers and to build a new Israel. He was active in the Zionist movement attending the internation congresses which organized the first efforts at settlement in Israel. As a young soldier he fought with the Jewish Legion of the British Army in World War I against the Turks. He later used his military knowledge in the formation and organization of the Haganah, the forerunner of the Israeli defense forces. After the war, Eshkol helped found Degania Beth Kibbutz and was able to watch not only the growth of his home agricultural community but to see the establishment of the kibbutz system as a foundation stone of the Israeli economy.

Levi Eshkol was recognized as a world authority on collective farming and cooperative communities. His involvement in the labor movement and the Mapai political organization led to his active role in the Israel Government and to the positions of leadership for which he was so eminently qualified. In the fields of agriculture, economic planning, and financial organization, Levi Eshkol was without peer. His one unfulfilled dream was for peace.

Perhaps his greatest tribute was that he was chosen to lead his nation. Israel is a dynamic and vital state. Its people are inventive and courageous and the leader of such a nation must encompass all the qualities which contribute to its greatness.

This earth has known few great men. Levi Eshkol, pioneer, soldier, farmer, and statesman, was a great man.

Mr. REID of New York. I thank the gentleman from New York.

I yield to the distinguished gentleman from New York (Mr. HALPERN).

Mr. HALPERN. Mr. Speaker, we are deeply grieved at the death of Prime Minister Levi Eshkol. He was a true builder and leader of Israel. His whole life was dedicated, until his final hour, to Israel's revival as a sovereign land.

Levi Eshkol was a man of the people.

He was an architect of Israel's democracy. He was a symbol of truth, justice, and human dignity. His death is a loss to Israel and to freedom-loving people everywhere.

Mr. REID of New York. I thank the gentleman from New York.

I yield to the distinguished gentleman from Florida (Mr. PEPPER).

Mr. PEPPER. Mr. Speaker, I thank the able gentleman from New York for permitting me to join with him and my colleagues in an expression of profound sympathy to the families of the departed distinguished Prime Minister of Israel, Levi Eshkol, to the Government and people of Israel, and to people all over the world who believe in the cause of freedom which the people of Israel have so nobly espoused in that small but great land.

I had the privilege of being with my wife in Israel in January of last year.

I had the honor and opportunity of seeing at first hand what this great man was doing in the leadership of his country in this crucial period of his nation's history and in the cause of freedom all over the world. His death comes at a time when Israel is beset by many dangers and is confronted by many crises and has many problems to confront, but I am sure, Mr. Speaker, that the courage which was responsible for the establishment of this great new star in the constellation of states, and which has sustained this country up to this moment and made it capable of momentous achievements, and their abiding faith in the God they have so long worshiped and served will sustain these noble and gallant people of Israel in this other hour of crisis, and that they will emerge stronger than ever before and will go forward to attaining greater victories in the cause of liberty and freedom than have yet crowned their renowned country.

Mr. REID of New York. Mr. Speaker, I thank the gentleman from Florida.

I yield to the gentleman from Pennsylvania (Mr. FLOOD).

Mr. FLOOD. Mr. Speaker, I thank the gentleman from New York for yielding to me.

In this hour of tragedy for the people of Israel, my mind goes back to Easter week of the year 1945. At that time I had the honor of serving upon the great Foreign Affairs Committee of the House under the beloved Sol Bloom of New York who was then its distinguished chairman. At that time I introduced in the House—at the same time as the late beloved Senator from New York, Bob Wagner, introduced it in the Senate—what was known as the Israel Resolution, the Flood-Wagner resolution. In that resolution, which was passed by the Congress, we declared this Congress in favor of the creation of a free and independent nation in Palestine to be known as Israel.

This soon came about, and after this new nation was established, I was invited by that country and by its congress—which they called the Knesset—to appear representing our country at the first session of the Knesset.

Down through the years this Nation and this House have looked with favor and with protection and with pride upon the creation, the birth, and the development of this great little country, Israel, and its people.

So today I join with my colleagues in the House in extending a deep and heartfelt sense of tragedy in this great loss of their great and well-known Premier Levi Eshkol.

Mr. REID of New York. Mr. Speaker, I thank the gentleman from Pennsylvania.

I yield to the gentleman from New York (Mr. McCARTHY).

Mr. McCARTHY. Mr. Speaker, I thank the gentleman from New York for yielding.

I join with my colleagues in expressing the profound sympathy of Mrs. McCarthy and myself to the family of the great and distinguished Prime Minister of Israel, Levi Eshkol.

This is a tragic loss for Israel and it is a tragic loss for the whole world, because Mr. Eshkol was a powerful force for peace and reason in the Middle East. And he was courageous in expressing his views on peace. It is a great loss that this influential spokesman will not be with us in furthering the urgent cause of peace in the Middle East.

Israel will miss this man, the United States will miss him, and the whole world will miss him.

Mr. REID of New York. Mr. Speaker, I thank the gentleman from New York.

I yield to the gentleman from Tennessee (Mr. KUYKENDALL).

Mr. KUYKENDALL. Mr. Speaker, today the whole world mourns the loss of a great and compassionate leader in the sudden death of Israel's Premier, Levi Eshkol. His death in this critical time of history is indeed a tragedy for his own country and for all the people of the Middle East.

Levi Eshkol was truly one of the outstanding statesmen of our time. In spite of years of armed conflict between Israel and the Arab Nations, actual out-and-out war involving the whole world has been kept at a minimum due to his tact, his determination to avoid war and his genius at inspiring his people.

I join with the people of Israel, Jews throughout the world, and all people of good will in mourning the loss of this great and good man. No greater thing can be said of him than those all-powerful and all-encompassing words, "He served his fellowmen."

Mr. REID of New York. Mr. Speaker, I thank the gentleman from Tennessee.

I yield to the gentleman from Illinois.

Mr. YATES. Mr. Speaker, I associate myself with the remarks of the distinguished gentleman from New York and my other colleagues who have indicated their grief at the loss of the Prime Minister of Israel, Mr. Eshkol.

Almost two centuries ago, Edmund Burke stated:

> Men are much more important than measures.

A great leader gives his people real political and spiritual maturity. He lifts their eyes to great objectives, and makes them oblivious to the distance and difficulty of their attainment. He gives the ideals of democracy color, clarity and vividness, a dynamic quality, which elevates them and inspires them. Such a leader was Levi Eshkol.

A simple man possessing the great virtues, he assumed the highest office within the gift of his people to give and wrote an imperishable page in history as a noble leader. His wisdom, his commonsense, his humility, his perception endeared him to his people. He united them in their moment of greatest peril and his courage and insights brought them to a safe shore.

His loss is particularly poignant at this critical time when strife still separates Arab and Israeli. Eshkol looked to the day when in the land of the Bible swords would be beaten into plowshares and war would be made no more.

His memory will be cherished by all who love peace, freedom and humanity.

Mr. RIVERS. Mr. Speaker, will the gentleman yield?

Mr. REID of New York. I am happy to yield to the distinguished chairman of the Committee on Armed Services.

Mr. RIVERS. Mr. Speaker, I should like to associate myself with the remarks of the distinguished gentlemen who have spoken.

I visited with the distinguished gentleman as an ambassador, and I have had a firsthand view of this great country and of its people, as well as this fine leader who has now had an untimely death.

It is a serious blow to the aspirations of all peace-loving peoples. It is a world loss. He was a great friend of our country.

Mr. REID of New York. I thank the gentleman.

Mr. RYAN. Mr. Speaker, will the gentleman yield?

Mr. REID of New York. I yield to the gentleman from New York (Mr. RYAN).

Mr. RYAN. I thank the gentleman for yielding.

Mr. Speaker, I wish to join my colleagues in this expression of grief and sympathy on the tragic loss of Premier Levi Eshkol of Israel. The news of his unexpected death at the age of 73 comes at a time when all of us are deeply concerned about the security of the State of Israel and about the necessity for the achievement of peace in the Middle East. Certainly no one was more devoted to that end than the Premier.

Premier Eshkol brought outstanding qualities of leadership and integrity to the Government of Israel and his death is a tragic loss for the people of Israel whom he so effectively led. As the second head of State in Israel's 21 years as a nation, Premier Eshkol led his country during the 6-day Arab-Israel War of 1967, when Israel repulsed an unwarranted attack by her Arab neighbors. His leadership then was crucial, and his subsequent efforts to bring peace to the Middle East established his reputation as a strong and compassionate leader.

Premier Eshkol came to Palestine at the age of 13 and participated in the great events that led to the founding of the State of Israel. He served his nation as a member of Parliament before succeeding David Ben-Gurion as Premier in 1963. As one who has consistently supported Israel's efforts to achieve security

for herself and for the Middle East, I offer my deepest sympathies to the people of Israel at this time of mourning, and pay tribute to an outstanding leader who faithfully and effectively served his country as its head of state.

Mr. TIERNAN. Mr. Speaker, will the gentleman yield?

Mr. REID of New York. I yield to the gentleman from Rhode Island.

Mr. TIERNAN. I thank the gentleman for yielding.

Mr. Speaker, I want to join my colleagues and to be associated with the fine remarks of my distinguished colleague from New York at this time of tragedy to the State of Israel.

Mr. REID of New York. Mr. Speaker, Prime Minister Eshkol was a man of great warmth, of vision, of strength. He had a unique capacity to resolve differences. His contributions in personal terms and in agriculture, in finance, in defense, and perhaps above all through statesmanship and working toward an abiding and lasting peace, are very real and will provide, I believe, significant foundations for the future.

I join with all Members in expressing my deepest sympathy to Mrs. Miriam Eshkol, to other members of the family, to the people of Israel, and to the President and the State of Israel.

Mr. VAN DEERLIN. Mr. Speaker, with the death today of Premier Levi Eshkol, Israel has lost one of her greatest champions in what is perhaps her time of greatest need.

Like the nation he headed, Mr. Eshkol was a study in versatility, having served at various times in top posts in the ministries of defense, agriculture and finance before becoming premier in 1963.

It is my fervent hope—and expectation—that Israel now will be able to rally around her new national leaders in the trying days that lie ahead, for she is threatened as never before in her 21-year history by her hostile neighbors.

I personally am confident that Israel, as she has so often done in the past, will come through this latest crisis with colors flying. The brilliant leadership provided by Mr. Eshkol, and his predecessor, David Ben-Gurion, will be carried on by the new government to be selected after the mourning period for Mr. Eshkol.

For there is no shortage of talented statesmen in Israel. And the dedication of her leaders and people to the preservation of this gallant nation will, in my opinion, transcend any of the political differences which her enemies doubtless hope will now divide Israel.

Mr. ROSENTHAL. Mr. Speaker, I am grieved to hear the news of Mr. Eshkol's sudden death. Levi Eshkol was a man whose wisdom and judgment helped prevent another round in the Middle East war. Although tensions remained high in recent months, Mr. Eshkol was an ardent supporter of mediation efforts and a just settlement with the Arab countries.

Mr. Eshkol was a master at conciliation. He achieved political compromises where others could not. Mr. Eshkol never lost sight of his overriding goal and the overriding goal of his country: an Israel whose political sovereignty and territorial integrity remain intact and respected by her neighbors. Although less fiery than his critics may have desired, he was resolutely determined to achieve peace in the Middle East.

Both Mr. Eshkol's political flexibility and his commitment to Israel's security were evident in his interview appearing in the February 17, 1969, issue of Newsweek. He stated:

> The present cease-fire lines will not be changed except for secure and agreed lines within the framework of a final and durable peace. We must discuss new borders, new arrangements.

But he also was reported as saying that Israel was flexible about every aspect of a peace settlement except that she was determined to keep the Golan heights in Syria and all of Jerusalem and to have troops stationed along the Jordan River and at Sharm el Sheik.

Eshkol was not only a patriot, he was also a realist. In the midst of a political fight, he would consistently be the man to find the one common strand of agreement.

An outstanding leader is now dead; it is not only Israel's loss, but the world's as well.

Mr. MURPHY of New York. Mr. Speaker, the world today mourns the death of a great man.

Premier Levi Eshkol, only the second man to head Israel's Government during the Jewish State's turbulent 21-year life, was a politician's politician, a brilliant man and a friendly man.

His death at the age of 73 after a heart attack robs not only his nation and the turbulent Middle East but the world of his calm wisdom in a time of intense crisis.

A native of the Ukraine, Eshkol came to Palestine at the age of 13 and was active in the Jewish labor movement and the Haganah army which fought for the establishment of Israel. From Israel's founding in 1948, he served first as Director-General of Defense, then as Agricultural Minister and from 1952 to 1963 as Minister of Finance.

Eshkol succeeded David Ben-Gurion as Premier in 1963 and headed the Government during Israel's lightening victory over the Arabs in the June 1967 war.

I had the great honor to personally meet with Premier Eshkol. His loss, therefore, is a particular loss to me and I mourn with great sadness the death of a warm and gracious friend.

Mr. DULSKI. Mr. Speaker, the passing of Premier Levi Eshkol of Israel is a great blow not only to his home State of Israel but to the entire free world.

The second man to head the Government of Israel during its 21-year life, Premier Eshkol had won high respect for himself and for his people.

Several of my friends in Buffalo, N.Y., who have visited Israel, have told me of the wonderful work which he was doing for his countrymen.

He was Premier since 1963 and became known as a politician's politician. Premier Eshkol had the great ability to compromise policy disputes and to bring harmony when it was most needed.

The sudden passing of Premier Eshkol, after he had appeared to have recuperated fully from an earlier heart attack, is a great loss to the cause of Israel.

Mr. HOLIFIELD. Mr. Speaker, I was greatly saddened at the news of the untimely passing of the Premier of Israel, Levi Eshkol. His death at a time when steady hands are needed in Israel and other countries of the Middle East raises new and serious dimensions of concern for the United States. I was also surprised to learn that the official representative of the United States at Mr. Eshkol's funeral would be the Secretary of Health, Education, and Welfare of the new administration. I believe that this implies an inadequate level of support for an important ally in an important area of the world. President Nixon must, of course, accept the responsibility for this level of representation.

Mr. Speaker, no one wants more than I do to see the establishment of an enduring and stable peace in the Middle East at this time. The road to such peace, however, is a long and tortuous one with few shortcuts available to us or to the immediate parties of the conflict. The imposition of a two-power or four-power settlement would hardly lead to an enduring peace; the most enduring and stable arrangement will have to be found by a face-to-face meeting of the Arab nations with the leaders of Israel.

The fortunes of the United States and Israel are inextricably linked in the Middle East. At this time, although we have interests in other Middle Eastern nations, we have no firm allies there other than Israel. I do not accept this situation as a permanent one, nor should it be accepted as permanent. While the Arab nations have been rallied into a superficial alliance and goaded into a brothers-in-arms spirit by Nasser of Egypt, several of these Arab nations realize that Nasser has led them down the path to ignominy and defeat in the past and may do so again. The Soviet Union has begun to realize the heavy price of dealing with fanatics, and it is no coincidence that the Soviets have taken a cautious approach in moderating their re-arming of the dangerously provocative leader of Cairo. Ultimately the other nations of the Arab bloc will realize that there is more to be gained by stabilizing relations with Israel than there is to be gained by maintaining a continuing state of mutual terror and fear.

A further consideration which concerns me is the diminishing stature of the United Nations as a source of stability and reconciliation in the Middle East. At present, the U.N. enjoys the confidence of none of the parties in this tragic situation. This is not entirely the fault of the United Nations membership as a whole. It is the fault of the major powers which dominate the Security Council and who do not find it in their interest to push for an effecetive U.N. role in the Middle East. While the negotiations which will be necessary must be between the Jews and the Arabs, there is much that the U.N. could be doing to set the stage for such talks.

Finally, I would say this word to our allies in Israel: the United States is a huge and powerful nation, not to be forced into confrontations by its smaller allies' reckless or ill-timed actions. New leadership now comes to the fore in

Israel. Since we are firm allies, there must be a spirit of communication and consultation in our relations, not a spirit of fait accompli. The Beirut airport incident was a fait accompli. We will not be pulled by the tail into a dogfight in the Middle East; by the same token, we will not permit our tail to be stepped on or twisted by the fanatics in Cairo or those circles in the Soviet which are playing games in the already troubled waters of the Middle East.

Mr. ADDABBO. Mr. Speaker, the world has lost a statesman with the untimely death of Israel's Prime Minister Levi Eshkol.

A farmer, Levi Eshkol, became an economic expert for the Israel Government prior to his selection as Prime Minister. One of the earliest pioneers of the Jewish state, Eshkol was liked by all political factions and was able to form a united government for Israel.

He was a man who loved people—an unassuming man but a leader of great vision. Not a military-oriented man, he was able in January 1968 to successfully negotiate the purchase of 50 Phantom supersonic jets from then-President Lyndon B. Johnson. Levi Eshkol led his nation during the Israel victory in the 6-day war but turned his attention quickly to the search for a lasting peace in the Middle East.

He was candid and open as a diplomat. Just 3 weeks ago in an interview for Newsweek magazine, he said that he would "go to Cairo tomorrow" if Nasser would discuss peace.

Mr. Speaker, we have lost a man of the people and a compassionate leader. For the sake of world peace, I hope the people of the Middle East and the leaders of nations in that troubled area will not let Levi Eshkol's search for peace go unfinished.

Mr. MIKVA. Mr. Speaker, I rise to join my colleagues in mourning the passing of Premier Levi Eshkol of the State of Israel. His kind of leadership is always in short supply. In these trying times—trying most especially for Israel and her people—Levi Eshkol's compassion and understanding were most needed. As the New York Times said of Mr. Eshkol yesterday, despite his tumultuous political career he "remained a conciliator at heart, a gentle man who seemed the least likely person to lead a nation into the most spectacular triumph of its two-decade history, the 1967 war."

In 1963 when Levi Eshkol succeeded David Ben-Gurion, to whom he had been a top aid in the early 1960's, he became only the third premier in Israel's history. During the days of increasing tension in 1967, and during and after the 6-day war, Mr. Eshkol guided Israel with dignity and restraint. Both for David Ben-Gurion and later for himself, Mr. Eshkol proved himself the master of concilliation, reconciling seemingly irreconcilable factions to keep a strong and viable government together.

It is appropriate that the Israeli Government has chosen to allow Levi Eshkol, the first premier to die in office, to be buried on Mount Herzl, named for the father of Zionism, with the founders of the nation which he helped to lead.

Mr. RODINO. Mr. Speaker, I was deeply saddened to learn of the death of Prime Minister Levi Eshkol, of Israel, and I want to pay tribute to the memory of this great world leader.

Levi Eshkol was Prime Minister of Israel since 1963, but before then he had achieved a magnificent record of service and dedication to his chosen land. He came to Israel in 1913, before this bastion of democracy in the Middle East was established as an independent state, and he had a valiant and vital role in the long struggle for statehood and economic development of Israel. As Prime Minister during the perilous years when Israel's very survival was at stake, he led his people with wisdom, courage, and firm determination, never doubting the outcome. Yet throughout these difficult times he maintained a calm and moderate outlook, seeking only to assure the integrity of Israel and to find a just solution that would bring peace to this most troubled area.

The passing of this unique man is a loss to the whole world and to the cause of freedom and peace. But he has left a wonderful heritage of statesmanship, humanitarianism, and courage to guide his people and the leaders who must now carry on.

Mr. BURTON of California. Mr. Speaker, the death of Prime Minister Levi Eshkol is a cause of sorrow for the people of Israel. It is also a loss to the world which looked to his capable leadership and his strength to maintain the peace in the Middle East. While the people of Israel will mourn for him, they are also keenly aware of the potential threat which the untimely death of this great man may present to them.

Prime Minister Eshkol fought to establish his nation and served its people in various positions of responsibility since 1948. Since 1963, when he became Prime Minister, he has used his plentiful talents to preserve and protect Israel and to defend her people. His death is a great loss and cause for sadness.

It would be tragic, indeed, if Israel's Arab neighbors should, in the transitional period that must follow this loss, enter into a reckless military adventure. For while attention may be diverted to the political realm in Israel and differences may exist, as they must in any healthy democratic society, there is a common bond, a common cause, a common dedication to the preservation of Israel which transcends all other considerations which face her people. It would be folly for anyone to misjudge this.

The people of Israel have lost a leader who served them well. They have lost a man of strength but their strength is not alone in their leaders but in themselves, in their faith in their destiny, and in their love of the Israel which Levi Eshkol helped to conceive and which he served until his death.

Mr. WOLFF. Mr. Speaker, all men of good will mourn the passing of Levi Eshkol, the late Premier of Israel. During the past 6 years Mr. Eshkol provided Israel with dynamic, constructive leadership that was as committed to peace as it was to the preservation of his homeland.

It was Mr. Eshkol's enduring devotion to his homeland that reminds me of our pioneers of the last century. Premier Eshkol migrated to Palestine at an early age and the rest of his long and productive life involved him in the founding and then the development of Israel. Like the great men that made our country what it is, Premier Eshkol and his fellow countrymen set out to build a healthy, viable, free nation in which all peoples could live under democratic order.

The establishment of Israel and its subsequent development in the midst of hostility required men of restraint and strength, diplomacy and forthrightness. Premier Eshkol embodied these qualities and had special skills as an economist and administrator.

Especially striking was the late Premier's desire to reach a lasting peace agreement with Israel's neighbors. Mr. Eshkol's desire for peace was as strong as his desire to see Israel survive as a viable nation.

Levi Eshkol understood the meaning of being in the Middle East during a most crucial period in that historic part of the world. He was a strong adherent to the democratic principles of the Western World and was a friend of the United States and the other free nations of the West. He was our ally in resisting the intrusion of communism into the Middle East and at the same time sought to preserve the unique character of that part of the world.

My condolences go the Premier's family and his countrymen with whom we share the loss of this able servant of freedom.

Mr. MORSE. Mr. Speaker, the passing of Prime Minister Levi Eshkol is a cause for sorrow for the people of Israel. As his successor, Mr. Allon said:

> He was a man of the people who remained one of the people. We have lost a brother, a friend and a leader.

His death is also a loss to the world which looked to his strong and capable leadership in dealing wisely with the tense and complex problems facing Israel and in maintaining peace in the Middle East.

His life encompassed and paralleled the entire history of modern Israel, from the reclaiming of the desert wastes, through 20 years of striving for statehood, to its achievement in 1948. As a fighter, farmer, union leader, and foreign envoy he worked for the creation of the state, and then led it through its formative years as he rose to become Minister of Agriculture and Development, Minister of Finance, and, since 1963, Prime Minister.

His love for his country and his desire to live in peace was resolute. Levi Eshkol was a patriot, yet a realist; a strong and decisive statesman, yet a master at conciliation in the most difficult political issues. His total commitment to the welfare of his nation did not preclude the political and diplomatic flexibility vital to working amid high tension toward the peaceful settlement of the complex problems of the Middle East.

I am glad to note that those who are now faced with the continuing and awesome responsibility of preserving the security of Israel and peace in the Middle

East have agreed to maintain his policies. We who are concerned with and dedicated to the integrity of the Israeli nation, peace in the Middle East and in the world, will continue to uphold the goal of peaceful settlement that Mr. Eshkol so deeply hoped for. As former Supreme Court Justice and U.S. Ambassador to the United Nations, Arthur Goldberg, recently said:

> Our renewed efforts to create . . . (a) just and lasting peace in the Middle East . . . would be the finest memorial to Levi Eshkol.

Mr. TUNNEY. Mr. Speaker, I wish to express my profound sorrow at the passing of Israel's Premier Levi Eshkol. It is a rare event in history when the passing of one man marks the end of an era. Such a moment was exemplified last week when the world was saddened by Levi Eshkol's death. Israel's leader was a man of great strength yet his humble beginnings ingrained in him an understanding of and compassion for his fellow man. Premier Eshkol valued reason above emotion and understanding above hate.

Walter Lippmann once said:

> The final test of a leader is that he leaves behind him in other men the conviction and the will to carry on . . . . The genius of a leader is to leave behind him a situation which common sense, without the grace of genius, can deal with successfully.

Levi Eshkol passed both of these severe tests of leadership. Coming to power in a demanding and difficult situation, he acted with restraint and commonsense where others might have precipitated total conflict.

It is clear that the Middle East is in the throes of great turmoil and the memory of the restraint of Levi Eshkol must serve to illuminate a path toward peace. To say that the task of Israel's new generation of leaders will be difficult and perilous would be an obvious understatement.

Walter Lippmann said further:

> Surely the task of statesmanship is more difficult today than ever before in history. . . The distance between what we know and what we need to know appears to be greater than ever. . . . Nor can we keep to the problem within our borders. Whether we wish it or not we are involved in the world's problems, and all the winds of heaven blow through our land.

Let us here in the United States heed these words in our search for world peace and in our world involvement let Levi Eshkol's memory of restraint and commonsense serve to illuminate our path.

Mr. MATSUNAGA. Mr. Speaker, we in the United States felt a particular sadness upon hearing of the death of Levi Eshkol, Prime Minister of the State of Israel. Mr. Eshkol was a friend of the United States and of all freedom-loving peoples throughout the world. He served his nation through trying times, from the birth of the state in 1948, through three wars, through an unprecedented period of economic growth, through international crises, and during the time of mass immigration of disfranchised Jews from everywhere. The era of Levi Eshkol and his fellow countrymen, an era indelibly marked in history as one of great achievements, is one that will remain in the memory of men as a time of heroic deeds.

But Levi Eshkol was not the usual hero type; he was a quiet man, with a sense of humor and a deft grasp of the art of statesmanship. Presented with the alternatives, he did not waiver or hesitate, but made a firm decision, which usually proved to be the right one. He was at once a man of one-word answers for complex problems of state and of the rambling jokes he loved so well, often told in his favorite Yiddish vernacular. To an opponent in the Knesset, Eshkol was a formidable debater, and to a small child in a Kibbutz, he was a lost grandfather. He could calculate with equal ease the amount of financing necessary for an irrigation project or the amount of water needed for one tree. Levi Eshkol was a pragmatist with a state budget and a dreamer when discussing the future of his nation and his people.

Let those who would honor Levi Eshkol remember that the greatest monument which can be erected to his memory is the continued existence of the State of Israel. The people of Israel have lost their Prime Minister, but the people of the world have lost an advocate of peace.

Mr. KOCH. Mr. Speaker, Levi Eshkol, a prince of Israel, has died. He died in the service of his people, a people having a tradition going back 5,000 years. Understandably, there is pain in the breasts of those who loved him, and this would not be limited to his immediate family but encompasses the Jewish people all over the world. The Jewish religion particularly comforts in a time of bereavement. We are enjoined from grieving at a time of death, because we believed good men live on by their works and through their children; and in his case, he lives on in the hearts of the entire Jewish people, who thought of him as a father. There is a Talmudic statement oft quoted which goes as follows:

> From Moses to Moses, there is no one like Moses.

Undoubtedly, the name of Levi Eshkol in generations to come will be similarly revered.

Those of us in this 91st Congress, Jew and gentile, who wish to make certain that the dream of the sages in ancient Babylon poignantly stated more than 2,000 years ago, "If I forget thee O Jerusalem, let my right hand forget its cunning," must in this generation never forget the safety of Jerusalem and the people of Israel.

Mr. COHELAN. Mr. Speaker, the State of Israel suffers a dreadful loss in the death of its revered Prime Minister, Levi Eshkol. He exemplified not only the highest qualities of leadership but also the abilities of a master craftsman in the art of government, and he will be sorely missed in the world community.

From the time he came to Palestine as a young student in 1913 till his death at the age of 73, Levi Eshkol worked courageously and effectively on behalf of the land, the nation, and the people he loved. As a soldier in the Jewish Legion, as Director General of the Ministry of Defense, as Minister of Agriculture and Development, as Minister of Finance, and finally as Prime Minister, he mastered the intricacies of establishing and governing the new nation of Israel.

Throughout Israel's challenge and travail Levi Eshkol was unwavering in his steadfast dedication to the betterment of his people and to all of humanity. In the face of the hostile forces which have surrounded Israel, he remained calm, confident that the cause of his beloved country is just. He has not feared to negotiate, but he has been firm in his insistence that the security, integrity, and independence of Israel are not negotiable.

The United States has lost a great friend and understanding ally. The world is poorer for the passing of a proud and compassionate leader. I join with my colleagues in Congress in extending to the people of Israel my most sincere sympathy. The Kaddish intoned around the world testifies to the fact that we all share their grief.

Mr. CAREY. Mr. Speaker, from the day in 1913 when he first arrived in Palestine, Levi Eshkol was a man of the soil. His first home was on one of the agricultural settlements that were striving to build a refuge for the lost and homeless Jews of the world. He learned early that the land of Israel was a harsh master, for the struggle to make the land productive and fruitful required more than just work—it demanded a devotion and determination often beyond the capabilities of most men. Those first pioneers in Israel were men and women with a vision of a new land—a new land to be built at all costs on the decayed ashes of a pledge made centuries before by a downtrodden people.

The lessons of those laborious years were not wasted on the young Levi Eshkol. He was to remember that whatever was worth having, was worth working for. The rewards did not come early nor quickly, but with patience, dedication, and effort.

As Minister of Finance for his nation, he established goals for the economy and Israel reached them, despite the fact that no other nation in history had ever achieved such heights in development so quickly. The dream and the reality were somehow merged in Levi Eshkol. He saw the dream and turned it into the reality.

As the Prime Minister of Israel, Levi Eshkol's leadership qualities were all the more evident. Under his guidance, the Israelis withstood the Arab challenge of 1967, and emerged from the battle unscathed and victorious. Until his final moments, Levi Eshkol was searching for the elusive Middle East peace which would have freed his nation from the burdens of defense and turned its full efforts toward the development not only of Israel, but of the whole region.

To the people of Israel, we in the United States extend our most heartfelt condolences at the loss of their great statesman. We share, in part, their loss, for Levi Eshkol was our friend and a champion of freedom for all men.

Mr. MINISH. Mr. Speaker, I rise to express my profound sadness at the death of a great leader of the free world, Premier Levi Eshkol, of Israel, Premier Eshkol, a brilliant man who dedicated his life to the preservation of peace and to the development of Israel, will be sorely

missed, not only by his brave countrymen, but by people the world over who shared his belief in democracy and freedom.

As a young man, Levi Eshkol felt persecution in his native Russia and settled in Palestine in 1914. After the establishment of the State of Israel in 1947, he rose quickly to a well-deserved position of influence and power in the new Government. As Minister of Finance from 1952 to 1963, Eshkol became the driving force behind his nation's phenomenal economic growth and development. Since 1963, when he rose to the position of Premier, Levi Eshkol has provided Israel with strong and resolute leadership during its most trying and crucial years.

Mr. Speaker, the tremendous achievements of Israel over the short span of two decades will stand as a lasting monument to Levi Eshkol's inspiring life. He lived to see his adopted homeland transformed from a barren desert to a thriving, free society, populated by hard-working and courageous citizens. We all pray that his last dream—that Arabs and Israelis might someday prosper together as peaceful neighbors—will soon come to pass. Mrs. Minish joins me in offering sincere condolences to Premier Eshkol's wife and children.

Mr. GIAIMO. Mr. Speaker, we were all shocked and saddened by the sudden and untimely death of Prime Minister Levi Eshkol. I join with my colleagues in Congress, and men of good will everywhere in mourning the passing of this great statesman and respected world leader.

Prime Minister Eshkol devoted 60 years of his life to the service of his country. At the age of 13, Mr. Eshkol left his home in Eastern Europe and journeyed to Palestine in search of a new and better life. As he worked and learned and grew into manhood, his leadership abilities became apparent. Zionist leaders recognized these abilities and employed his talents in promoting a Jewish homeland both at home and abroad. He did his work well and was instrumental in the fulfillment of the age-old dream of a free and independent Jewish State of Israel. With independence a reality, he continued working untiringly to insure the success of Israel as a member of the world community.

Mr. Eshkol succeeded Prime Minister David Ben-Gurion in 1963 and led the State of Israel through one of the most treacherous periods of its existence. During the 1967 crisis, Israel was threatened with annihilation by her enemies. His calm and courageous leadership gave strength to his people throughout the crisis and Israel was preserved.

Under the leadership of a lesser man the Middle East situation might have exploded in a massive conflict. A conflict which could have ultimately involved the nuclear powers. For this alone the world is truly in Levi Eshkol's debt.

Mr. Speaker, his loss will be sorely felt, not only by the people of Israel, but by the people of the world. Let us hope that Mr. Eshkol's successor will possess the same fine qualities of patience, restraint and wisdom that made him such a great and respected leader.

GENERAL LEAVE

Mr. REID of New York. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to revise and extend their remarks on the passing of Premier Levi Eshkol.

The SPEAKER. Is there objection to the request of the gentleman from New York?

There was no objection.

Mr. REID of New York. Finally, Mr. Speaker, if there are one of two sentences which might be quoted from the late Prime Minister, perhaps it would be appropriate to quote from a recent interview reported in Newsweek. I believe this is worth thinking about for the future.

Prime Minister Eshkol said:

> Let me say, clearly and unequivocally, there will be no return to the situation preceding the June war. The present cease-fire lines will not be changed except for secure and agreed lines within the framework of a final and durable peace.

Let it be the hope of this House, in expressing our sympathy to the people of Israel, that indeed there will be meaningful progress toward a real and lasting peace.

PROPOSED MANDATORY PRISON SENTENCE TO PERSON CONVICTED OF FELONY WITH A FIREARM

(Mr. MONAGAN asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. MONAGAN. Mr. Speaker, today I am introducing legislation which I believe to be an important adjunct to the Gun Control Act of 1968; namely, a bill to provide an additional mandatory prison sentence to any person convicted of committing a felony with a firearm.

While I do not advocate that these stricter penalties for felons who commit crimes with firearms be a substitute for regulations which make it more difficult for potential criminals to purchase firearms, I do think that having expressed our desire to reduce the alarmingly high incidence of crimes perpetrated with guns in this country through the Gun Control Act of 1968, we should implement the force of this law by imposing an additional period of punishment for a felon's use of a firearm to commit his crime.

Although the Gun Control Act of 1968 may well cause some reduction in the incidence of gun-related felonies, we need only read the newspaper each morning to comprehend the extreme urgency to find some means of penalizing the use of firearms by persons intent on committing a crime. The amendment which I propose provides such means.

I have in the past expressed my deep concern for the alarming increase in the incidence of crime in this country. On February 5, 1969, I introduced House Resolution 220 to establish a Committee on Coordinated Crime Control as a select committee of the House to coordinate efforts on the part of the enforcement officials at the different levels of government.

At that time I warned, and I repeat that warning today, that we must place our faith in democratic enforcement of the law, and we must also strengthen our efforts in the traditional form. Keeping that warning uppermost in my mind, I offer this bill today which will further strengthen anticrime efforts within the traditional democratic process.

This amendment to the Gun Control Act of 1968 contains two provisions which I expect to act as deterrents to firearms use.

A first offender under this subsection must be sentenced to at least 1 but not more than 10 years imprisonment, in addition to the penalty provided by the court for commission of such felony. A second offender under this subsection would, in addition to the penalty provided by the court for the commission of such felony, have to be sentenced to a term of imprisonment for not less than 5 nor more than 25 years. A court finding a person guilty of a second offense under this subsection would be prevented from suspending the sentence of such person, and the term of imprisonment imposed under the subsection would not run concurrently with the term provided for the commission of the principal felony.

While I intend this amendment to act as a deterrent to the resort of firearms by providing for additional penalties, I have intentionally refrained from making either provision inflexible in order to allow a sentencing judge to fashion the penalty, within reasonable limits in relation to the gravity of the offense, to the particular circumstances of each case. While imposing a 1-year minimum and a 10-year maximum on a first offender, I have refrained from putting any further limitations on the court of jurisdiction. A sentencing judge may, in the case of a first offender, provide anywhere from 1 to 10 years imprisonment, suspend the sentence, or give a probationary sentence. While for a second offender under the subsection the minimum sentence is 5 years imprisonment and the maximum 25 years, the sentencing judge may, in a proper case, utilize the probationary sentencing procedure.

I think my proposed amendment will do much to strengthen our anticrime efforts within the traditional democratic form, and will further protect law abiding citizens from those individuals in our society who choose to violate the public order by resorting to firearms to perpetuate their unlawful schemes.

I sincerely hope that this legislation will be given early and favorable consideration by the Congress.

AMBASSADOR EDWARD CLARK HONORED AT LAREDO AS "MR. SOUTH TEXAS OF 1969"

(Mr. KAZEN asked and was given permission to address the House for 1 minute and to revise and extend his remarks and to include extraneous matter.)

Mr. KAZEN. Mr. Speaker, for 72 consecutive years, the city of Laredo, Tex., has held a Washington's Birthday celebration honoring our Nation's first President. Of the many activities held during this historic occasion, one of the most outstanding events is the one honoring a citizen of south Texas and designating him as "Mr. South Texas" of the year.

The person selected to receive this honor is one who has made an outstanding contribution to the progress, growth, and development of this entire area. The recipients of this great honor and distinguished award have come from many fields—education, business, government, and civic affairs. A former distinguished Member of this House, the Honorable Joe M. Kilgore, is among those who have been so honored.

At this year's celebration, the honor and award went to one of south Texas' most illustrious sons, the Honorable Edward Clark, U.S. Executive Director of the Inter-American Development Bank. Ambassador Clark was cited for his contribution in various fields of endeavor. The presentation of the award was made at the President's luncheon on Saturday, February 22, 1969, by the popular mayor of the city of Laredo, the Honorable J. C. "Pepe" Martin, Jr.

The remarks made by Mayor Martin very eloquently describe the many and great contributions made by Ambassador Clark, and I insert them in the RECORD so that all may become aware of and take pride in the achievement of this great American.

Following the stirring introductory remarks made by Mayor Martin, the Honorable Edward Clark then addressed the President's luncheon, and in view of the distinguished career that this outstanding citizen has had and the great public service that he has rendered this State and his country, I also take great pride and extreme pleasure in inserting Ambassador Clark's remarks in the RECORD.

The addresses referred to follow:

REMARKS OF HON. J. C. MARTIN, JR., MAYOR OF LAREDO, TEX., PRESENTING HON. EDWARD CLARK—"MR. SOUTH TEXAS OF 1969"

Ladies and gentlemen, this tribute luncheon at which we have assembled today to honor a distinguished native son of Texas is a cherished privilege for the citizens of Laredo. It is our fervent hope that the occasion strikes an equally responsive chord within the heart of the man we honor today as "Mr. South Texas" of 1969—the Honorable Edward Clark of Texas, U.S.A.!

As I've sat here this afternoon and watched people from all walks of life challenge the capacity of our auditorium, the prophetic words used by Judge J. J. Ficher, of Beaumont, to describe the public's admiration and affection for his brother-in-law have never left my mind.

"Ed," the Judge counseled, "You'll always draw a crowd!"

That personal appraisal of the magnetic qualities of Edward Clark—his character and his effervescent personality—has been substantiated once again in Laredo today as the cascading current generated by this afternoon's affair has literally engulfed us.

As attested by his legions of friends and well-wishers here today—Ed Clark has proven in one fell swoop that he's no ordinary man.

And I'm confident those closest to him will testify that this was made possible by the fact that he is not, and has never been, a disciple of sophisticated and unrealistic standards, nor of unanchored senses of values. And I know that they—like we—take pride in the fact that his successes have accumulated from an undaunted faith in his fellow man, an unrequiting loyalty to those he calls his friends, and a near-reverent love for the people and the traditions that are part and parcel of his beloved State of Texas.

You may well ask on this occasion, what was the background and what were the traditions and circumstances that forged and blended in the character and talents of this lawyer—banker—citizen statesman? He was reared in the piney woods of East Texas among a citizenry who practiced the homely virtues and drew their strength from frequent contact with the bosom of mother earth. Their work and their worth were measured by their diligence and the development of faculties capable of the severest discipline and yet they possessed the saving grace of humor and drank deeply of the pure joys of generous friendships and mutual high enthusiasms. They were not prone to appear as "cock-sure" reformers leading quixotic crusades nor jump to hasty and ill-grounded conclusions—but in common walks, with clear seeing intelligence, the courage to act and the skill to perform, they advanced themselves, helped their fellow men and aided the state along the lines of enduring progress.

Of such men the poet sang when he eloquently wrote:

"And there is neither East nor West
Border, breed nor birth
When two good men stood face to face
Though they came from the ends of the earth."

Ed Clark was one of four children—two sons and two daughters—born to his parents, John David and Leila Downs Clark in San Augustine. The sole surviving man of his family, Ed, has always been and remains closely attached to his mother, who still resides in San Augustine, and to his two sisters, Mrs. Leola Clark Butts of San Augustine, and Mrs. Kathleen Clark Fisher of Beaumont.

We regret that circumstances prevented Ed's lovely mother from being with us on this proud occasion, but we are happy that his two sisters, with their husbands, are here and adding beauty and dignity to our program.

Ed has always been fiercely proud of the fact that his forefathers arrived in Texas in 1842, when Texas was still a republic. It is also a constant source of pride to him that he is one of 24 living members of the Order of San Jacinto, membership of which is restricted to people whose families lived in Texas between 1836 and 1848.

Early in life, Edward Clark determined to make law his vocation. Toward this end, he enrolled in Tulane University, at New Orleans, La., where he received a B.A. Degree in 1926. He later received his LLB from the University of Texas in 1928.

While at Tulane, Ed met a young lady destined to be the inspiration of his illustrious career. She was Anne Metcalf, who was born on a plantation owned by her grandparents in Washington County, Mississippi. Steeped in the tradition of the Old South and a beauteous Southern Belle in every sense of the term, Anne was a student at Sophie Newcomb College when she met her future husband.

A whirlwind courtship won Ed Clark his first important case: He and Anne, then just 18, were married December 27, 1927.

To this union was born one child, a daughter, Leila, who grew into a beautiful and charming young woman.

Leila re-established the family's affinity for the legal profession by wedding a then budding young attorney, Douglas C. Wynn, who successfully practices law in Greenville, Mississippi, where they make their home. Laredo is most proud to have them with us this afternoon and we know their presence makes our tribute to our honor guest complete.

Mr. and Mrs. Wynn have blessed the lives of the Ed Clarks with four grandchildren—three girls, Anne, Margaret, Martha and finally, a boy, Billy. And there's nothing their grandfather relishes more than raring back and telling all the world—Mississippi included—that they're sixth-generation Texans!

Ed Clark will be the first to admit that things were tough the first few years of his marriage.

"I borrowed $150 to get to Austin with my wife and baby to seek my fortune," Ed will tell you. He quickly follows up, though, with "I made it after I got there. The good things that have come to me cannot be forgotten!"

Admitted to the Bar in 1928, he began his career as County Attorney of San Augustine County and subsequently ascended to the positions of Assistant Attorney General of Texas; Administrative Assistant to Governor James Allred of Texas; Secretary of State of Texas; Special Assistant to the Attorney General of the United States, and Special Counsel to the Board of Regents of the University of Texas. The law firm he heads in Austin today—Clark, Thomas, Harris, Denius and Winters—is one of the most noted and outstanding legal firms in Texas. Throughout his varied and vast career in his chosen profession, Ed Clark pursued—the articulate principles of the law with the ardent conviction that the law is not alone the punishment of crime or preservation of property rights but reaches its pinnacle of perfection in the expansion and protection of the interests of humanity—writing its judgments clearly—so that neither shall the mighty crush the weak, nor shall the lawless destroy the law—but humanity shall ever be her abiding and guiding star.

Throughout his life—from the hard times to the good years—Ed's great love, next to his family, has been for the stage upon which he has spent most of his life—Texas. His loyalty and love for his state and his fellow Texans have continued to ripen with the years.

Ed paid his first visit to Laredo some 35 years ago when he accompanied the late Governor, James Allred, here for—appropriately enough—Washington's Birthday Celebration. And I'm proud to say that he's returned every year since for the celebration when circumstances have permitted.

We all know that Ed Clark's forte is personal—or person-to-person—relations. I cannot help but feel his exposure to the two blended cultures that he has encountered in Laredo and Nuevo Laredo impressed him with the fact that we Americans can live together, plan together and work together with other people for common goals and mutual benefits.

It is also my personal belief that Ed Clark knows—as do few non-border residents—the great potentialities and influences that Mexico's booming economy and cultural achievements hold forth to the people of Texas.

Ed has branded himself as a "tough businessman." This no doubt is true, but those close to him also describe him as an aggressive and progressive banker.

Aggressively jolly by nature and always anxious to develop new friendships, Ed has led many newcomers to laugh at his jokes and indulge in his reminiscences without being aware they were being studied by the cool, level, evaluating eyes as they peered behind the rimless glasses of a very shrewd man. Commanding those eyes is the brain that built the borrowed $150 "stake" into a personal fortune of several million dollars.

Ed's business acumen has won him the chairmanship of the Board of the Capital National Bank of Austin and the presidency of the First National Bank of San Augustine as well as directorships in the San Benito Bank and Trust Co., the Telecom Corporation of Georgetown, Red Ball Motor Freight, Incorporated of Dallas, and places on the Board of the University of Texas Law School

Foundation and Texas Southern University at Houston.

In between, Ed has found time to serve his country as U.S. Ambassador to Australia, as Federal Commissioner to HemisFair '68, and, of course, through his present duties with the Inter-American Development Bank.

Ed Clark's opportunity to apply his philosophy and talents to his country's foreign policies resulted from Australian Prime Minister Sir Robert Menzies' visit to Washington in mid-1966. Sir Robert urged President Lyndon B. Johnson to name as resigned Ambassador William C. Battles successor, "a close friend, someone you have confidence in—someone who can ring you on the telephone and get through to you." Sir Robert told the President, in answer to a question, "I think a Texan would be great—as long as he's a Texan who knows you very well."

"Mr. Prime Minister," President Johnson declared, "I've got your man!"

Edward Clark went to Canberra, as U.S. Ambassador, under a mandate from President Johnson to get to know Australia and Australians—not only in the area of officialdom, but in all walks of life.

With the help of a ready, capable and gracious workmate in his wife Anne, Ed Clark set out to fulfill his President's mandate.

Our friend in the land from Down Under had not long to wait to meet the new Ambassador. He had but shortly arrived when he initiated a new people-to-people diplomacy that broke all barriers to diplomatic contact. For the first time, he opened the American Embassy to all visitors and segments of the Australian people. He went forth through the Country to meet and talk with the people on their farms, in their fields, in their cities and their factories. He brought the advantages of the diplomatic service from behind the walls of the embassy directly to the people and within a short period had completely captured and captivated the hearts of all Australia.

During his service in Australia, Ed told a newsman, "In these days of big government and big publicity, it is easy to think that foreign relations are solely matters of official business. In a certain sense, government servants are the junior partners in the business of international understanding, because in free societies foreign relations are strongly in the hands of the people themselves."

I cannot help but believe that our Honor Guest's previous visits to Laredo, where he saw the Good Neighbor Policy practiced daily between the people of the two Laredos, helped form this political philosophy.

Returning to the U.S., fate maneuvered Ed into positions to serve another area of the world for his country, through his responsibilities as Federal Commissioner to HemisFair '68, and when he accepted the office of Executive Director of the Inter-American Development Bank.

HemisFair proved an excellent introduction to the family of Latin American nations, many of whose economies are closely tied with those of South Texas.

In naming Ed Clark as Executive Director of the Inter-American Development Bank, following the signing of the Organization of American States Treaty Amendment on April 23, 1968, President Lyndon Johnson told the assembled representatives of the American family of Nations present:

"I want to take advantage of this occasion to introduce all of you to a distinguished American who will be playing a key role in the days ahead in our relations with Latin America.

"The man I have reference to has just completed a tour of duty as our Ambassador to Australia. In that position, I believe that he learned and understood and knew more about the geography of that country, its resources and its people and had more interest in them than most ambassadors are able to display or to accumulate in that brief period.

"He did such an outstanding job that when I gave thought to the selection of someone as United States Executive Director of the Inter-American Development Bank, someone who I wanted to know the geography of Latin America, someone who I wanted to know the resources of Latin America, someone who I wanted to know the people of Latin America and to bring all three of these together in the way that the Inter-American Development Bank could play its major role and the United States of America could give its major contribution, I asked Ambassador Clark to take this assignment.

"The Bank, as you know, is the financial cornerstone of our Alliance for Progress.

"It gives me a great deal of pleasure to wish Ambassador Clark well in this new assignment and to say to our friends in Latin America that I don't know of an individual in this country who could or would or can or will display more interest in your problems or do more about helping you solve them." So spoke the President of the United States.

Such was the background of influences which were melted and moulded in the crucible of Ed Clark's character and genius, and such were the faculties that have endured throughout his eminent career. Such are the qualities that make him equally at home, at a country fireside or counselling a president; participating in the varied functions of our Washington's Birthday Celebration to which he has returned year after year, or directing with untiring zeal and profound judgment the intricate financial transactions of the Inter-American Development Bank; treating the winning jockey to a decanter filled with the best bourbon in Australia for winning the "Texas Handicap" which he initiated to the delight of the citizens of Canberra, or being toasted by his earliest critics in the diplomatic service whom he had completely converted into his most ardent admirers.

The man we honor today, though fiercely proud of his native home, is indeed a man of all regions. He possesses the rare gift of absorbing with delight and admiration the customs, commerce, culture and traditions of the peoples of all lands where his labors have led him. But above all else, with a unique dual combination of heartfelt homespun philosophy coupled with a disarming but rare insight into human nature Ed Clark possessed the talent to inspire and direct mankind's highest energies toward the mutual common good.

Now it becomes our pleasure, Ed, to acquaint you with a few words expressing the esteem the citizens of Laredo hold for you and which touch on those fields of endeavor and accomplishment which inspired them to honor you here this afternoon.

These are the words inscribed upon the plaque I am presenting you in their behalf:

"Presented to Edward Clark, selected as 'Mr. South Texas' for 1969—in public recognition of his many personal contributions to the growth and development of Texas through his achievements in the fields of Banking, Law, Diplomacy and International Relations, and in appreciation of his efforts to strengthen the national fibres of Mexico and our other good neighbors of Latin America which have established greater understanding and closer bonds of friendship with them, all of which combine to create new opportunities, greater material benefits and a richer way of life for the people of South Texas—by the citizens of Laredo, Texas, through the Washington's Birthday Celebration, February 22, 1969."—and inscribed with the names of the officers of the Association and the members of the Mr. South Texas Committee.

Ladies and Gentlemen, I give you Mr. South Texas of 1969—the Honorable Edward Clark.

REMARKS OF AMBASSADOR EDWARD CLARK, U.S. EXECUTIVE DIRECTOR, INTER-AMERICAN DEVELOPMENT BANK, AT THE WASHINGTON'S BIRTHDAY CELEBRATION LUNCHEON HONORING "MR. SOUTH TEXAS," LAREDO, TEX., FEBRUARY 22, 1969

Thank you, my friends, for this undeserved honor. I join a goodly company of former Mr. or Mrs. South Texas's. I look at many of their faces and feel even more proud. For thirty years I have been happily at home in Laredo for three days every February. The celebrations Anne and I missed in 1966 and 1967 we spent on an island (Australia) 10,000 miles away. The Vice President of the United States was a guest in our United States Embassy residence on February 22, 1967. The place was teeming with activity, but all the exciting weekend my heart was here in Laredo with you, my friends. My mind was filled with handclasps and abrazos, with sparkling velvet and powdered wigs, with perfume and paper flowers. This was where I wished to be. Truly my cup runneth over.

How fitting and proper that on George Washington's Birthday, here at the gateway to Mexico, we speak of inter-American relations and our mutual interdependence. For many years Laredo has presented this inter-American celebration because here the names of Hidalgo's and Bolivar and Juarez join that of Washington, each enshrined in the hearts of all Americans who love liberty. We all share a common history of casting off colonial masters and establishing our own self-government. The same ideals that motivated George Washington have application throughout all of the Americas. Bolivar was the Washington of South America.

In this day of Apollo VIII, when man courses around the moon, we know the world has shrunk to a degree unknown in the time of George Washington, or even in the time when this celebration first commenced. Our good neighbors are more important today than ever before, and our need to preserve the ideals of George Washington in the Americas becomes more apparent and more urgent with every passing day.

While I was United States Commissioner to HemisFair, in San Antonio, I saw at first hand the impact in Texas of the interchange of cultural and commercial ties between the United States and Latin America. My firmer grasp and new realization of urgency made me accept the President's appointment as Executive Director on the Inter-American Development Bank Board. This is a real Bank, with six other directors representing 20 countries south of the Border plus the United States. It was given life by President Eisenhower, greatly enlarged by President Johnson. Its purpose is to make developmental loans to advance economic and social well being for all. In its 10-year life, nearly $3 billion have been loaned which in turn generated another $5 billion in investments. Initially a $1 billion bank, we now have a resource capacity of $6 billion.

A summary of accomplishments includes:

Bringing into production nearly 6 million acres of farmland and granting one-half million individual credits to small and medium-scale farmers in Latin America through loans extended by our Bank to local development institutions.

The construction of 35 large industrial plants has already been completed. Small industries benefit from thousands of other credits extended to them by local development banks which obtained capital from the Inter-American Bank.

Miles of main highway and more miles of farm-to-market roads have been built. Port expansion and grain elevators are also financed.

3,000 city and rural water systems and many sewerage systems benefiting more than

40 million Latin Americans are being built with our Bank loans.

300,000 housing units for low-income families serving also 2 million people are being constructed.

120 schools throughout Latin America are being modernized and improved.

51 credits have been authorized for studies of specific development projects—so called "pre-investment" funds.

I was most encouraged to see, during my recent travels in Latin America, what our projects can accomplish. I visited a teacher training institution, in a rather remote village, where I saw, in the faces of teachers and students, an understanding of the challenge and the burden placed upon them to improve the predicament of their own people. While the institution was partially financed with United States funds, both for construction and the technical assistance for modernizing the curricula, these people recognized the real job, which is to train trainers who in turn will improve teaching, and thence the quality of life. I was very pleased to see that the source of this outside help was genuinely appreciated. I saw clear-cut evidence of what can be done to support the agricultural cooperative movement with financial help and technical help for research. The leaders were devoted to their cause, and with this outside assistance they were proceeding in a dynamically impressive fashion.

The fundamental concept underlying this or any other outside assistance, bilateral or multilateral, is self help. Self help is a cornerstone of the Alliance for Progress. Less developed countries can make progress only through their own efforts. Outsiders cannot force the farmers to invest in fertilizers, pesticides and high-yield seeds. Outsiders cannot carry out the necessary policies that will stimulate demand for larger and better crops. Outsiders cannot build all of the school rooms necessary to increase educational opportunity. Outsiders cannot reform the tax systems to mobilize additional domestic resources. Outsiders cannot force the people of crowded countries to limit their families. These measures require *self help;* outside loans or grants without internal help is aid wasted.

Latin America's importance to the United States is obvious. Reasons are many; we live in the same neighborhood, and we grew up at about the same period in history; we enjoy a tradition of friendship; we have fought beside each other in three wars; our economic systems complement each other.

The area's importance to us is further emphasized by the rapid awakening of this immense continent from its long colonial-age sleep; awakening into a modern technological society, whose products and living standards it ardently desires to posses at once, but for which it lacks sufficient education, skills, and ready local capital.

President Nixon has stated that in the search for alternatives to caudillos and communists and the threat of communism," . . . what Latin America really needs is fewer marching feet and more helping hands."

Hungry people cannot be productive people and untrained people cannot provide the human resources for a modern society. The needs are great and I am sure that together with self help the resources from the outside will be made available. The Inter-American Development Bank is participating in this battle. It is an Institution to which the Latin American countries have made substantial contributions, both financially and to its management. This is truly a mutual effort.

I am happy to state that the Bank's bonds grace the portfolio of nearly all important banks, insurance companies, pension funds and similar institutional investors throughout the United States, including Texas. To indicate the high regard in which the Bank is help throughout the world, nonmember governments such as Canada, Germany, Holland, the United Kingdom and others have entrusted the Institution with the administration of funds devoted to the economic development of Latin America.

Within the Bank we are all aware that the experience of one of our great member nations, Mexico, holds our great hope for the rest of Latin America, and through the Bank we have been able to share the Mexican experience with the lesser developed countries of our Hemisphere in sustaining economic and social progress.

Poverty, ignorance and disease are still with us in this Hemisphere. There are no easy solutions. We are moving forward slowly on some fronts, more rapidly on others. President Johnson has said, "Development is a task not for sprinters, but for long-distance runners."

Proudly I stand here in Laredo, a great city of happily blended cultures, speaking to you of our hope for progress. It is symbolic that this international border—which most of us will cross and recross in the next day or two, is not a border of tension and of moving armies, like those in so much of the world. It is only a challenge to mutual cooperation for mutual benefit.

In closing please let me speak from the bottom of my heart to my good and true friends in Laredo and say how very deeply grateful my wife Anne and I are to you for your kind consideration and many courtesies.

UPDATING QUALIFICATIONS FOR AIR TRAFFIC CONTROLLERS

(Mr. DULSKI asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. DULSKI. Mr. Speaker, the safety of our airlanes is of vital concern in this day of ever-increasing air travel.

Unfortunately, our air traffic control system has not been able to keep up with the demands for assistance and supervision of air traffic.

The staff is inadequate to handle the job. In this demanding and exacting work protecting the lives of millions of air travelers, employees should not be expected nor compelled to work extra hours in order to keep the system operating.

I have introduced legislation today to raise the qualifications and standards of air traffic control personnel. The Federal Aviation Administration and the Civil Service Commission have not dealt adequately with this problem and therefore it becomes incumbent upon Congress to act.

The work of air traffic controllers must be considered as a profession as proposed in my bill. There must be updating of qualifications for air controllers, including the vital age limit for beginners, as well as special attention to the somewhat unusual retirement needs of the controllers.

The present conditions in the air controller system cannot be allowed to continue. The need for corrections is urgent.

THE 1970 TRAINING CAMP OPENS AT THE CONGRESSIONAL HOTEL: A HANDY GUIDE FOR REPUBLICAN MEMBERS

(Mr. VAN DEERLIN asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. VAN DEERLIN. Mr. Speaker, one of the busiest spots on Capitol Hill these days is the third and fourth floors of the Congressional Hotel. These are the suites of offices occupied by the Republican congressional campaign committee.

Possibly by mistake, since I am a Democrat, my office recently received an announcement from the committee, detailing the special services it stands ready to provide. I might wish this had been no mistake—that Democrats, too, could avail themselves of year-round assistance and hard cash such as the committee bestows upon our colleagues of the opposite party.

Mr. Speaker, in the manner of a hungry waif pressing his nose against the delicatessen window, I herewith submit the campaign committee's bill of fare for the RECORD:

REPUBLICAN CONGRESSIONAL COMMITTEE SERVICES

Located in the Congressional Hotel, the Committee's staff, headed by I. Lee Potter, Executive Director, provides a wide range of services and assistance to Republican House members, ranging from direct financial assistance to professional services and counseling.

The Committee's Public Relations Office in Room 312 is available to work with members and staff assistants on PR problems arising during the year—including the preparation of press releases, radio–TV programs, setting up press conferences, as well as general advice and counsel on public relations matters. Contact: Paul A. Theis, Public Relations Director.

The PR office also has available a former NBC newsman, Bob Gaston, to work with members in the development of broadcast materials and programs for their District stations. Room 308.

The Republican Congressional News Bureau is designed to help publicize members through press releases to their district news media—releases which the member himself might consider too self-serving to put out from his own office. For instance: House GOP Leader Ford praising the member for his attendance record or legislative efforts, etc. Contact: Ed Neff in Room 312.

The Committee's PR staff also prepares and distributes a number of party publications, such as the weekly Committee Newsletter (circulation of 60,000) which is sent to subscribers who pay $25 a year for it and complimentary to key leaders and each of the nation's daily and weekly newspapers as well as radio and TV stations which carry editorials. Other committee publications include the "Issue of the Day" (designed to call members' attention to the issues which may have been missed and which may provide subject matter for speeches, newsletters, etc.); Speech of the Week (designed to call attention to the best Republican-oriented speech each week); Daily News Digest (sent to each GOP office each morning reporting the highlights of the major political news of the preceding 24-hour period).

The Committee's PR office maintains a speech file of major speeches by Republican members and others for the use of GOP offices—broken down by subject matter and type of audience. For instance: speeches for use over Lincoln Day, before Young Republican Clubs, business audiences, etc. Contact: John Lofton in Room 312. Because of staff limitations, the committee is unable to prepare finished speeches for members but the staff will assist in the development and polishing of speech material. The committee also has a speech typewriter available for

the use of Republican offices—but the member will have to supply the typist. See Judy Gagliardi in Room 412.

To provide members with professional art work for their newsletters, press releases, TV programs, letterheads, etc., the Committee has artists on staff and a wide range of samples to look over in Room 312 of the Hotel. See Lee Wade or Steve Balogh.

The Committee also provides a complete photo service, with two full time photographers and dark room facilities, to shoot and process pictures of members for publicity use back home. Contact: Bob Brockhurst or Mickey Senko on Capitol extension 7121 or in Room B-304 of the Rayburn Building.

The committee keeps a running tabulation of GOP members' voting records in the House and at the end of each session sends a complete record to each member along with an explanation of the issue voted on. Bill Waugh handles this in Room 411 as well as research on Democratic incumbents' records.

The committee also provides financial assistance to members to help underwrite their public relations activities: $3,500 for 1969 to freshmen and members from marginal districts and $2,000 to others. This fund is to be used for projects and activities which help the Congressman tell his story back home through his news media and to provide indirect benefit to the party as well. A list of PR activities which the fund can be used for has been sent to each member's office. For further information, contact Curt Fulton.

To summarize, here is a ready-reference listing of key contacts who can be reached either through the Committee's offices at the Congressional Hotel or LI 4-3010.

Executive Director—I. Lee Potter, Room 412.

Public Relations Director—Paul A. Theis, Room 312.

Art and Advertising Director—Lee Wade, Room 312.

Radio-TV Director—Bob Gaston, Room 308.

Photographs—Bob Brockhurst, Room B-304, Rayburn Building, or Ext. 7121.

PR Allocations and Finance Director—Curt Fulton 53 D Street, S.E.

Incumbent Research—Bill Waugh, Room 411.

Speech and Issues Research—John Lofton, Room 312.

Republican Congressional News Bureau—Ed Neff, Room 312.

Issues of the Day—Jack Anderson, Room 312.

Committee Newsletter—James Galbraith, Room 312.

Congressional Offices Liaison (General)—Tom Lias, Room 414.

Women's Activities—Mary Ellen Miller, Room 414.

JUDGE RUSSELL E. TRAIN, UNDER SECRETARY OF THE INTERIOR

(Mr. DADDARIO asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. DADDARIO. Mr. Speaker, I am delighted that Judge Russell E. Train has been confirmed as Under Secretary of the Interior. Judge Train occupies a unique place in the natural resources field, having had the experience of leadership in both national and international conservation organizations. For the past 4 years he has been president of the Conservation Foundation, located in Washington, D.C., and on many occasions has provided new ideas and reliable information on resource problems and issues for the consideration of congressional committees. The African Wildlife Leadership Foundation, of which he also is president, has spearheaded educational programs in East Africa for the training of badly needed resource managers and field personnel. In the last session of Congress, I had the pleasure of Judge Train's assistance in organizing a congressional colloquium, sponsored by both the House and Senate, which discussed the need for a national policy on environmental management. Judge Train emphasized that much more must be done, and as quickly as possible, if the insidious degradation of the quality of our environment is to be halted. In our exchange of views on this subject, I learned of his deep concern for an orderly and planned coexistence between man and his physical surroundings. As the No. 2 man in the Interior Department, I feel certain that he will bring courage and insight to the task of establishing new goals of environmental management for productive purposes as well as the pursuit of an ecologically sound and esthetically pleasing environment. I hope that the Nixon administration will have the wisdom to make the fullest use of Judge Train's unique abilities and experience in the conservation field. I am confident that he will respond with dedication and distinction.

REPEAL THE FREEZE ON AID TO DEPENDENT CHILDREN

(Mr. BINGHAM asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. BINGHAM. Mr. Speaker, on July 1 of this year the freeze on aid to dependent children imposed by the 1967 amendments to the Social Security Act will go into effect.

I strongly support responsible economy measures in these inflationary times. I realize and agree that major revisions are desperately needed in our welfare system, which in many instances operates wastefully, ineffectively, and inhumanely. But the arbitrary limit set by the 1967 social security amendments on the number of children and their families eligible to receive aid under the aid to dependent children program constitutes neither reasonable economy nor responsible reform. It is nothing more than a simplistic and reactionary effort to solve a very complex problem. It will be effective only in imposing greater hardships and disadvantages on children who are neither responsible for the condition of their birth and early life, nor able to help themselves in any way.

This regressive legislation, which I and many of my colleagues in both the House and Senate opposed with utmost vigor when it was included in the 1967 package of social security amendments, must be removed from the statute books before it has a chance to work its unfortunate effects: before it imposes further deprivations where further and better care is needed; before it discourages and dislocates dedicated welfare employees in Federal, State, and local programs who will be forced to carry it out, when what is needed instead is sweeping program reform.

I am today introducing legislation to repeal section 403(d) of the Social Security Act. I am pleased to join those of my colleagues who are also sponsoring this legislation, and I am hopeful that it will be acted upon quickly and favorably by the Congress.

TRANSFER OF SPECIAL ORDER

Mr. BINGHAM. Mr. Speaker, I ask unanimous consent that the special order granted me for today be transferred to tomorrow, Thursday, February 27.

The SPEAKER. Is there objection to the request of the gentleman from New York?

There was no objection.

INTERGOVERNMENTAL COOPERATION ACT OF 1969

(Mr. PICKLE asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. PICKLE. Mr. Speaker, today I wish to join my colleague from North Carolina (Mr. FOUNTAIN) in cosponsoring the Intergovernmental Cooperation Act of 1969, which he introduced late last week.

As you may know, this general subject is one about which I have been most interested, and I have already reintroduced the bill this year known as the Executive Management and Reorganization Act. My original measure directs that a study commission be created among other things to look at the effects of Federal grant activities on the interrelationship of Federal, State, and local governments and to consider the possibility of channeling all Federal programs which benefit the same functional area through a single State agency for each State.

The bill I am introducing today contains provisions which might well simplify some of the goals sought in my original measure and I feel it is certainly essential that we consider these matters from all possible sides.

This newest Intergovernmental Cooperation Act directs that Federal programs be consolidated along functional lines whenever such moves would promote the efficiency of the Government, and I believe this step might lead us to the point that any attempts to extend State and local control in Federal programs would not lead to nightmarish administrative problems.

I fully realize and would mention that the bill I originally introduced was essentially a study measure, while the bill I am sponsoring today is cast in terms of substantive legislation. Still, my understanding to the two approaches is that both aspects are needed.

Mr. FOUNTAIN's bill implements improvements in the organization of the executive branch; it simplifies and standardizes financial reporting procedures in connection with assistance programs; and it provides for interdepartmental joint funding of functionally identical projects.

I believe that all of these purposes are worthy. I would hope that the additional

provisions of my original bill will still be considered in connection with creating a single State agency to handle programs of the same functional area. And I commend my colleague for this important legislative step.

JAMES FARMER OF HEW

(Mr. RARICK asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. RARICK. Mr. Speaker, since the announcement of the appointment of James L. Farmer as Deputy Director at HEW, there have been many inquiries as to his background, experience, and qualifications. Some are aware that he was active in the so-called civil rights movement in the Southern States, but uninformed concerning his direct involvement with identified members of the Communist Party of the United States, and his leadership in the SDS.

As late as August 1968, James Farmer shared the speaker's platform in Washington, D.C., with Herbert Aptheker, director of the American Institute of Marxist Studies.

His appointment is an insult to education and an affront to civilization itself.

Mr. Speaker, I ask that various news clippings follow my remarks so our colleagues will have ready access to some history about the appointee.

ALABAMA LEGISLATIVE COMMISSION TO PRESERVE THE PEACE

JAMES L. FARMER

James L. Farmer, Negro male, born January 12, 1920, is the National Director for the Congress of Racial Equality. He has resided at 85 Bedford Street, New York City 14, New York, Apartment #5, since August 1949. Prior to that time, his residence was at 27 Desbrosser Street, New York City. In 1951, his wife, Lula, was employed as a typist at the Institute of International Education, 2 West 45th Street, New York 19, New York, an organization organized in 1919 by Elihu Root and Nicholas Murray Butler, former President of Columbia University, New York, for the purpose of promoting world understanding by student exchange, i.e., students in various European colleges are educated in American universities and vice versa. It is financed by fees from the students, government grants, membership dues and contributions. The Chairman of the Board of Trustees in 1950 was the President of Hunter College, George M. Shuster, outstanding educator, journalist and Catholic layman.

In 1951, James L. Farmer was reportedly employed as a lecturer and student organizer with the League for Industrial Democracy, 112 East 19th Street, New York City, New York, an organization allegedly devoted to the cause of Socialism through education in the fields of economics, politics, and culture. This organization frequently has held testimonials and dinners, often attended by prominent Americans. The League for Industrial Democracy has clearly stated its opposition to Communism, and is definitely Socialist in nature.

He is presently affiliated with the Congress of Racial Equality and the National Association for Advancement of Colored People, as a National Director; he is also listed as a member of the National Board of the Committee for a Sane Nuclear Policy.

James Farmer was listed as a candidate for the 9th District on Independent Nominating Petition of the Socialist Party—General Election—1952, New York State.

The program of the Students for Democratic Society (SDS) 1960 Conference for Human Rights in the North, lists James Farmer, National Association for the Advancement of Colored People, as a member of the National Advisory Council. The Students for Democratic Society is a non-partisan educational organization of students who are concerned with ways of increasing democracy in all areas of our common life and extending it to all parts of the world. The SDS is coordinating the 1960 Ann Arbor Conference for Human Rights as part of its broad educational program.

James L. Farmer, Jr., not further identified, is listed as having been National Chairman, Youth Committee Against War, 1942.

One James Farmer, 2013 Fifth Avenue, New York City, New York, reportedly was Secretary, Non-Violent Action Committee, Fellowship of Reconciliation, 1942.

James Farmer allegedly was affiliated as a speaker with the March-On-Washington Movement, 1943 and 1944 and in 1964.

James Farmer allegedly was listed as a sponsor for the Carlo Tresca Memorial Meeting, January 11, 1945, Webster Hall, New York City; and participated in the 7th Annual Carlo Tresca Memorial, January 11, 1950, Rand School, 7 East 15th Street, New York City.

James Farmer, identified as International Representative of the American Federation of State, County and Municipal Employees, AFL–CIO, was reportedly a participant at a meeting of the New York Committee Against Testing Nuclear Weapons, August 6, 1957, Town Hall, New York City.

James Farmer listed in "Counterattack," March 4, 1960, page 36, as a National Board Member of the Committee for a Sane Nuclear Policy.

[From the Shreveport Times, Apr. 26, 1964]

EX-RED HELD INVOLVED IN RIGHTS MARCH

CLEVELAND, OHIO.—Mayor Ralph Locher said Saturday he sent a report to the Federal Bureau of Investigation Friday charging Eric J. Reinthaler, 30, former Ohio Valley secretary of the Communist party, and some 30 other members of subversive organizations with taking part in local civil rights demonstrations.

Reinthaler, who is co-chairman of the Finance Committee of the Congress of Racial Equality (CORE) was described by police as playing a "major role" in demonstrations in the recent school integration controversy.

Locher said his letter was based on a report received from Police Chief Richard R. Wagner.

Wagner said the police subversive squad had definitely "identified 18 known Communist party participants" in the demonstrations since Jan. 30.

Police said Reinthaler allegedly advised CORE members how to influence public opinion in the trials of school board sit-in demonstrators, urged the use of handbills, pickets and demonstrations, and was a leader of a CORE demonstration during a rent strike campaign.

Reinthaler and six others were indicted by the federal grand jury for falsely swearing to a loyalty oath and was convicted in 1958. He was sentenced to federal prison in Milan, Mich., from March, 1961 to July. 1962.

Police reports show Reinthaler took an active part in CORE activities and made regular financial reports at membership meetings.

Reinthaler and present officers of the Communist party denied he was now a member of the party. Party officials said "Reinthaler was expelled."

City council is to hear a resolution Monday asking for a federal investigation of known subversives involved in the demonstrations.

Locher said he resented recent FBI investigations of alleged police brutality charged by demonstrators last week.

"I resent their spending our tax money to investigate our police," Locher said, "when we know there were known Communists among the demonstrators."

INTERNATIONAL DAY OF PROTEST AGAINST THE WAR IN VIETNAM, SATURDAY, APRIL 27, 1968

Join us in demanding that the U.S. Government:

End the war and support our GI's.

By bringing them home now.

End the draft and release all draftees now.

Let the Vietnamese solve their own problems in their own way.

Join us on: Saturday, April 27.

11:00 a.m. Assemble at Franklin Park, 14th and K Streets, N.W.; march to and demonstrate at the Induction Center, 916 G Street, N.W.

1:00 p.m. Return to Franklin Park for rally.

SPEAKERS

Professor Howard Zinn, of Boston Univ., author Vietnam: The Logic of Withdrawal.

Etta Horn, Volunteer Community Worker.

Jan Bailey, Washington Black Anti-War Anti-Draft Union.

Donna Allen, Women Strike for Peace.

James Farmer, former head of CORE, Professor at Lincoln University.

End the war now! The fight for freedom is at home!

SPONSORING ORGANIZATIONS

Catholic Peace Fellowship.

CHOICE.

Committee for a SANE Nuclear Policy.

Congress of Racial Equality.

Draft Resistance Union.

Federal Employees Against the War in Vietnam.

Student Mobilization Committee.

Student Non-Violent Coordinating Committee.

Students for a Democratic Society.

Washington Black Anti-War Anti-Draft Union.

Washington Mobilization Committee to End the War in Vietnam.

Washington Peace Center.

Women's International League for Peace and Freedom.

Women Strike for Peace.

Young Socialist Alliance.

[From the New York Daily News, Aug. 16, 1968]

FARMER HEADS BLACKS FOR ROCK

James Farmer, former director of the Congress of Racial Equality, and other Negro leaders pledged their support yesterday of Gov. Rockefeller's GOP presidential candidacy and announced formation of the Black independents and Democrats for Rockefeller.

Farmer said the group, which includes the Rev. Martin Luther King, father of the slain civil rights leader, strongly opposed the candidacies of Vice President Hubert Humphrey and former Vice President Richard Nixon.

DOUBTS M'CARTHY'S POWER

Farmer said he didn't think Sen. Eugene McCarthy could get the nomination.

Other members of the group include entertainer Cab Calloway, Bishop F. D. Washington of the Churches of God in Christ, Rev. George Lawrence of the Southern Christian Leadership Conference and Omar Ahmed, a former associate of the late Malcolm X. Alfred Duckett is the national executive chairman.

CATHOLIC CONFERENCE: MILITANTS SCORE CHURCH

Members of a Catholic liturgical conference were urged yesterday to use their talents as organizers with the middle classes instead of in the black ghettoes.

They were also told that black power is a legitimate demand of black Americans and that racism is "ingrained in Christian society."

The speakers were Saul Alinsky, caustic organizer of the poor; James Farmer, former national director of CORE and now a Republican Party candidate for Congress in New York's 12th District, and Isaiah Robinson, chairman of the Harlem's Parent's Committee and also chairman of the upcoming National Black Power Conference to be held in Philadelphia.

They spoke at workshops of the National Liturgical Conference at the Sheraton-Park Hotel.

Organization of the middle classes instead of the ghettoes was brought up by Alinsky, who urged the clergy and lay participants of the conference not to march into the ghettoes uninvited in what he called the "traditional colonizing" manner of the Catholic church.

"There's a great deal of political wisdom" in rejection by black militants of help from white sectors, he said, adding "you should be working with your own people."

He called the preoccupation of militants with black culture and power "natural in many ways. It's part of growing up, of getting an identification and it's going to work." Eventually, he said, militants will be willing to accept help from whites and to work with them.

All revolutionaries of history have lived at least part of their lives among the middle class, Alinsky said. The middle class in America can be organized as a vital force and power base, but only when it feels threatened, he added.

Farmer, calling black power a legitimate demand, said: "Black Americans must develop ethnic cohesion and pride to be able to enter and participate meaningfully in a pluralistic society."

"In the days ahead," he added, "we must wield the levers of the machinery available for social justice and seek economic and political power through control of our own communities." This is the process that other minorities have used to gain acceptance in American society, he said.

Farmer pointed out that American attitudes about foreign groups have changed and rechanged very rapidly at times when it was deemed in the "national interest" by the Government.

"The American attitude toward the Japanese has been changed three times in recent years," he said. "But it was done with the backing of the U.S. Government and by using all the media and platforms available to reach the people."

Robinson made the charge that racism is "ingrained in Christian society."

He recalled that religion was historically used in America to pacify slaves but that once converted, black Christians were eventually forced to establish their own churches.

The history of Christian responses to the racial challenge in the past leaves black Americans with little hope of a positive response today, he concluded.

Members of the conference later endorsed a Liturgical Week statement of concern calling for an unconditional halt to the bombing of North Vietnam and also calling for laws protecting the rights of conscientious objectors.

The statement also said it was the duty of married couples to make their own decisions on birth control. Finally, the resolution called for the United States to donate at least 2 per cent of its annual Gross National Product to fight poverty.

[From the Chicago Tribune, July 7, 1968]

RIGHTS GROUPS DECENTRALIZED—URGES MOVE TO MAINSTREAM

James Farmer, former head of CORE, used it in a commencement address at Muhlenberg college, Allentown, Pa., to urge graduates to "move into the mainstream with a hand on the decision-making levers."

The Poor People's campaign, to many of the campus radicals and even some of the seasoned S.C.L.C. workers, presented a hope for a new kind of populism, uniting the poor of all races under the banner of "participatory democracy" and "the guaranteed wage."

[From the Washington (D.C.) Post Aug. 18, 1968]

SPEAKERS QUESTIONED

What has Herbert Aptheker, a Communist on the National Liturgical Week program, got to do with Roman Catholic liturgy?

[From the Washington (D.C.) Evening Star, July 29, 1968]

O'BOYLE RAPS SPEAKERS FOR LITURGICAL MEETING

The theme of the event, to be held Aug. 19–22 at the Sheraton-Park Hotel, is "Revolution: Christian Responses." It is sponsored by the Liturgical Conference, a national voluntary association of clergy and laymen, mostly Catholic, interested in broadening the liturgy of the church.

Cardinal O'Boyle, archbishop of Washington, criticized the announced speakers for the meeting as having "little or no expertise in the liturgy" and declared the Liturgical Week "is not endorsed by the Archdiocese of Washington." The archdiocese had not previously endorsed the event.

Announced speakers include Dr. Herbert Aptheker, founder and director of the American Institute of Marxist studies, New York; James Farmer, first national chairman of the Congress of Racial Equality; Saul Alinsky, executive director of Chicago's Industrial Areas Foundation; Floyd McKissick, immediate past CORE director; Marcus Raskin, co-director of the Institute for Policy Studies, Washington, and the Rev. Andrew Young, vice president of the Southern Christian Leadership Conference.

Several other anti-war and black power activists are on the program, but Aptheker has drawn the most criticism.

JAPANESE INSTIGATOR OF WAR TO BE FETED

(Mr. RARICK asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. RARICK. Mr. Speaker, the announcement that Gen. Menoru Genda, the Japanese general who engineered the dastardly attack against the U.S. fleet at Pearl Harbor, has been invited to lecture at the U.S. Naval Institute at Annapolis comes as a torturous disservice to the memory of all loyal Americans who perished and served in World War II in the Pacific.

I echo the comment of John E. Joniec, president of Philadelphia's Pearl Harbor Survivors Association, that it may be all right to forgive and forget, but never to laud a former enemy leader by honoring him as a "distinguished visitor."

If we are to forgive and forget all, can we now expect Rudolph Hess, the Nazi leader, to be freed from the English prison where he has been held for over 24 years? And when are we to rectify the injustices against Admiral Kimmel, the American counterpart of Genda, who was sacrificially disgraced and shelved as a result of Pearl Harbor?

Mr. Speaker, I protest this indignity against our people. An article and table follow:

[From the Washington (D.C.) Evening Star, Feb. 25, 1969]

JAPANESE VISITOR HIT BY SURVIVOR OF PEARL HARBOR

PHILADELPHIA.—A Philadelphia man who survived the Japanese attack at Pearl Harbor does not think the general who engineered the attack should be honored as a "distinguished visitor" in this country.

John E. Joniec, 49, president of Philadelphia's Pearl Harbor Survivors Association lodged his protest in a telegram to the U.S. Naval Academy at Annapolis, Md.

The Japanese general is scheduled to lecture at the U.S. Naval Institute in Annapolis March 3 as a guest in the institute's "distinguished visitor" program.

"It is all right to forgive and forget, but not to toast and honor the coward Gen. Menoru Genda," Joniec said in his telegram. "The memory of those who died Dec. 7, 1941, will remain with us survivors forever."

Herbert Machol, news director at the Naval Academy, said yesterday there would be no military ceremonies for the general. The institute is not affiliated with the U.S. Navy. It is a professional, private society, he said, which owns a building on the Academy grounds.

U.S. MILITARY CASUALTIES AT PEARL HARBOR

	Killed	Wounded	Missing	Total
Navy and Marine Corps	2,117	876	960	3,953
Army	226	396		622
Total	2,343	1,272	960	4,575

Source: Legislative Reference Service, Library of Congress.

ELEANOR ROOSEVELT HUMANITIES AWARD

(Mr. PEPPER asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. PEPPER. Mr. Speaker, I received one of the most meaningful honors of my life, the Eleanor Roosevelt Humanities Award, at the Ambassador's Ball sponsored annually by the Israel Bond Drive at Miami Beach. The award was presented by His Excellency the distinguished Ambassador of Israel to the United States, the Honorable Yitzhak Rabin. A bound volume of the scrolls of tribute to me from those attending this stirring dinner was presented by the great, eloquent and learned rabbi of Temple Emanuel of Miami Beach, Irving Lehrman.

Mr. Speaker, I include my address in accepting this award following these remarks in the body of the RECORD:

REMARKS BY CONGRESSMAN CLAUDE PEPPER ON ACCEPTING THE ELEANOR ROOSEVELT-ISRAEL HUMANITIES AWARD, FONTAINEBLEAU HOTEL, MIAMI BEACH, DECEMBER 28, 1968

Mr. Chairman, Distinguished and Gallant Ambassador Rabin and Mrs. Rabin, Learned Rabbis, Distinguished Guests, Ladies and Gentlemen: You honor me far beyond my desserts in bestowing upon me this evening the Eleanor Roosevelt-Israel Humanities Award. I accept with deep humility and profound gratitude for what is a particularly meaningful and moving experience for me.

I am all the more pleased to receive this Award in the presence of the distinguished son of Eleanor Roosevelt, former Mayor or Miami Beach and former General in the Air Force, Elliott Roosevelt, and his lovely wife; and in the presence of the distinguished and heroic Ambassador from Israel to the United

States, General Rabin, and his lovely wife; and in the presence of so many devoted friends whose friendship I have so long cherished.

At a time when the mood in our own country and in the world is too often callous rather than concerned and indifferent rather than interested in the poor, the ill, the under-privileged, the victims of tyranny, intolerance and discrimination, it is fitting that we refresh our memories and the memories of all people of Eleanor Roosevelt whose great and beautiful life was principally dedicated to the problems of such people and to the defense of millions who suffered from man's inhumanity to man.

And at such an era in history, it is an inspiration to those of little faith and weak courage to thrill to the dramatic birth and the heroic survival and magnificent progress of what a small population of diverse origins but common ferver and faith can make of a barren land surrounded by savagely hostile neighbors determined upon their destruction.

When three Americans departing from Florida have just circled the moon and landed safely back home exhibiting the capacity of the human mind and body to perform miracles in the material world, it is well that we direct men's hearts and souls to the examples of Eleanor Roosevelt and Israel as to what the human spirit is capable of accomplishing to bring man's heroism of the spirit world to the level of his gallant achievements in the physical world. Surely if man can create and harness a force which will lift him out of the pull of the gravital forces of his own earth it would seem that if he will to do it, he could create and harness a force of the spirit which would lift him above the pull of the base forces of selfishness, greed and destructiveness and to generate as the mightiest force on earth recognition in truth of the Fatherhood of God and the Brotherhood of man.

Eleanor Roosevelt's devotion to the State of Israel was symbolic of her faith in the right of all people to build their own lives and determine their own destinies in an atmosphere of freedom and prosperity and respect for the dignity of the individual human being.

She was deeply moved by an experience she had at a camp in Germany. She recalled standing in the mud of that camp for Jewish refugees:

"I remember," she wrote, "an old woman whose family had been driven from their home by the war's madness and brutality. I had no idea who she was and we could not speak each other's language, but she knelt in the muddy road and threw her arms around my knees. 'Israel,' she murmered, over and over. 'Israel. Israel.'"

It was while looking into this woman's weatherbeaten face and hearing her pleading voice that Eleanor Roosevelt realized fully and personally what Israel really meant to so many, many people throughout the earth.

This is the kind of thing she meant when she said something so seemingly bland as: "You gain strength, courage and confidence by every experience in which you really stop to look fear in the face. You are able to say to yourself, 'I lived through this horror. I can take the next thing that comes along.' . . . You do the thing you think you cannot do."

I remember so vividly when Mrs. Pepper and I were in Israel in 1950. I had been there in 1945 when Palestine was still a British Mandate. But now we were in the new State of Israel and had the privilege of an hour's conference with Israel's great first Prime Minister, Ben Gurion.

Prime Minister Ben Gurion told me then that he didn't know how he was going to do it, but Israel was going to take—and find a home for—every Jew from any part of the world who want to come to Israel.

And last January when Mrs. Pepper and I were back in Israel for our third visit with a group of outstanding people from our area, I could not help but think how well Ben Gurion and his devoted followers had done the thing that so many people thought could not be done.

The enormous progress that has been made in the development of the State of Israel seems a miracle almost comparable to the crossing of the Red Sea on land by the Jews of Exodus or the feeding of the starving wanderers by manna from heaven in the wilderness.

Everywhere, one sees today, the evidence of the determination of an able and dedicated people to build a great state in a hostile environment. Not only has there been the problem of the Arab states which cannot stand the comparison with the successes of Israel or understand the great human resources which the people of Israel have unleashed in an abused and largely barren land. There has been the enormous problem of correcting the abuses of centuries, of rebuilding the land that once was known far and wide for its "milk and honey" and for the riches of its mines—the mines of King Solomon—and for the even greater spiritual riches of its people.

In the material terms which we value so highly in our own society, the State of Israel has made enormous progress.

Her gross national product exceeds three billion dollars a year. It has grown at an annual rate of 11 per cent during her first decade of existence and has continued to enjoy one of the highest growth rates of any country in the world.

Much of this growth has been made possible by a very large immigration—bringing talented people, as well as some of the world's poorest people—to this tiny land. Much of the growth has also been the result of the receipt of over five billion dollars of foreign capital from bond sales abroad, contributions from Jewish organizations throughout the world, private investment and foreign aid—including approximately $1.2 billion in U.S. aid to Israel over the last two decades.

The importance of bond revenues, which this great Israel Bond organization has done so much to provide, has been inestimable. And the State of Israel has never defaulted on a bond issue and has paid off some $500 million of the more than $1 billion of bonds it has issued.

The per capita gross national product of Israel exceeds $1,300 a year—by far the highest in the Middle East. Despite the great number of immigrants who must be absorbed in a small economy, the unemployment rate has been held to a level comparable to that of the United States and the rise in per capita labor productivity has been much greater than our own—increasing by about 5 per cent a year in the last several years.

But the thing which struck us, in addition to the serene dignity and the calm confidence of the people of Israel, was the trees. In 1950 Mrs. Pepper had noted the absence of trees. Now everywhere there are trees. The Israeli government and the people of Israel have planted 85 million trees throughout the country. They have also brought water to the desert sands—even developing techniques for growing crops in saline water, to stretch the available fresh water supplies by adding some fresh water to reduce the salt content of the abundant salt water supplies.

Now the fields of Israel are so well used—the available land so wisely tilled—that Israel has a surplus of food. And with the solution of the food problem it looks forward to the early 1970's when its flourishing export trade will enable it to achieve a balance in its critical imports and exports.

I am proud of my long association with the State of Israel, which dates back to the late 1930's when, as a Senator and a member on the Senate Foreign Relations Committee, I began to work closely with Jewish leaders in our country toward the fulfillment of the Balfour Declaration and the ancient dream of re-establishing a Jewish homeland in Palestine.

The United States had then—and still has—a great humanitarian stake in the establishment and maintenance of the State of Israel. Today we also have a vital strategic interest in the preservation of this great bastion of democratic commitment in the strategic Middle Eastern area. The forces of Russian power and international communism, in furtherance of the old Russian dream to dominate the Middle East, have sought to exploit the weakness of the Arab countries and to arouse their envy and recklessness against the people of the State of Israel. The great, heroic armies of Israel so gallantly led by Ambassador Rabin, have turned back these forces—especially in the magnificent achievements of the Six Day War. But the Russians continue to rearm the enemies of Israel and the petty potentates of these countries continue to threaten the destruction of the dynamic little democracy and her people.

When I was speaking to the great and eloquent Foreign Minister of Israel, Abba Eban, in Jerusalem in January, he said: "You know we are relying upon the United States to keep Russia from aggressing upon us." In view of Russia's persistent threat to Israel and the determined and savage belligerency of the Arab States against her, it seems obvious that it should be the duty of the United Nations to maintain peace in the Middle East and the continued independence of Israel and all countries there. But in view of Russia's attitude that appears impossible. Hence, either NATO should be expanded to include Israel as it includes Greece and Turkey and for the same reasons, or failing that, the United States should enter into a mutual defense pact with Israel in solemn treaty form which would proclaim to the world our commitment that we would consider an attack upon the territorial integrity of Israel, at least by a great power, as an attack upon the United States, just as we say now to the world that an attack upon Greece and Turkey or any other member of NATO, we will consider an attack upon ourselves. I have introduced legislation in the Congress calling for such a mutual security pact and I will continue to urge it upon our government until some more effective method for preserving the integrity of Israel and peace in the Middle East can be found.

I am pleased that with my friend and colleague, Lester Wolff, of New York, I was able to get in the Foreign Aid Bill in the recent Congress a provision directing the President to enter into negotiations with Israel to supply Israel with 50 of our latest F-4 Phantom Jets to enable Israel to defend herself against the vast supply of weapons being furnished to the Arabs by the Russians. I am pleased that the announcement was made by our State Department yesterday that an Agreement with Israel for supplying these 50 latest model Phantom Jets has been reached and delivery will begin in 1969. I am hoping that the delivery schedule may be accelerated. We should let the Russians, the Arabs and all would-be aggressors upon Israel know that we will supply Israel with whatever weapons she needs and whenever she needs them and upon terms which she can afford to defend her security and to enable her to carry on her great work of progress in that old part of the world which needs to be stirred to a new life and hope.

Eleanor Roosevelt believed, as I believe, that the ultimate hope for peace, trust, and cooperation in the world lies in a strong and committed United Nations. She was a realist; she understood the vital role of military strength and power in world and human

affairs. But she was a fervent spokesman and defender of the cause of international brotherhood and cooperation.

Once when she was asked: "Don't you ever feel depressed? What do you do when you just have one of those days when life doesn't seem worth bothering with?" And she replied:

"Why, one just faces up to it and goes about one's job."

This was the noble spirit of this great woman whom Mrs. Pepper and I were privileged to know our friend. I shall ever cherish the memory of the times when I was privileged to play some small part in many of her great projects. We shall never forget when she honored our home as a guest here two years before she passed away. Mrs. Pepper recalls Mrs. Roosevelt dozing on her shoulder not long before the end as she rode back from Hyde Park with her from a meeting with the United Nations Association. To the end this admitted First Lady of the world was bravely facing up to all of the ugliness and brutality of the world; facing up to it and transcending it and in some way at least softened it with one of the greatest human spirits who has adorned the human race.

It was as Chairman of the United Nations Commission on Human Rights, established in 1946, that Eleanor Roosevelt achieved the immortality in the hearts of mankind that she so richly deserved. It fell to her to implement one of the basic purposes set forth in the Charter of the United Nations:

"To achieve international cooperation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion."

Under her wise leadership the Universal Declaration of Human Rights was drafted and proclaimed. Then came the difficult work of incorporating these noble sentiments in a series of international convenants which could give them the force of law throughout the world.

Nine of these covenants have been ratified by the requisite number of nations to bring them into force:

The Convention on the Prevention and Punishment of the Crime of Genocide entered into force on January 12, 1951.

The Convention on the Freedom of Association and Protection of the Right to Organize became effective in 1950.

Equal Remuneration for Men and Women Workers became a recognized goal in 1953.

The Convention on the Political Rights of Women was made effective in 1954.

The supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery was brought into being in 1957.

The Convention on the Abolition of Force Labor entered into force in 1957.

Discrimination in Respect to Employment and Occupation was given international disapproval in the convention adopted in 1960.

The Convention against Discrimination in Education entered into force in 1960 also.

And the Convention on the Elimination of all forms of Racial Discrimination became effective in 1965.

I regret that our own government has ratified only two of these Conventions—the supplementary convention on slavery and another the Protocol on the Status of Refugees to which we have recently adhered. I hope the Senate will see fit soon to advise and consent to six Conventions submitted by Presidents Truman, Kennedy, and Johnson:

1. The Inter-American Convention for Granting Political Rights to Women, recommended by President Truman in 1949.

2. The Convention on the Prevention and Punishment of the Crime of Genocide, recommended by President Truman in 1949.

3. The Convention on the Freedom of Association and Protection of the Right to Organize, recommended by President Truman in 1949.

4. The Convention on the Abolition of Forced Labor, recommended by President Kennedy in 1963.

5. The Convention on the Political Rights of Women, recommended by President Kennedy in 1963, and

6. The Convention on Employment Policy, recommended by President Johnson in 1966.

But I am proud and I know Eleanor Roosevelt would be proud to know that the State of Israel has completed its ratification of all but the most recent of these conventions.

A few days ago as Colonel Bormann and his intrepid fellow astronauts left the moon and started homeward 200,000 miles away, in semi-glow, orbiting in the vast emptiness of space, loomed as a little orb the earth. As Colonel Bormann gazed upon our world he reflected upon all that he would soon enjoy again—his family, his home, the beautiful country, all of the majesty and might, the marvelous things, the wonderful places—he said to his fellow astronauts, "the earth is a good earth and we who are upon the earth are all there together, brothers whether we like it or not." You and I know that ours is a good earth and we love it. But we know also that it can be better and it must be better and it shall be better if we work together in the spirit of Eleanor Roosevelt as the brothers we are to make it better. That is our task. That is our challenge.

As we face the future, then let it be with firm faith and unfaltering confidence and ever with unfailing courage, always assured that by walking in the spiritual footsteps of Eleanor Roosevelt and Israel we can, as have they, helped all men to walk on higher ground.

A CALM, OBJECTIVE COMMENTARY

(Mr. PEPPER asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. PEPPER. Mr. Speaker, on February 5, 1969, the Honorable Paul C. Warnke, then Assistant Secretary of Defense, International Security Affairs, delivered a very able, thoughtful, and eloquent address before the annual combined luncheon of Yale-Princeton-Harvard Clubs of Washington at the Mayflower Hotel. This calm, objective commentary upon our foreign policy and our relations with other nations is, I believe, a very meaningful contribution to a better understanding by Congress and the country of so many challenging problems which face us in our relations with other nations and people. I, therefore, include the outstanding address of former Assistant Secretary Warnke in the RECORD following my remarks and I commend it to my colleagues and my fellow countrymen:

REMARKS BY HON. PAUL C. WARNKE, ASSISTANT SECRETARY OF DEFENSE, INTERNATIONAL SECURITY AFFAIRS, BEFORE THE ANNUAL COMBINED LUNCHEON OF YALE-PRINCETON-HARVARD CLUBS, WASHINGTON, D.C., FEBRUARY 5, 1969

Thank you Mr. Faulkner, Mr. O'Brian, honored guests, ladies and gentlemen.

I am afraid that you are all victims of false advertising. My talk today was planned to be sort of a personal retrospective on defense policy and national security as I saw it during my term of service in the Pentagon.

I had hoped to speak as a private citizen with all of the answers and none of the responsibility, but due to circumstances more or less beyond my control, I find I still have the constraints that necessarily accompany public office. In my case, however, they are quite mild. No one really cares if you are a Hawk or a Dove when you are clearly a lame duck.

But a more serious disadvantage is the fact that Governor Harriman is speaking at the National Press Club at this very moment. Not only is he freer to express his views but his service in the interests of our national security spans about as many years as mine does months. We would all be much better off if we could have his speech piped in here. As you know, he is one of our most able, effective and durable public servants and I am sure he is only temporarily at liberty.

The practical effect of my lack of change of status is that I will have to stick a little more closely to my notes. Fortunately, they are not too long and perhaps equally fortunately I find that what I would have said to you in a private capacity does not vary all that much from what I can express to you today.

As an overall theme I thought that I might try and link some of the exhibits from the chamber of horrors that was set forth in the flyer announcing my appearance. This list, as you will recall, included Vietnam, the *Pueblo*, the Middle East crisis, and the Russian invasion of Czechoslovakia. And the announcement, I thought, left some sort of a hangnail implication that maybe none of this would have happened had I not been Assistant Secretary of Defense.

I would have to concede that most of these won't rank high among American triumphs. Although we have not lost in Vietnam neither have we won militarily. And although we recovered the 82 men from the *Pueblo*, one American was murdered during the outrageous seizure of that vessel, some of our intelligence was compromised and the survivors were subjected to a year of brutal mistreatment. Our unexampled power was unable to put us in a position to deal summarily with aggressive conduct by countries we dwarf in size and resources.

Nor has our military strength enabled us to resolve the smoldering dispute in the Middle East, or to block the unprovoked and unjustified suppression by the Soviet Union of the stirrings of liberalism in Czechoslovakia. We have to ask why it is that our objectives are often frustrated despite our conviction of their fairness and despite our strength. And one might even ask why it is worth while to have this amount of military power if it cannot buy us the ability to control these events.

The reasons, of course, are complex, but the answers, I think, are pretty clear. In the present world situation we must deal with circumstances which no nation, including our own, can hope always to control and to direct toward the accomplishment of our national objectives. And this is true even though those objectives challenge the integrity and the independence of no other country. Our national security instead derives from the independence and the autonomy of other countries. And our military establishment exists to insure that security.

Questions about our world role and doubts as to when and where our vital interests are at stake have long been a part of the American political scene. In recent years, that debate has grown in intensity and it is never easy to turn these questions and that debate from the day-to-day crises to a longer range view of our security interests and toward lasting solutions. I don't expect to be able to do it today. But nonetheless I would like to try.

As I have noted, the first requirement of our defense establishment and indeed of the government as a whole is to provide for the security of the nation. However, today this security depends not only on the resources we are prepared to commit for the national defense and the resourcefulness with which

we use those resources. It depends also on the capabilities and the determination of our potential adversaries and on the awesome growth in military technology.

One compelling example I believe illustrates the increasing dominance of these two latter factors. With the technology of long-range ballistic missiles and with nuclear weapons and given the size of the Soviet economy and the determination of her leaders to have a credible nuclear deterrent, we can do nothing that will deprive the Soviet Union of the capability of killing millions of Americans. They could rend the fabric of our society at any time within 30 minutes after a decision to launch. We have had to conclude reluctantly and after hard analysis that a ballistic missile defense against a sophisticated Soviet attack is presently unattainable. So that in today's nuclear world, we are dependent upon influencing intentions rather than on frustrating capabilities. At least this is true in the case of the other major power.

Because of this need to influence intentions, there has had to come a much closer linking of our diplomacy with our military strategy. As a newcomer in this field, I was surprised and pleased to find the degree of cooperation and consultation that exists between the Departments of State and Defense. I have been equally pleased to find that—contrary to the popular myth—the Defense Department disputes don't develop typically from a military-civilian split. Our diplomacy cannot proceed without reference to our military capability. And the development and the deployment of our military forces cannot be divorced from our foreign policy objectives.

We have three and one-half million Americans under arms; of that number, one and one-half million are stationed outside the country. They support there eight collective security treaties with 43 nations, and the very existence of these forces is in itself a cardinal fact of our foreign policy. As a result, the determination of our foreign policy objectives is and must remain a mixed political-military issue.

Over one-half of those overseas military personnel are now located in Southeast Asia and their presence there has occasioned perhaps the bitterest internal debates of our history. In my view, however, these debates should center on priorities and on price rather than on the propriety of our objectives. What we have sought to achieve there is something different than empire, something different than economic gain. We have sought to achieve the right of the South Vietnamese people to determine their own political future, and we have felt that this objective was consistent with the kind of a world in which a country such as ours could continue to prosper.

We have recognized that this limited objective would not warrant the application of unlimited force which could lead us into a much wider conflict. Accordingly, we have not pursued enemy forces across national boundaries and we haven't attempted to occupy and conquer North Vietnam. And under the conditions of instability that exist in South Vietnam, these prudent restrictions have made it inevitable that we try to find a settlement rather than a military solution. Now finally, despite the prefatory bombast which is about all we have received from the other side thus far, the substantive talks directed toward a settlement are going on in Paris.

In regard to our foreign policy, we have heard of the "arrogance of power," we have heard of the "responsibilities of power." What I am suggesting today is that we all have to agree on the limitations of power, as graphically illustrated by our Vietnam experience. Our military posture must be and it is sufficiently strong to deter or to repel any attack by any adversary. It is sufficiently strong to protect our allies from external aggression. But no military strength we can bring to bear can give any other country internal stability or propel it toward progress in meeting the needs of its own people. In Southeast Asia, as elsewhere in the lesser developed regions of the world, our ability to understand and to control the basic forces that are at play is a very limited one. We can advise, we can urge, we can supply financial support. We can even in selected cases buy some period of time in which a country can be protected from external pressures while seeking to solve its own internal social problems. But American military power cannot build nations, any more than it can solve the social and economic problems that face our own country.

In other instances what military force may do can be irrelevant or even counter-productive. The Pueblo episode, for example, faced us with almost unprecedented provocation. Our men and our ship were seized in international waters. Their activity had been neither unusual nor questionable. For example, our vessels and Soviet vessels collect intelligence all over the world. The Soviet vessels come within three miles of our shores. They are safe in doing so. Moreover, intelligence about the operations of other countries, and particularly potential adversaries, not only prevents surprise, it can prevent misunderstanding. And in view of North Korea's avowed intention to take over the entire peninsula by force, it was certainly in our national interest to obtain such information as we could about their operations.

The kneejerk reaction, I would suggest, was to strike back against this outrage. We could of course have attacked the port of Wonsan; we could have sunk the North Korean Navy, and this might have given us a temporary feeling of vindication but it would not restore our men to their families. Instead, the likely effect would have been to sign their death warrants. The other course, and a course which we followed, was to seek their return through negotiations. We also used diplomatic pressures. It took almost a year and it required an American signature on what we clearly identified in advance as a total North Korean fabrication.

But our fundamental national interest is and was to prevent North Korea from scoring gains in its campaign of aggression. The North Koreans had hoped to damage our relations with the Republic of Korea. Instead, our allies accepted the necessity for the steps that we took to regain our personnel and militarily we left North Korea worse off than they were before their theft of the Pueblo and their contemporaneous attempt to assassinate the President of the Republic of Korea. Their conduct led to the strengthening of the South Korean defenses and to a $100 million supplemental in military aid. So in my view the Pueblo episode demonstrates a realistic awareness of the limits of military power, and the proper use of other means to secure national ends.

Turning to the Middle East, the chronic crisis there shows the uses as well as the limits of American military strength. We cannot expect and must not try to force the resolution of the ancient hostilities that plague that area. We can, through our friendship with Israel and through our relations with the moderate Arab states, use our good offices to help bring about peace and stability. It is our strength on the other hand that makes the Soviet Union aware that they, as we, must avoid a direct military confrontation, both in that area and elsewhere in the world.

So in the Middle East our military power can and does deter military intervention by other outsiders, but it cannot impose a lasting military solution on the region. Nor could we even try to do so without grave risk to world peace.

On the other hand, whatever accommodation of competing interests may be possible in the Middle East, it has to remain clear to the Soviet Union that any incursions on the security of Western Europe would require our military response. Although we cannot make the nations of Eastern Europe honorary members of NATO, and I must admit none as yet has applied for admission, we can make plain our legitimate concern with Soviet military moves anywhere in Europe that may affect the security of our allies.

The Czechs, I am told, envy the Israelis on the ground that being surrounded by enemies is much safer than being surrounded by friends. And the concept of a Socialist commonwealth in which the Soviets claim to be free to intervene in the affairs of any other Communist country, should make a fairly poor recruiting device. But it also has to cast a chill not only in countries such as Romania and Yugloslavia but among their NATO neighbors. The Alliance however affords warm comfort against the risk of external aggression.

In trying to review my much too-brief experience and trying to think ahead, I have been struck with the rapidity with which the various components of our national security change in today's world. Thinking ahead, a likely target date would be the year 2000, which is now only 31 short years away. But if we think back to 31 years ago, we can see, I believe, the unlikelihood of trying to base a security policy on that type of long-range prediction.

In the year 1938, for example, we were on the eve of World War II. It would have been impossible to predict, I suggest, that 31 years later our participation in an Atlantic military alliance would find Germany as our leading partner and France as an abstainer. It would have been impossible to predict an Asian policy which looks forward to greater Japanese economic and security intervention in the affairs of Asia. It would have been impossible to guess that the list of great powers would not include a single Western European country. And no one would have thought that over one-half million Americans would be engaged in a land war, in what used to be French Indo-China, but without the participation of either France or China.

So that I would submit that we cannot predict and base policy on a perception of our interests as they will appear 31 years from now. But we can, I believe, continue to improve our posture by defining our objectives more clearly and ranking their order of importance to the national interest.

We certainly can and must do a better job of reading situations in other areas of the world and analyzing how American interests there may best be served.

That's what we are trying to do at the present time in the continuing debate about America's world role. The outcome of this soul-searching is not as yet clear, but I think what is clear is that the government will not be able to sustain any foreign policy for very long that does not have the clear support of the American people. Our leaders must be and they are responsive to long-range shifts in public opinion.

With our wealth, our power, and our concern, we have no choice but to remain involved in the world and certainly no policy of isolation would rid us of the danger of nuclear missiles. However, we do have choices to make in the years ahead and they are going to be hard and difficult choices about where to take a stand and where to follow a more flexible course. These are the kinds of questions of political judgment on which the government cannot long remain outside the bounds of domestic consensus—which demands of course an informed population.

And a final lesson of the past three decades is that we will have to live and live peacefully with the other major industrial powers throughout the world. This includes not only the western Europeans for whom we feel such bonds of cultural and political affinity, not only the Japanese who have become sort of honorary members of Western Europe, but

also the Soviet Union and eventually mainland China. They are two peoples and two societies which are very different from our own. But the world is too small and the Soviet Union now and mainland China potentially are too powerful to permit personal distaste or ideological dispute to block the way to eventual cooperation.

For example, our reaction to the Soviet invasion of Czechoslovakia, though strong, did not prevent us from continuing to explore matters of possible mutual interest. Although we sought condemnation of their action in the United Nations and pressed for withdrawal of their forces, we continued to pursue efforts toward the non-proliferation treaty and we continue, after some delays, to try and find ways to proceed with talks on the limitation of strategic offensive and defensive missiles.

With respect to the non-proliferation treaty the President announced this morning that he was sending it to the Senate with the recommendation that it receive speedy approval.

In just two and a half years I have been privileged to serve 30 percent of all of the Secretaries of Defense. I have seen each of these three men face valiantly the incredible problems of national security. None of them and none of us can hope to solve all of them successfully.

What they can hope for and what they must receive is our informed understanding, our tolerance of the inevitable miscalculations and our recognition of a shared national objective which is a secure nation in a stable though diverse world.

WHITE RUSSIANS OF RICHMOND, MAINE

(Mr. PEPPER asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. PEPPER. Mr. Speaker, some time ago I put into the RECORD some material telling about the great community establishment at Richmond, Maine, as a whole community for White Russians by a very old and distinguished friend of mine and formerly a member of a noble Russian family, and now a great American, Vladimir Kuhn von Poushental. The Richmond project has become a refuge home in America generally for White Russians fleeing the scourge of communism in Russia has received respect and admiration of all Americans and in many parts of the world. The establishment of such a great project required vision, courage, organizing ability, and determination. All these virtues Baron von Poushental possesses to a high degree. In the January 1969 issue of the Magazine of Maine, entitled "Down East," there appears a very interesting article on this dynamic Richmond project in Maine. It is a moving story proving that great dreams may still be made to come true by people of competence and character. I believe it will be an inspiration to my colleagues and my fellow countrymen to read this stirring article about a noble and successful experiment in democracy and our country. Hence, Mr. Speaker, I include this article for incorporation in the RECORD following my remarks:

THE WHITE RUSSIANS OF RICHMOND, MAINE

(By Isabel Currier)

Travelers along the winding highways on either side of the Kennebec River sometimes pause in Richmond, midway between Augusta and Bath, to ask directions of some strolling citizen, and are startled to be answered by the useful phrase, "No English," spoken with a Russian accent. The 300–400 Russians who reside permanently in the Richmond area are almost doubled in numbers during the summer, when compatriots from the cities occupy vacation homes. Despite the empty factory buildings along Front Street and the dozens of homes for sale on the hilly streets rising from the river, the White Russian colony has been revitalizing the once-prosperous typical Maine town during the past fifteen years. Approximately sixty village homes are now owned by Russians and, sprawling back from the peaceful river, about forty farms in the beautiful countryside have been reclaimed by these anti-communistic refuges—many of retirement age—who traveled halfways around the world to put down new roots for their ancient culture in Sagadahoc County, State of Maine.

The 2000 natives of Richmond take their new neighbors for granted, whereas the newcomers respect the community in which they've found refuge and safeguard its institutions while establishing their own. Richmond has acquired three new churches—two Russian Orthodox and one Ukrainian, a headquarters for the White Russian Corps Combatants in America, caviar supplier, a Russian bootmaker, and a Russian restaurant and baker, without many outward signs of these establishments' alien quality.

Strangers seeking the Russian restaurant and pastry shop, as the most accessible of the colony's centers in Richmond, will find it in a modest frame building near the top of Maine Street hill. There is a display of exotic plants in the plate glass windows, and it is obvious that the proprietors—as is often the case with their Maine counterparts—make their home in the apartment upstairs. Both the sign identifying the restaurant and the menus on the unadorned inside tables are in English. Along with borsch, Stroganoff, pelmeni, prijanik, perogis and other enticing Russian dishes, the bill of fare lists such standard American items as frankforts, hamburgers, french fries and coke. "Young people seem to like these better," explains Valerian Denisow, the slight, scholarly proprietor, who bakes the pastries, and proudly offers samples to his patrons.

With his wife Ariadna, who cooks meals and waits at table with the air of a formal hostess on her maid's day off, Mr. Denisow arrived in Richmond three years ago with all their goods and chattels packed in a car which he drove in eight days across the continent from San Francisco. A forest engineer in his Russian youth, in California Mr. Denisow worked successively as an experimental gardener, proprietor of a grocery store and then of a laundry, "We were prospering, but there was too much racial tension in San Francisco. We came here in search of peace and quiet, and have found it in this beautiful State of Maine."

Although both of the Denisows speak heavily-accented English, they strive constantly to improve it, and Mr. Denisow proudly displays a framed copy of the Declaration of Independence, presented him in Portland when he became a naturalized citizen of the United States. "Our language and religion set us apart," Mrs. Denisow said, "yet I am Russian only because I was born there. I was only three years old when the revolution caused my parents to leave our home in Kiev and go to Siberia." There the White Russians under Admiral Kolchak were defeated by the communists, and many fled across the Siberian boundary into China. "I grew up in China from the age of eight," Mrs. Denisow continued. "All I know of Russia is the language and customs taught me by my parents. That is true of most of us here of the older generation. What I'm saying is that we are only people."

Richmond's town clerk, Tom Borjesson, echoes this emphasis upon human similarities and considers the Russian group a distinct asset to the town. "They're a lot like Maine people—independent, industrious, religious, close-mouthed about their affairs, but courteous in answering questions. There are more highly-educated people among them than you find in most groups, but most of them are average; by and large, they keep to themselves and never cause any trouble."

The majority of the Russians in Richmond, he explained, are retired persons living on pensions; some younger ones work in the local shoe factory, some in the Bath Iron Works, and others are very successful farmers in the outlying countryside. "There are three generations of Russians here now, and the younger ones get Americanized fast. Several of our Maine girls have married Russian boys, and two or three of the group go to the Methodist Church."

Mr. Borjesson recalled that, a few years ago, the Russians rented the Methodist Church dining room to entertain their archbishop from New York. "It was strange to see all those beards and fancy regalia in a Methodist Church in Maine . . . It's also strange that, although many of the Russians speak several languages, the older ones especially have trouble with English. But then, we Mainers don't speak Russian—don't need to in order to understand and respect good people."

The quiet drama of the White Russian migration to Maine began in 1952, after Vladimir Kuhn von Poushental, born to the title of baron in the vanished empire of the czars and later manager of the Helicopter Corporation of America, chanced to visit the area. Five years earlier, forest fires had ravaged the Kennebec Valley and, in their wake, many farms and village homes became abandoned and desolate. Richmond itself, once a thriving Kennebec port with great icehouses along the river front where vessels loaded cargoes of "frozen gold" for the foreign trade, had been struggling for decades to find other industries that would keep its young people at home. The Great Depression, plus the fire, almost had reduced it to a ghost town. Then along came Poushental who, first of all, was struck by the resemblance of the landscape and climate in the Kennebec Valley to that of the region around Moscow, remembered from his Russian youth. His life had been almost a career of turning disaster into a new lease on life, and here in Maine he saw an opportunity to acquire a quantity of neglected real estate, whereon many of his homeless compatriots might reestablish themselves as a White Russian community.

Before proceeding with his plan, Mr. Poushental consulted both the governor and the secretary of state in Augusta, explaining the background of the White Russians as the first armed opponents of communism. He was assured that they would be welcome to Maine. With these official blessings, Poushental acquired abandoned farms and homes by the dozens and advertised them for sale in Russian language newspapers throughout North America. The response was eager and immediate.

More than half of the first hopeful migrants to Maine were persons whose rootlessness began with the Russian revolution following World War I. Others had become White Russian combatants during World War II, only to find that fighting for the invaders of communist Russia was to leap from the frying pan into the fire. Disillusioned with Germany, as well as with their homeland, they became displaced persons to escape repatriation to Russia. They flocked to the cities of hospitable countries to find any work open to them, living frugally and laying aside a nestegg to finance another possible enforced move. The advertisements which offered country life in a nostalgically familiar landscape and climate, also offered a miraculous opportunity to become home owners in a community of their own kind,

far removed from the crowded loneliness of the cities.

Mr. Poushental's vision in promoting such a community brought him the means to extend his real estate activities to Florida, although he still is a summer resident of Maine. Recently he has been made an honorary citizen of the United States and his achievements in the Richmond, Pittston, Dresden, Bowdoinham, Gardiner area of Maine has been recounted in the Congressional Record.

The compatriots who came to Maine to establish new homes had earned the wherewithal as actors, artists, singers, dancers, businessmen, teachers, farmers, taxi drivers and factory workers, even though a number of them—in common with Mr. Poushental—had been born to a forgotten aristocracy. The late Miss Lydia Rennenkampf, for instance, daughter of the famous Czarist General of the Northern Front in World War I, became an interpreter for the Russian theater of Maine under the direction of Eugene Sherbakoff. Miss Rennenkampf also was secretary of the Maine chapter of the White Russian Corps Combatants, which named Princess Vera Romanov, purchaser of a summer residence in Richmond, as its honorary president.

The purposeful and peaceful "Russian invasion" startled Maine residents—but usually in ways that they heartily approved. *The American Mercury* reported, for instance, that a newly-arrived Cossack farmer "walked five miles to the village store, purchased a 100-pound sack of grain and carried it home on his shoulder." Also, as the first colonists in Maine had done, the White Russians in Richmond immediately established a place of worship.

The first Russian Orthodox Church in Maine consisted of two rooms in a huge, rambling old house on Church Street. The house itself was presented by Mr. Poushental to the White Corps Combatants, a militaristic organization, somewhat comparable to the American Legion, whose response to his real estate ads made the Maine project an overwhelming success. The combatants accepted the gift for use both as headquarters and residences for permanent and visiting officials of the St. Alexander Nevsky Foundation—the formal name for the Richmond chapter. The two rooms, lavishly decorated with icons and paintings, set aside for religious services and dedicated to St. Alexander Nevsky, served as a church for the community until 1961. Then, the members of the Foundation decided to build a separate church edifice. They raised a fund of about $20,000 and, aided by eager volunteers among the parishioners, completed the small, but richly decorated church which was dedicated in 1961 by the Russian Orthodox Archbishop of New York.

The first pastor of the Russians in Richmond was Father George Gorsky, succeeded by Reverend Afanasy Donetzkow, until his retirement. But a group of parishioners, moved by a desire to keep their religion independent from the White Corps Foundation, urged Father Donetzkow to come out of retirement in 1964 as pastor of St. Nikolaus Russian Orthodox Church. This was established in a house on South Front Street, purchased with funds raised by the independent group, and serving both as St. Nikolaus Church and the pastor's residence.

Much the larger congregation of the colony is that at St. Alexander Nevsky, the original church, of which the pastor is Father Nikolas Kashnikov, once a member of the Czar's Imperial Guard. The aristocratic old priest, with merry blue eyes in a handsome, white-bearded face, assures all comers, with apologetic brows, that he speaks "No English." He is master of several other languages, though, and he also seeks to perpetuate his native Russian by conducting Saturday classes for the colony's school children, who are habitual speakers of English. With other members of the colony, including the Denisows, he also assists students of Russian at various Maine colleges who go to Richmond for periods of conversational practice. Visitors are welcome to stand with other worshipers—the church has no pews—at Sunday morning services at 10 o'clock, when the ancient Slav ritual of the Orthodox Mass is celebrated. Both Orthodox churches in Richmond hold a colorful traditional Christmas party for children, usually on the Saturday or Sunday nearest the Russian Christmas, which occurs this year on January 7th, according to the Julian Calendar.

A third church on Pleasant Street in Richmond is not strictly Russian in the purist sense, since it is Ukrainian. Theoretically under the jurisdiction of Rome, the Ukrainian Church holds Eastern Rite services under the Russian episcopate in America. "Our three churches may lead people to believe that we Russians in Richmond do not always agree among ourselves," Eugene Sherbakoff, official Russian interpreter for the State Welfare Department and other groups, remarked drily.

Eugene Sherbakoff is one of the most articulate Russians in Maine—not alone because of his command of the language, but also by virtue of his long experience as a professional actor and director of drama. His career, which began at theatrical school in his native Odessa, extended throughout eastern Europe but was interrupted by active service with the White Army, several arduous years in a German work camp, and finally with a term of enlistment in the American army. In 1948 he began an off-Broadway revival of the Russian theater in New York, which continued until Mr. Poushental's advertisement of the Russian colony in Maine caught his eye in 1958. Sherbakoff's wife Alexandra, both a ballerina and a concert singer in her Russian youth, had developed a chronic illness from labor imposed on her in a German factory, and the promise of camaraderie, prosperity, and the pure air of a familiar climate seemed irresistible.

Once in Maine, Mr. Sherbakoff organized a group of Russian players, an artistic venture dependent upon the late Miss Rennenkampf's interpretive narrations, which could not be continued after her demise. But Sherbakoff has directed and participated in college theatricals, such as a production of *Crime and Punishment* at Bowdoin, where he played the part of Inspector General.

The ebullient Mr. Sherbakoff says that it is second nature to all White Russians to find the talent for something in demand, instead of mourning the lack of demand for an already developed talent. With his hopes for a highly successful Russian theater in Maine unrealized, he cheerfully donned a hobbyist's chef's hat and began producing pastries (there are 144 flaky layers in his apple turnovers) and smorgasbords for the Worster House in Hallowell. With equal good cheer, meanwhile, his charming and cultivated wife went to work in the shoe factory in Richmond where, she says happily, "I've had the chance to really know and be accepted by fellow workers. And I like them; I think I'll be sorry when its time to retire.

Now in his seventies, Mr. Sherbakoff has retired, except for his official services as an interpreter—for the Russian-American Pension Association, as well as State departments. He also is Richmond correspondent for the Kennebec Journal. But he is busy all the time with unofficial chores of interpretation, to smoothe the way of his non-English speaking countrymen who might be haled into court, for instance, for speeding. His busiest time is right after mail deliveries, when compatriots bring their letters to him to translate. The Sherbakoff's hospitable home on Front Street is a sort of informal public relations bureau for Russians of the entire area.

They are excited about the successes of others such as the Gradsky brothers' poultry farm near Bowdoinham, with 100,000 chickens, and that of the Lupuschenko family, whose son married a Maine girl. Without children of their own, they take pride in Olga Taranko's position as a teacher in Gardiner, and in the English language courses she conducts for her people in Richmond. "Her brother Vladimir, graduated from the University of Maine and is now fighting in Vietnam," Mrs. Sherbakoff said, "but we are not the only ones who are proud of these people—and of about sixty Russian children in the public schools here, who are all acclaimed as good students. The entire community is proud of what our people accomplish in Maine, which has done so much to make us welcome."

Newcomers to the colony continue to arrive. A recent one is the Ukrainian artist, Seweryn Boraczok, widely acclaimed both in Europe and America for his adaptation of ancient Byzantine art to modern mediums, using glass and small stones for stunning mosaics and imitations of stained glass.

Also, Mr. Speaker, another fine article paying a great tribute to Baron von Poushental for the establishment of the Richmond project appeared in the January 6 issue of the Quarterly magazine section, published weekly by the National Association of Real Estate Boards of Washington, D.C. I also commend this very fine article to my colleagues and fellow citizens, Mr. Speaker, and include in the body of the RECORD following these remarks:

BARON VLADIMIR KUHN VON POUSHENTAL—REALTOR

Russia lives again, not on the windswept steppes of Central Asia, but on the snowy, sometimes bitter landscape of Maine.

Here, along, the shores of the Kennebec River, the ancient Russian ways, customs, religion, and language flourish as though uninterrupted by the cataclysm of the Bolshevik Revolution.

The community of more than 100 families in Richmond, Me., owes its existence to the desire of a former Russian nobleman, Baron Vladimir Kuhn von Poushental, to create a home for Russian refugees from communism and nazism.

This man, a Realtor, former hunter and aviation executive, following a personal conviction that "we must try to justify our existence by helping others," formed the Alexander Nevsky Foundation, named for the Russian warrior-saint who drove back the Tartars. Through this foundation and using his own business acumen, he began purchasing abandoned farms in the Richmond, Pittston, Dresden, and Gardiner areas of Maine.

He had visited the state soon after forest fires had swept across the land in the late 1940s and was struck by its similarity to the countryside around Moscow he remembered as a youth.

Before continuing with his plan, Mr. Poushental conferred with both the governor and the secretary of state of Maine, explaining the background of the White Russians as the earliest armed opponents of communism. With official blessings for his endeavor, he advertised in Russian language newspapers in the United States and Canada "telling of the hospitable people in Maine, of how there could be true Russian religious worship, and a reconstruction of Russian ways," wrote Eleanor Sterling in the Spring, 1967, *Maine Digest*.

"And soon, in small groups, the refugees began to come. In the manner of the pioneer generations past, they brought with them their own customs, their own language, their own religion. But they also brought with them one great variation on

the pioneering theme. More than half of them were retired pensioners living on social security and private funds. They came not to create a brave new world of youth but to buy up deserted farms and wasted acreage, to have a stretch of forest and river and garden of their own, to restore the sagging community while spending retirement years together in productivity."

Some who took up residence in the new community were Col. Anatole Rogoshin in 1955, then head of the White Russian Corps, a group of officers of the old Imperial Army and other Czarist services dedicated to the overthrow of communism; Miss Lydia Rennenkampf, daughter of the famous Czarist general of the Northern Front in World War I who was executed by the Bolsheviks; and Princess Vera Romanov, cousin of the late czar and daughter of the Grand Duke Constantine who was also named honorary president of the White Russian Corps.

"The Russian community had a troublesome beginning. Archbishop Nikon, (head of the Russian Orthodox Church in North America) with his undying faith, was a strong source of help to me. He is a great learned churchman and scholar," says Baron von Poushental.

"We had trouble with the town of Richmond from the beginning. The town officials did not want the Russian refugees to open their own church and were told 'your people should learn our way and go to our churches.' Our people spoke no English—the younger people of today are the only ones who do not speak their native tongue exclusively—our people only knew their prayers in Slavic, and they like to stand up during the services. Archbishop Nikon went to all clergymen, Catholic, Methodist, Baptist. . . . and with their help, we established our own church, the first in the state of Maine," he says.

Today, there are two Russian Orthodox Churches and one Ukrainian Church (Eastern Rite) in Richmond.

"The community has remained as it began—foreign as in the 'old country.' The people have their own social activities along with their church work; their own businesses and shops; they stay pretty much to themselves in their own community and do not depend on others. They are happy people and content to be free in America away from the dictates of anyone—and especially the communists."

Baron von Poushental was born in 1899 in Tiflis, Russia, son of a general in the Czar's Military Engineering Corps and grandson of the Ataman (chief) of all the Don Cossacks. During his youth, the family lived in Kiev, where he attended the Polytechnical Institute, and in St. Petersburg.

At age 16, he joined the Imperial Russian Army and attended the Michailovsky Artillery School and Naval Aviation in Baku, Caucasus. He was one of the first combat pilots in the Russian Army.

While American flyers were tangling with von Richtoffen in the skies over Germany, Mr. von Poushental was making bombing runs over the drydocks in Constantinople in the country he would soon call home.

As an officer in the Imperial Army, he was left with nothing to do when Kerensky gave the order for soldiers not to obey their officers. He went to Kiev and joined the White Russian Army, and when the army was routed in the Crimea, he fled to Turkey.

In Turkey, he shot ducks, geese, and quail on an estate outside Constantinople, making a good enough living. Ducks were worth a dollar each, and in a couple days he was able to shoot a hundred.

"But I always wanted to go to America and play Indian when I was a kid, so when the chance came, I went," he says.

His American career began auspiciously enough. When he arrived he looked up a friend of his father, Dr. George de Bothezat, then one of the world's ranking men in aviation. Dr. de Bothezat had evolved a revolutionary theory of propellers and airscrews and had an idea for a new type of plane using his theories.

He was commissioned by the U.S. government, and he built one of the first helicopters in Dayton, Ohio.

Dr. de Bothezat left the government to form the Helicopter Corporation of America, and in doing so, named Mr. von Poushental the manager. Success was shortlived because Dr. de Bothezat died, and his secrets died with him.

The baron had always managed to turn disaster into a new lease on life, and he found this in the neglected Maine real estate. His success in promoting Maine as a home for his homeless compatriots provided the means for him to extend his activities to Florida, although he is still a summer resident in Maine.

Realtor von Poushental has been honored several times for his achievements. He has been named an honorary citizen of the State of Maine, and twice had his achievements recounted in the *Congressional Record*.

In 1967, he was signally honored by being awarded the eight-pointed Maltese Cross of the Order of St. John of Jerusalem, a sovereign religious and military order of the Catholic Church. The cross is one of the organizations highest honors. He also was invited to join the Knights of Malta.

A member of the Andoscroggin Board of Realtors, he is president of Kennebec Realty, Incorporated, in Gardiner, Me.

Mr. Speaker, in further tribute to my friend, Baron von Poushental, for whose genius and dedication to the cause of his persecuted fellow countrymen and to the cause of freedom made this Richmond project in Maine, is an article in the Miami News, of Miami, Fla., of December 14, 1968.

I include this article, too, Mr. Speaker, for the information of my colleagues and all who read the RECORD, in the RECORD following my remarks:

RUSSIAN BARON STARTS U.S. TOWN FOR COUNTRYMEN

(By Louise Leyden)

A Russian nobleman who lost his fortune when he had to flee from his country to escape from the Bolshevik Army, has been instrumental in founding a white Russian community in Richmond, Me. Baron Vladimir Kuhn von Poushental, a resident of Miami Beach, and an American citizen since 1925, not only started the community in Maine, but was the guiding spirit behind the establishment of a Russian Orthodox Church for the immigrants.

"I felt the great need for a church there," he said in telling of the establishment of the colony, "so I went to see His Eminence Archbishop Nikon in New York who went with me to Maine to look over the situation.

"There was no Russian church in the state at the time and people of other churches around the community said 'Why have one more church? Let them go to our church'."

To this Baron von Poushental replied, "No. They must have their own church." After a 'fight' he won. Today there are two Russian Orthrodox churches and one Ukrainian church serving a community of some 1,000 people including children.

"They are really happy and are thankful for their freedom," the founder stated with a smile. "All go to church regularly. The Russian priests also teach English in addition to attending to their spiritual duties."

Baron von Poushental, who prefers to be called "Val" by his friends, had previously bought some abandoned farms in the Richmond, Pittston, Dresden and Garniner areas—a large tract of land which had been swept by numerous fires. He gave the early settlers who had come to America mainly via Yugoslavia, around 500 acres as well as farm houses and some horses to till the soil.

Shortly after that he began working for a house of worship for the spiritually-minded people who had lost not only their country and their homes but their churches as well.

Baron von Poushental's family originally had vast land holdings in the old Austria-Hungarian empire. When his great grandfather was forced from the family's original home after helping in abortive movements on the continent, the Czar gave him lands in Russia.

"My father was a general who built many military establishments for the Czar. He was rich, but not as rich as the Russian noblemen around him. With the coming of the revolution my whole family was killed.

"I was a captain in Baku when Kerensky gave the order, 'Soldier do not obey officer.' When he said that I had nothing to do so I went to Kiev and joined the White Army to fight the Communists. But in 1918 the Communists broke through. I went to Sevastapol where I took a boat for Constantinople, leaving Russia with a couple of suitcases."

He had sold his rubies for $850, the last of his family fortune.

Now in Maine where he spends his summers hunting and visiting with old Russian friends, Baron von Poushental is happy watching the people till the soil, raise chickens or make shoes and attend church services in a free land—a kind of life they once knew long ago.

An account of Baron von Poushental's life was published in the Congressional Record of July 18 at the request of Rep. Claude Pepper. An earlier account appeared in May 1967.

The recent story said "to von Poushental (he prefers not to use the title now) as to Dr. Zhivago, the important thing has been to somehow find a new way in a disrupted world." And this he has done.

TWENTIETH BIRTHDAY OF THE NATIONAL HEART INSTITUTE

(Mr. PEPPER asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. PEPPER. Mr. Speaker, on November 14, 1968, President Johnson met in the East Room of the White House with a distinguished group of guests to celebrate the 20th birthday of the National Heart Institute. The group included Mr. Wilbur J. Cohen, Secretary of Health, Education, and Welfare; Dr. Philip R. Lee, Assistant Secretary for Health and Scientific Affairs; past and present Surgeons General of the Public Health Service; past and present Directors of the National Heart Institute; and past and present members of the Institute's chief advisory body, the National Advisory Heart Council.

Representing the Congress at this gathering were myself and the Honorable Lister Hill, distinguished Senator from Alabama who, throughout a long and illustrious career, has fought for legislation and appropriations aimed at improving the health and welfare of all our citizens.

It was a special pleasure for me to attend this celebration; for I was one of those who, in February of 1968, introduced the bill which was subsequently enacted into law as Public Law 655. This law, also called the National Heart Act, created the National Heart Institute. It charged the new Institute with the tasks of conducting and supporting research

into the causes, prevention, treatment, and cure of diseases of the heart and circulation; with assisting States and other agencies in the application of pertinent findings of this research; and providing training in matters relating to these diseases.

It has now been 20 years since President Truman signed the National Heart Act. And I note with pleasure that, during its first 20 years, the National Heart Institute has come a long, long way.

From a fledging institute with a staff of 11 and no appropriation to call its own in 1948, NHI has developed into a major research complex employing nearly 700 scientists and supporting personnel and managing an annual appropriation of more than $160 million. In addition to a sizable research program carried out in Federal laboratories at Bethesda and elsewhere, NHI supports more than 2,000 research projects at universities, medical schools, and similar research institutions throughout the Nation. No less important is the Heart Institute's annual outlay of more than $25 million to support research and clinical training in the cardiovascular field and to improve standards of cardiovascular teaching in medical schools. This investment is, in a sense, "seed money" for future research progress.

The Heart Institute staff and its advisory bodies, who managed these research investments over these years, and the American people, who provided the money, both have many reasons to be proud of the results.

The store of scientific knowledge of the cardiovascular system and its diseases accumulated through research over the past 20 years far outstrips that gained during all previous years of medical history. In fact, during the past 10 years, the flood of scientific and clinical information pouring forth from a multitude of research projects is already straining, and threatens to swamp the traditional machinery for disseminating this information and for assuring its prompt and widespread application toward improving the health care received by all of our people. This is an urgent problem requiring solutions, and these are being provided by recent advances in computer technology. Such an "information crisis" could scarcely be envisioned 20 years ago; and this is certainly one crisis that, when resolved, will result in benefits to all mankind.

Meanwhile, although the dissemination machinery may occasionally creak, the fruits of research are finding their way from the laboratory to the ward more swiftly than ever before. The results, in terms of human lives saved or usefully prolonged and in terms of suffering relieved, have often been spectacular.

As recently as 1950, for example, there were no satisfactory drugs for the relief of high blood pressure, a disorder that is currently thought to affect between 17 and 21 million Americans.

Today, the physician has a variety of clinically proven drugs at his disposal. Not all are effective in every patient or against all forms of the disease. But where one drug fails, another drug or combination of drugs is likely to succeed. Only rarely does it prove impossible to bring a rampaging blood pressure under control.

Improved diagnostic techniques have also been devised for identifying patients suffering from high blood pressure due to kidney disorders and other potentially curable diseases. Many of these patients can be cured or substantially improved by surgery.

These advances in diagnosis and treatment have reduced death rates from high blood pressure by nearly 50 percent during the past 10 years.

Rheumatic fever and rheumatic heart disease, once a scourge of children and young adults, have been decreasing steadily as a cause of death and disability. Most attacks of rheumatic fever can be prevented by prompt and vigorous treatment of strep infections with antibiotics. Heart threatening recurrent attacks can often be prevented by providing continuous antibiotic protection to susceptible persons.

Hearts damaged by rheumatic fever may often be mended by modern surgical techniques for restoring or replacing damaged heart valves. Today, using any of a variety of artificial valves or valve transplants, surgeons can replace one, two, or even three damaged valves in a single operation with excellent prospects of success.

Equally impressive has been the progress made during recent years in the relief of inborn heart defects. Modern heart-lung machines and other techniques for sustaining the patient during open-heart surgery allow the surgeon time to correct even complex or multiple abnormalities. As a result, operations have been devised for the cure or relief of most of the recognized types of congenital heart disease.

Atherosclerotic heart disease, and acute heart attacks resulting from this disease, remains our Nation's most important health problem.

Progress has been made, to be sure. Medical science has learned much about factors that increase susceptibility to coronary heart disease. The coronary prone patient can often be spotted early by the physician, who can recommend measures that, hopefully, may avert that first heart attack.

For victims partially or completely disabled by the crushing chest pain of angina pectoris, new drugs provide longer lasting, more complete pain relief by reducing the work load of the heart. A recent development is an electronic device that provides nearly instantaneous relief of chest pain in selected patients.

New surgical techniques have been developed for increasing the blood supply to the oxygen-starved hearts of angina patients. In many patients, improvement has been dramatic. Some, who were partially or completely disabled before surgery, have been enabled to return to work. Others have been enabled to resume activities that formerly would have brought on incapacitating chest pain.

Recent developments are also steadily improving the patient's chances of recovery from acute heart attacks. Intensive coronary care units, specially equipped and staffed for the closest clinical supervision of the coronary patient, are saving many lives that might otherwise have been lost to rapidly developing complications of the acute attack.

Special monitoring equipment keeps continous watch on the patient's heart function and summons medical assistance at the first hint of trouble. New drugs and electrical techniques for normalizing an erratic heart beat, effective agents for restoring a falling blood pressure or improving the performance of a flagging heart can swiftly be employed to avoid or cope with circulatory crises.

The Heart Institute's new artificial heart-myocardial infarction program holds promise of further improvements in coronary care. In seeking increased medical knowledge of the acute illness itself and improved methods of diagnosis and medical treatment while simultaneously working toward the development of heart assist devices to complement more conventional therapy, this program may bring about substantial reductions in death and disability in the future.

Many of the advances I have cited have been made possible through the Federal investment in biomedical research. This investment, wisely managed by the National Heart Institute and other Institutes of NIH, has supported the studies of outstanding scientists and clinicians throughout the country. It has also supported the research of a comparatively small but immensely talented group of scientists at Bethesda. The high esteem in which these men are held by the scientific community is evidenced both by the outstanding trainees that they attract to the NIH campus and also by the numerous awards bestowed on them by professional societies and related groups. And very recently, one member of the National Heart Institute scientific staff, Dr. Marshall Nirenberg, became the first Federal scientist to win a Nobel Prize. I very much doubt that he will be the last.

During its first 20 years, the National Heart Institute has indeed accomplished much. And, while much remains to be done, I have no doubts that, during the next 20 years, the Institute will continue to acquit itself as well—that it will attack the formidable problems that confront it with no less vigor, imagination, and skill than it has already shown in the past.

What the results of this effort will be, no man can now tell. But there are ample grounds for hope that, during the next 20 years, diseases of the heart and blood vessels will be largely eliminated as a cause of premature death, disability, and suffering among our people.

Mr. Speaker, the 20th birthday of the National Heart Institute, its past accomplishments, and its future prospects should be matters of considerable pride and great hope for all of us. For this reason, I propose that the transcript of the proceedings be entered into the CONGRESSIONAL RECORD:

TRANSCRIPT OF PROCEEDINGS: THE 20TH ANNIVERSARY OF THE NATIONAL HEART INSTITUTE

Secretary WILBUR J. COHEN. We are here today to commemorate the 20th Anniversary of the National Heart Institute. The National Heart Act was passed in June of 1948 during the Truman Administration. During these 20 years the Institute has distinguished itself with a most impressive list of accomplishments. This, I believe, reflects great credit on those concerned with its establishment and with its growth to maturity during these past two decades. Many of these individuals are with us today, and I would like to introduce some of them to you at this time.

First, I would like to introduce one of the men who introduced the bill which became law in 1948—a man who at that time led the effort to make the National Heart Institute a reality—my good friend, Congressman Pepper. I may be carrying coals to Newcastle, but I brought with me the first page of the bill (S. 2215) that Mr. Pepper, then a Senator, introduced on February 25, 1948 and which subsequently became law. I would like to present this and a copy of the act to him today in commemoration of this 20th Anniversary.

I would also like to introduce the man who, over these many years, has led the fight both in legislation and appropriations, not only for NHI but also for NIH and for many other important activities in the field of health. This man, who has made much of this possible, is retiring; but he leaves a great record: my friend, Senator Lister Hill.

I would also like to introduce two others who have done so much to make all of this work possible. First, Mrs. Mary Lasker. And someone who needs no introduction, Dr. Michael DeBakey.

We have here in this room a glittering galaxy of stars: men and women who have done so much in this particular area. I'd like to introduce first a man to whom I have delegated all my responsibility for administering the tremendous work in the field of health: Dr. Philip R. Lee, Assistant Secretary for Health and Scientific Affairs.

Those of us connected with the Department of Health, Education, and Welfare are, of course, very proud of the remarkable group of men and women whose work has contributed to the progress we have been making, not only in the heart field, but in many other areas. We are delighted to have here one of the outstanding members of the National Institutes of Health scientific staff, Dr. Marshall W. Nirenberg and his wife. Dr. Nirenberg, as you know, is our first Nobel Prize winner.

I'd like now to introduce the present Director of NHI, Dr. Theodore Cooper. Dr. Cooper is the latest of a line of very distinguished men who have previously served in this post. I'd like to introduce these former directors: Dr. James Watt; Dr. Ralph Knutti; Dr. William Stewart, former NHI director and current Surgeon General; and Dr. Donald Fredrickson.

Under the National Heart Act of 1948, the Heart Institute is charged with the responsibility for conducting research into the causes, prevention, diagnosis, and treatment of diseases of the heart and circulation; fostering, supporting, and coordinating cardiovascular research and related activities by public and private agencies; providing training in matters relating to heart diseases; developing more effective methods of prevention, diagnosis, and treatment; and assisting the States and other agencies in the application of these methods.

As this chart shows, cardiovascular diseases are responsible for 55% of all deaths in the U.S. each year. This, of course, is why the Institute is of such great importance. Accounting for more than half of these one million cardiovascular deaths was atherosclerotic heart disease, which claimed 559,000 American lives during 1966. Ranking second in importance was stroke, which claimed 201,000 lives. Hypertension, a distant third, caused 67,000 deaths. The remaining 173,000 deaths represent the combined total resulting from congestive heart failure, rheumatic heart disease, congenital heart disease, and other cardiovascular disorders.

This chart gives you some idea of the tremendous growth of the NHI during its 20-year history. The chart begins here in 1950, the year the Institute received its first appropriation. During the next six years, growth was slow and the annual appropriations remained below—often well below—$25 million. Then, beginning about 1957–58, when Senator Hill and Congressman Fogarty became interested in seeing what could be done, one can see how the appropriations have increased steadily over the years.

In 1963, when President Johnson took office, the budget of this Institute was about $108 million. By last year, it had climbed to more than $162 million, showing the tremendous growth that has occurred during this period of time. Most of this growth occurred in the area of research and training grants.

During 1967, NHI allocated about $127 million for research grants. Of this sum, $44 million was spent for research in atherosclerosis. This included roughly $26 million for research into the causes of this disease, $14 million for treatment, and $4 million for diagnosis.

The $14 million allotted for the study of hypertension included $8.6 million for research on causation, $3.3 million for treatment, and $2.1 million for diagnosis. The emphasis here indicates the importance of discovering the causes of these diseases, still largely unexplained.

At this point I'd like to introduce our distinguished Director of the National Institutes of Health, Dr. Robert Q. Marston, who will describe to you some of the Institute's specific accomplishments during the past 20 years.

Dr. ROBERT Q. MARSTON. Thank you, Mr. Secretary, Ladies and Gentlemen. NIH is proud of the accomplishments of the Heart Institute over the last 20 years, but I think it is important to point out that the scientists at the Heart Institute are a part of a much larger group of scientists who are dedicated to research toward curing and controlling all diseases that threaten the health and well being of our citizens. Work in other fields has made major contributions to the Heart Institute's efforts; and, indeed, the Heart Institute's findings have often had even greater applicability in other areas.

We build upon the advances of the past, on the work of others, and on the fruits of the work of the people in the Heart Institute.

In pointing out some of the highlights, one can look at the problem of heart disease due to infection. There has been a decrease over the last 20 years in rheumatic fever and rheumatic heart disease to almost half of what occurred in 1950. This has been due primarily to the prophylactic use of penicillin.

Similarly, in 1950, syphilitic cardiovascular disease was a major problem. Today it is essentially ceasing to be a problem in this country.

Hypertensive heart disease remains one of the major problems today; but one can see the dramatic progress since 1950, not only in the decrease in deaths of all ages, but particularly the decrease in deaths under the age of 65. Indeed, one sees a decrease in the death rate down into lower age groups. Surgical procedures for correcting certain kidney disorders have made contributions to the reduction of the problems with hypertensive heart disease, but the main contribution has been the development and application of effective blood pressure-lowering drugs. And we hope that in other areas of heart disease, such as coronary heart disease, it will be possible to find drugs, such as those that have an effect on lowering blood lipid levels, which may prove to be equally effective.

There have been very dramatic developments in all areas of cardiovascular surgery. Indeed, one can say that, over the last 20 years, this field has developed and has essentially been perfected. Here we see pictures of a child with tetralogy of Fallot, a major cause of "blue babies," before and after operation to correct the condition. Not only has cardiac surgery allowed the correction of a variety of congenital defects by allowing prolonged access to the heart itself, but it is also possible to correct abnormalities, particularly stenotic lesions of the heart valves, due to acquired heart disease. In this chart we see the decrease in the size of the heart following the installation of an artificial heart valve to replace the mitral valve which had been damaged, probably by rheumatic fever.

Engineers, in addition to working with surgeons and physiologists on the development of heart-assist devices and even total replacements for the heart, have also made major contributions in the development of artificial pacemakers. These can restore normal heart rate and rhythm when degenerative diseases have destroyed or impaired the conduction processes that normally control the patient's heartbeat. Some 20,000 people at present have such devices implanted, and about 10,000 additional patients are having pacemakers inserted each year.

In addition, artificial pacemakers and defibrillation devices, used transiently after acute heart attacks, are saving many lives formerly lost to arrhythmias and cardiac arrest.

Another advance stemming from the combined efforts of engineers and physicians has been an electronic device for relieving pain from angina. Here is depicted the use of a carotid sinus stimulator, which allows the patient to push a button and get almost instantaneous relief from chest pain due to advanced coronary atherosclerosis.

Now, Dr. Berliner, who is now Director of Laboratories and Clinics, NIH and who formerly headed the NHI Intramural Research Program will talk in greater detail about some of these and other advances made during the last 20 years in the cardiovascular field.

Dr. ROBERT W. BERLINER. Mr. Secretary and distinguished guests.

Dr. Marston has pointed out the dramatic reduction in the number of deaths from hypertensive heart disease that has taken place in the last 20 years. And, as he pointed out, this is largely due to progressive improvement in the management of high blood pressure through the application of new and better blood pressure-lowering drugs. In turn, the development of these drugs has been greatly facilitated by increased understanding of the way the small blood vessels that regulate blood pressure are controlled through the operation of the sympathetic nervous system.

A great deal has been learned about the ways in which messages are transmitted from one element of this system of nerves to another by the release of chemical substances that carry the messages. These chemicals are released, not only at the nerve endings in heart and blood vessels, but also in the brain centers from which the impulses arise.

Scientists working in NHI and other intramural labs in Bethesda have made a major contribution to our understanding of the processes whereby these chemical messengers are formed and stored in brain and nerve tissues and also the ways in which their storage, release, and action are effected by drugs. Indeed, it is by altering the manufacture, storage, release, or action of these chemical messengers that the drugs which

are useful against hypertension produce their effects. For his contribution to our knowledge in this field, Dr. Bernard B. Brodie, Chief of the Heart Institute's Laboratory of Chemical Pharmacology, last year received the Lasker Award.

However, an outgrowth of Dr. Brodie's work illustrates the point that we can never be sure where or how some piece of basic scientific work will turn out to have practical application. This work now appears to have made important contributions to a most promising development in a disorder far removed from hypertensive heart disease: a new treatment for Parkinson's disease, commonly known as "shaking palsy."

It has been found that dramatic improvement can be produced in many people with this disease by the administration of a substance called L-DOPA. L-DOPA is a precursor of one of the chemical transmitters in the central nervous system. That is, when L-DOPA is acted upon by certain enzymes in the central nervous system, it is converted to one of the chemical transmitters. This particular transmitter has been found to be deficient in Parkinson's disease. The work in Dr. Brodie's Laboratory had helped to focus attention on the concentration of such transmitters in the central nervous system, so that the deficiency in Parkinson's disease was discovered. In addition, his work showed that the transmitters themselves cannot enter the nervous system. To raise the concentration of the transmitters, one must administer its precursor—in this case, L-DOPA—which does enter the central nervous system where it is converted to the active substance. Thus, this basic work on the physiology and pharmacology of the sympathetic nervous system has had an unexpected payoff in what promises to be a remarkably effective treatment for a disease that is thought to affect more than a million Americans.

Dr. Marston showed an X-ray demonstrating an artificial heart valve that had been used to replace a diseased one. These valves, although they usually bring about marked clinical improvement, have been plagued with problems owing to the formation of blood clots on the foreign metal surfaces. A modification developed in the Heart Institute has remarkably reduced this difficulty. The solution was suggested by the results obtained when loose-weave plastic fabrics were used to replace segments of diseased blood vessels, a procedure that Dr. DeBakey has pioneered. Such replacements become lined by the ingrowth of body tissue so that, in a relatively short time, there is no longer an interface of blood with foreign material and clotting is no longer a problem. The solution to the valve clotting problem then was to cover the fixed metal part with woven plastic cloth. This covering encouraged the ingrowth of tissue, so that the blood no longer made contact with a foreign surface. Continued administration of anticoagulants to prevent blood clotting is no longer necessary and the clotting problem is almost elminated.

Finally, I would like to describe another use of the cardiac pacemaker. This application originated in the Heart Institute and, although it is still in the experimental stage, has provided interesting and promising results. This is the use of an electronic device to relieve angina pectoris: that is, the chest pain that occurs upon exertion or excitement in some patients with disease of the coronary arteries.

It is known that this pain comes on when parts of the heart muscle do not receive enough oxygen to meet their requirements. The situation can be improved either by increasing the blood supply to the heart or by reducing its oxygen requirement. Since our means of increasing the cardiac blood supply are very limited, it seemed worthwhile to direct attention to reducing the heart's demand for oxygen.

Fortunately, in the Heart Institute laboratories, extensive studies had been done to define the factors that determine the heart's need for oxygen. The most important of these had turned out to be, first, the pressures against which it is required to pump; second, the frequency with which the heart contracts, that is, the pulse rate; and third, the rapidity or force with which each contraction occurs. All of these—blood pressure, heart rate, and force of contraction—are controlled by the sympathetic nervous system. As a result, we can reduce heart oxygen requirements acutely by reducing the input through the sympathetic nervous system.

This can be done by providing stimuli to a structure in the neck called a carotid sinus nerve. The sympathetic nervous system interprets these electric stimuli to mean that the blood pressure is too high. Subsequently, this nervous system tries to reduce the blood pressure by dilating the blood vessels, by slowing the heart, and by reducing its force of contraction. When it does, the oxygen requirements of the heart are very sharply reduced and the pain of angina is usually dramatically relieved.

The picture that Dr. Marston previously referred to shows a man who has a carotid sinus stimulator. A transmitter, worn externally, beams radio frequency signals to a receiver implanted under the skin. From there the signals are carried via implanted wires to the carotid sinus nerve in the neck. When the patient feels the pain of angina, or when he's about to undertake some activity that he knows from experience will produce angina, he turns on his transmitter and his pain is relieved or obviate. Several patients who had been completely incapacitated from angina have been rehabilitated by the use of this device.

I have tried to point out a few of the contributions of our intramural program to practical results in the management of heart disease, emphasizing the way in which basic research has contributed, often in ways that could not have been anticipated by the worker at the time the work was done In this connection I would like to note again the presence of Dr. Nirenberg, whose work has provided a key that promises to open many doors to the future of biomedical research. Although we do not know yet where or when it will find practical application, we feel certain that it will; and, at that time, the Heart Institute will again note with pride that it was privileged to support and provide a home for his work. Thank you.

I would like to introduce Dr. Theodore Cooper, NHI Director, to tell us something about the future of research in cardiovascular disease.

Dr. THEODORE COOPER. Thank you, Dr. Berliner.

Mr. Secretary, Ladies, and Gentlemen.

In a sense, commenting on the future challenges confronting the Heart Institute is tantamount to reporting in some detail on our apparent failures, and in particular on our failure to stem the rising tide of coronary heart deaths in young men. As you can see from this chart, there is no doubt that the tide is still rising. Every year in the U.S. more than 123,000 young men—that is, men under 65—die of this disease.

Coronary heart disease is a complex disease which is likely to challenge us for some time to come. As an initial attack on this problem, we have some promising new treatments which we can apply to patients now suffering from coronary disease. In addition, we have been mounting an attack on the problem of sudden, pre-hospital deaths in adults, because these constitute about half of all patients who die from heart attacks.

Moreover, we have gained some insight into what we call the risk factors which are associated with coronary heart disease. Much of the information on these risk factors has been derived from a population study which the Institute has supported for the past 20 years at Framingham, Massachusetts.

There are a number of these risk factors, but three are of special importance. These three are elevated blood cholesterol, high blood pressure, and cigarettee smoking. And, although we are not able to say at this time what the basic mechanisms are by which these factors act to produce a heart attack or coronary artery disease, the message here is clear. Namely, that high blood cholesterol levels in combination with high blood pressure and cigarettee smoking increase the chance of having a heart attack more than five-fold.

We use a score of 100 to designate the average risk of having a heart attack. An individual who has none of these risk factors—that is, he had normal blood pressure, normal blood cholesterol, and is a nonsmoker—would be rated at 68; thus his risk of a heart attack is less than average. However, if he has all three risk factors working against him—elevated cholesterol, elevated blood pressure, and the cigarette habit—his score would be 535; hence his chances of having a heart attack are more than 5 times the average risk.

What we do not know, and what we plan to concentrate upon in our research efforts during the next decade, is how to prevent heart attacks. And to do this, we must know what the causes are and how these often-lethal lesions are produced. Some of these problems can be attacked now. As you heard previously, the skills and knowledge of many new disciplines, like engineering, are becoming increasingly available to medical science. By working together and pooling new ideas, resources, and techniques, I feel sure that, in the next 20 years, we will find some of the causes of coronary disease and also of congenital heart disease, high blood pressure, and chronic lung diseases, all of which now take so many lives prematurely.

Hand in hand with this, of course, we must continue our efforts to improve the treatment now available for people who suffer from heart attacks. This we plan to do and this we are doing. For example, the Institute is attacking the underlying scientific problems associated with heart transplantation. And the Institute also has an active, coordinated program of artificial heart development. Actually, temporary mechanical assist-devices have already been used successfully in a few centers. In addition, we are developing, testing, and improving monitoring systems and new drugs for the treatment of the disorders of heart rhythm, which are so often the cause of death for people who suffer from a wide variety of heart diseases.

Let me re-emphasize that treatment really never equals prevention. Treatment and prevention both contain many difficult problems; but with the continued support of the Congress and the public, Mr. Secretary, I am optimistic that substantial progress can be made toward the solution of these problems.

Secretary COHEN. Thank you, Dr. Cooper.

I'd like to introduce at this time, two distinguished men that I did not introduce originally: they are Dr. Leonard Scheele, former Surgeon General, and Dr. Luther Terry, former Surgeon General.

And now, since we have a minute or two, Dr. Cooper, why don't you tell us what's in the six exhibits here.

Dr. COOPER. Here we have a left-ventricular bypass pump which was developed by a team of scientists under the direction of Dr. DeBakey. It was one of the devices I mentioned which has had successful clinical application under his sponsorship at the Methodist Hospital, Houston, Texas. This is an air-driven device which supports the pumping function of the main ventricle of the heart that pumps blood into general body circulation. It takes up blood from the

left receiving chamber (atrium) of the heart and pumps it into the aorta. The pump can assume any part or, if necessary, all the circulatory duties of the left ventricle, which pumps whatever blood remains after the device has taken its share. The pump itself is mounted outside the body and can be removed when the patient's heart no longer requires pumping assistance.

Here is a cardiac pacemaker of the type developed by Chardack and Greatbatch: pioneers in the application of engineering technology to diseases in which the conduction system of the heart is so interrupted as to prevent or impair effective, coordinated contraction of the heart's pumping chambers. ike most modern pacemakers, it is completely implantable and is powered by long-life mercury batteries that require replacement only every 2–3 years. The unit may be implanted under the skin of the abdomen and the pacing stimuli conveyed to the heart by wire electrodes implanted in the heart muscle via an incision through the chest wall. Or, alternatively, the pacemaker may be implanted in a skin pouch beneath the patient's armpit and the pacing electrodes run into the heart via the jugular vien. The rate at which the device will pace the heart is set by the surgeon at the time of implantation, but can be changed later if this proves desirable or necessary.

Here we have a mount of the Starr-Edwards valve. Currently, this is the valve most widely used in cardiac surgical circles for the treatment of acquired valvular disease, usually of rheumatic origin. It has had several improvements over the past years. One improvement was to cover the metal struts of the cage with a loose-weave fabric, which encourages tissue ingrowth and reduces the threat of clot formation. Another was the use of a lightweight metal (Stellite) ball instead of the silicone ball used in earlier models. The silicone ball tended to erode under prolonged exposure to blood flowing through the valve, eventually causing the valve to become incompetent in some patients.

On the far right is a device which is called an intra-aortic balloon pump. It is based on a simple concept, but appears very promising as a mechanical support to assist the pumping function of a depressed heart. This particular one is called the Kantrowitz-Avco pump, developed in Boston, or the environs of Boston. The balloon surrounds the end of a cardiac catheter, which is introduced into the aorta (the main artery carrying blood from the heart) via the femoral artery of the leg. The balloon, inflated as the heart refills between pumping strokes, helps raise blood pressure in the systemic circulation. Deflated as the heart contracts, it reduces the pressure the heart must work against in expelling blood, thus reducing the cardiac workload.

In addition, we have here some other experimental devices under development both at the Institute and by contractors for the Institute. Now over here, we have a Kolobow-Bowman assist device, developed in the Laboratory of Technical Development at the National Heart Institute. Dr. Bowman—I see he's in the audience today—is director of that team. The device has a rigid outer shell and an elastic inner jacket fitted around the pumping chambers of the heart. Suction, applied to the outer shell, causes the elastic jacket to expand outward from the ventricles, allowing them to fill. When suction is released, the "elastic recoil" of the jacket causes it to squeeze down on the contracting ventricles, aiding them in ejecting blood.

Another device here is the spiral coil artificial lung which was also developed by Kolobov, of the NHI Laboratory of Technical Development. This device features a membranous envelope wound loosely around a central core in the rigid outer housing. Blood entering the lung flows across the outside surface of the envelope while a stream of oxygen is pulled through the envelope by the application of suction. Oxygen diffuses across the membrane to the blood; and carbon dioxide, diffusing into the envelope from the blood, is subsequently flushed from the envelope by the oxygen stream.

This membrane oxygenator appears very promising for use during acute respiratory crisis and possibly after open-heart surgery or during the acute phase of a heart attack, when low blood pressure or other serious heart catastrophes may reduce the capability of the cardiopulmonary system to oxygenate the blood adequately.

On the main exhibit we have some additional devices which are of interest in the field of cardiac replacement. And as you know, the whole field of cardiac replacement received a great impetus during the past year by the amazing success that surgeons and scientists have experienced with cardiac transplantation. There is always going to be a discrepancy between the potential number of patients needing heart replacement and the number of potential donors. Thus, a reasonable complement to the problem of cardiac replacement is the development of artificial hearts. In this exhibit we have examples of some prototypes of total cardiac replacements designed to do the same thing that a transplanted heart accomplishes now. At present, none of these are anywhere nearly ready for clinical application, but they illustrate several interesting approaches to the fundamental problem of artificial heart development.

Dr. Willem Kolff, the developer of the first artificial kidney, is also active in the field of artificial heart development. This is a model of a heart replacement developed by his team of scientists when he was at the Cleveland Clinic. He is now at the University of Utah where he is continuing his work. His device is closely analogous to the human heart, in that it has two receiving chambers and two pumping chambers. It has necessary conduits to receive "used" blood returning to the heart from the systemic circulation, pump it to the lungs for oxygenation, then return it to the left side of the heart. The pumping chamber on the left side then pumps the blood into the systemic circulation to nourish the organs and tissues of the body.

This device, like most blood pumps of contemporary design, is powered by compressed air. It has been used successfully in experimental animals of large size for about a day or so.

The major problem here, and, indeed, with all devices developed thus far, resides in the problem of obtaining a suitable material that is compatible with blood and body tissues. The Heart Institute has a major program segment devoted to attempting to understand better why so-called inert, non-toxic materials promote blood clotting and denature proteins and other blood constituents. Once this problem of materials is solved, I would predict that there will be an acceleration of development in the artificial heart field.

Much of what I said concerning the Kolff heart can be applied to the Woodward total heart replacement demonstrated by this exhibit. It is another mechanical analogy of the normal heart.

On the far right, we have another model of the DeBakey left ventricular bypass device, which I described earlier.

A different approach to cardiac pumping assistance is exemplified by the auxiliary ventricle designed by Dr. Adrian Kantrowitz. It works in series with the weakened ventricle. The device is installed across the aortic arch. It receives blood pumped into the aorta by the natural left ventricle. Then, while the ventricle refills, the pump gives the blood an extra "boost" to provide adequate blood pressure and to improve bloodflow throughout the body.

Again, with all these devices, the major scientific problem that we face for further development and improvement is the problem of finding a material that does not make blood cot, which does not destroy blood cells, and which does not denature the proteins in the blood.

Secretary COHEN. Mr. President, we've been reviewing here today the 20 year history of the accomplishments of the NHI. The bill leading to its establishment was sponsored by Senator Pepper, and was signed into law by President Truman in 1948. We've gone over the record of accomplishments. On this chart over here, you can see the increase in appropriations during recent years. When you took office, the budget for the National Heart Institute was $108 million. In this last year, it was $162 million. We have put together, as a record of today's review, a book of the charts which are presented here and the story of the Institute. We would like to present it to you in commemoration of this 20th anniversary.

President JOHNSON. Thank you very much, Mr. Secretary.

Senator Hill, and distinguished Congressman Pepper, distinguished members of Congress, honored guests, all. This is one birthday party I am very glad to attend. All of you in this room—Congressmen, Federal officials, doctors, and medical researchers—have contributed a great deal in the struggle against heart disease. I am particularly happy (to see that) Dr. Robert Hall, a distinguished cardiologist who looks after General Eisenhower, is a guest here this morning. I don't know whether I should make this personal reference or not, but I've been forced to pay the Federal Government several hundred thousand dollars in taxes since Dr. Willis Hurst saved my life when I had a heart attack, and I'm happy President Eisenhower is going to continue to pay taxes after many, many attacks. I think this is largely due to the great advances that you good people in this room have forced us politicians to take, as well as to the work that the National Heart Institute is doing.

There's one person that can't be here today that I wish could be. If he were here, he would certainly be justified in occupying the seat of honor. That person is Harry Truman. President Truman believed that the health of the people of this country should be his foremost concern, and it *was* during the days of his presidency. Those of us who share this belief often seem to regard it as a fact that was revealed in the Book of Genesis. But it isn't, and it wasn't, and building the Federal role in health and medical research, as Lister Hill and Claude Pepper know, is long and hard and sometimes bitter. But thanks to all of you today, there is a strong support in this country for the NIH from political leaders, from researchers, and, most important, from the people of this country. And all the people not supporting it will be supporting it if you'll give their names and addresses to Mrs. Lasker. (Laughter)

In the 20 years since this Institute was founded, we have amassed more knowledge about the heart and about its diseases than mankind gained in all the previous history. We've reduced the death rate from high blood pressure by nearly 50% in the last 10 years. We've developed new surgical techniques. (We have some of the distinguished surgeons with us here this morning, I'm glad to say.) We've developed heart-lung machines, we've developed open-heart surgery, and we've made many other breakthroughs. Intensive heart care units are today saving hundreds of lives, and everyone they save becomes a taxpayer and remains a taxpayer. And *that* we must not lose, because this investment pays off. Many of these advances would never have been achieved at all except for the Federal investment in health care and biomedical research which was brought about under the leadership of you people, and particularly

Senator Hill and Congressman Pepper, and others.

We have come a long way, but I know there's not a person in the room or at the Heart Institute, or a medical faculty anywhere who feels that we've come nearly far enough. A family of diseases that still murders more than a million citizens a year cannot be said to be ready for a knock-out blow. High blood pressure kills 55,000 Americans every year. Twenty to 30,000 babies are born each year with heart defects. Coronary heart disease kills more than 500,000 Americans every year and many die before the doctor ever gets there.

Today, in this room, I think we should all pledge ourselves so that someday we can say to our grandchildren (I'm thinking in terms like that these days) that we met here in the East Room with the President and we started on the next 20 years. And in those years to come, I think we ought to expect that our accomplishments will be even more spectacular. So I want to send all of you away from here with a mission, with a charge, with a challenge. I would hope that each of you would be willing to be missionaries of progress in health legislation for the next 20 years. I'm not talking about the past now; I'm talking about what's ahead of us. I wish we could make sure the path between the research laboratory and the congressional committee room is well worn. So stand before the American people and tell them what a good investment it is to spend a little money on thinning blood so that a man can live another 20 years and pay thousands of dollars in taxes every single year. Stand before the American people and argue for the funds that are essential if we're going to make this 20 years better than the last.

And if you do these things, I have no doubt that when we meet again, in the East room, God willing, 20 years from now, we will have an even happier birthday celebration. And on that day, I believe we can boast not only to have slowed down the killers (which you have—and at least a few presidents are evidence of that fact today), but we can brag that we have banished them; and that all of the fear, waste, and tragedy that went along with it is no longer with us. And if that happens, that will be my proudest moment, because I have seen in my own life and in the lives of other dear people what you scientists can do if we will just give you a little of our concern and our care and our interest. I know what it is to watch the crisis days that I've gone through the last few weeks with President Eisenhower's illness. I have seen the great investment that we've made pay off in helping this man resist his problem. I know what it is to have your blood pressure go to zero—to go into shock. And I know it well enough that I would like to see the day come when that didn't happen to anybody. And if it did happen to anybody, that you would have the implements to get the same results that the good Lord, and Lady Bird, and Doctor Hurst, all working together got back in 1955. Some of you may agree it was a good result, and some of you may not. (Laughter.)

PROHIBITION OF FEDERAL AID FOR RIOTING STUDENTS

(Mr. ROGERS of Florida asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. ROGERS of Florida. Mr. Speaker, Congress last year passed laws against Federal aid for rioting college students. Those laws are not being enforced.

The New York Times recently reported that of 549 students arrested this school year for participating in campus disorders at embattled San Francisco State College, 122 were receiving Federal financial assistance.

It is estimated that one of every six college students holds a scholarship, loan or grant from the Office of Education or a bank loan guaranteed by the Government.

Congress made it quite clear last year that the American taxpayers had no intention of financing revolution and anarchy. Student protests that exceed legal limits must not be permitted. When law violations do occur, and the students arrested are receiving Federal scholarship assistance, that aid should be terminated.

Just this week President Nixon issued a call for strong enforcement of law and order on the college campuses. He will be supported by the vast majority of American people in this regard. He has the tools within his own executive agencies to combat the wave of lawlessness, and he should be strongly urged to enforce the laws passed by the the Congress last year. Every Federal agency dispensing aid to colleges and universities should at once insist on full compliance with the law and a proper and peaceful atmosphere on the campus. The minority of students who attend college only to disrupt the education of the majority should suffer the immediate loss of Federal aid. Colleges and universities which refuse to take adequate measures to guarantee the safety of the students who do wish to continue their education in a lawful manner should be required to comply with the law without further delay.

Congress adopted these new laws to give the executive branch the necessary tools to meet the campus crisis. We expect every effort be made to enforce the law.

DESIGNATING THE BIRTHDAY OF MARTIN LUTHER KING, JR., AS A LEGAL HOLIDAY

(Mr. CONYERS asked and was given permission to address the House for 1 minute and to revise and extend his remarks and include extraneous matter.)

Mr. CONYERS. Mr. Speaker, I rise for the purpose of advising my colleagues that today I and 24 other Members of this House have introduced a bill that would make the birthday of the late Dr. Martin Luther King, Jr., January 15, a legal public holiday. I think that we need not spend too much time reviewing the life of one of America's greatest citizens, and certainly one of the Nation's most prominent figures in the few years that I have been privileged to serve in the House.

I would hope that in addition to the nearly one-half million letters and petitions that have come in from across the country in support of the bill, that we as Members of this great body, will indicate our esteem and support of this great leader for peace, for nonviolence, for humanitarianism and for justice by designating him the first black American to be honored in this way.

Mr. Speaker, I include at this point in the RECORD two telegrams which I have received, together with a press release and list of the sponsors of this legislation.

ATLANTA, GA.,
February 25, 1969.

Congressman JOHN CONYERS, Jr.,
Rayburn Office Building,
Washington, D.C.:

We are truly pleased with the sincere initiative taken by the co-sponsors and you to make the birthday of Dr. Martin Luther King, Jr., a national and legal holiday. Unfortunately, overloaded schedule will not permit my presence at the press conference on the bill today. However, the SCLC has committed itself to make certain that the Nation supports this legislation and that the Congress responds positively to this mandate. Please see that we receive copies of this historic bill.

RALPH DAVID ABERNATHY,
President, SCLC.

ATLANTA, GA.,
February 25, 1969.

Congressman JOHN CONYERS, Jr.,
Cannon House Office Building,
Washington, D.C.:

Deeply regret that a prior commitment prevents me from being with you today. I support you and the other distinguished Congressmen in your efforts to make January 15, Martin Luther King Jr.'s birthday, a national holiday.

CORETTA SCOTT KING.

CONYERS ANNOUNCES INTRODUCTION OF MARTIN LUTHER KING, JR., BIRTHDAY HOLIDAY BILL; REV. A. D. KING PRESENT AS NEARLY ONE-HALF MILLION MESSAGES OF SUPPORT DISPLAYED

Congressman John Conyers, Jr. (Dem-Michigan) today announced re-introduction, with 24 co-sponsors, of legislation to make the birthday of the Dr. Martin Luther King, Jr. a legal public holiday. Congressmen Conyers, Henry Reuss (Wis.), William Ryan (New York), George Brown (Calif.) and Benjamin Rosenthal (New York) were joined in a press conference by Rev. A. D. King, brother of the late Dr. King and Rev. Delaney, also of the Southern Christian Leadership Conference. The conference table was piled with nearly one-half million letters and petitions which have been received in support of the legislation.

"We are overwhelmed at the number of persons who have written to us and various radio stations in support of the bill," said Conyers. "The impressive thing is not just the amount of mail, but the fact that much of it has come from persons who, seldom, if ever, write to Congressmen. This obviously is an issue which has great meaning to millions of Americans, and we are delighted that so many have taken the time to make this simple, personal gesture in memory of the late Dr. King. I, and everyone else involved greatly appreciate these letters, and wish that it were possible for each to be answered individually."

This bill was originally introduced during the tragic days following Dr. King's untimely death in Memphis last April. Conyers then re-introduced the bill on the opening day of the 91st Congress. Several nationally known entertainers learned of the bill and made radio tapes which have been played across the country. "As a result of the efforts of Sammy Davis, Jr., Ruby Dee, Ossie Davis, Bill Cosby, Joe Williams, Diana Ross and the Supremes, Diahann Carroll, Dick Gregory, and Nancy Wilson," said Conyers, "my office has been literally deluged with mail. I hope the sincerity and volume of this continuing support has a very positive impact on the legislative process and we can look forward to observing the Martin Luther King, Jr. Birthday Holiday next January 15th."

Although she could not be present for the press conference, Mrs. Coretta King, widow

of the late Dr. King, sent a tape expressing her gratitude for the encouraging support for the holiday honoring her husband. In the tape, which will be sent to radio stations throughout the country, she urged that persons begin to contact their own Congressmen and Senators to indicate their interest in passage of the King Holiday Bill.

SPONSORS OF THE MARTIN LUTHER KING, JR., BIRTHDAY HOLIDAY BILL

Frank Annunzio, Illinois, Alphonso Bell, California, Jonathan Bingham, New York, Richard Bolling, Missouri, John Brademas, Indiana, George Brown, California, Mrs. Shirley Chisholm, New York, William Clay, Missouri, John Conyers, Jr., Michigan, John Culver, Iowa, Charles C. Diggs, Jr., Michigan, Don Edwards, California, Don Fraser, Minnesota, Seymour Halpern, New York, Charles Joelson, New Jersey, Edward Koch, New York, Allard Lowenstein, New York, Abner Mikva, Illinois, Mrs. Patsy Mink, Hawaii, Richard Ottinger, New York, Ogden Reid, New York, Henry Reuss, Wisconsin, Benjamin Rosenthal, New York, William Ryan, New York, Louis Stokes, Ohio.

Mr. RYAN. Mr. Speaker, will the gentleman yield?

Mr. CONYERS. I am glad to yield to the distinguished gentleman from New York.

Mr. RYAN. Mr. Speaker, I am pleased to join our distinguished colleague, the gentleman from Michigan (Mr. CONYERS), in introducing a resolution to designate the birthday of the late Reverend Dr. Martin Luther King, Jr., January 15, as a Federal holiday.

Martin Luther King, Jr., dedicated his life to securing equal justice for all Americans. The inspirational leadership he provided to the civil rights movement in both the South and the North helped make possible the enactment of the landmark Civil Rights Acts of 1964 and 1968, and the Voting Rights of 1965. Beyond that he eloquently articulated the need for America to commit itself to righting the abject misery which still characterizes the life of millions of poor Americans—black and white. His final great effort—the 1968 Poor People's Campaign—focused attention on the plight of millions of Americans—who suffer from pervasive poverty and the lack of an equal opportunity to share in America's abundance.

Dr. King rejected the notion that hate, violence, and oppression are inevitable and instead, by appealing to America's conscience, tried to draw out our better instincts for justice and fair play. In his own lifetime he became a symbol of the struggle to make real the American ideals of equality and equal opportunity. In that effort he surely made a vital contribution to our national life.

I was privileged to work with Dr. King on many occasions during the course of his career, and I never failed to be impressed by the magnitude of his commitment and the steadfastness of his courage. In an era of our national history marked by racial strife and intolerance, he was a man of all races; a leader who fought for dignity and an equal chance for black and white; a critic who never doubted that American society could be redeemed.

I recall a visit with Dr. King in the summer of 1962 when he was jailed during the civil rights struggle in Albany, Ga. In a basement cell of the Albany jail he told me of his goals and aspirations for a free America. I returned to the Congress and called for the immediate adoption of legislation aimed at curbing the denial of rights which was then rampant in Albany, Ga., and insuring equal access to public accommodations. But the Congress did not adopt that legislation until 1964.

I was with Dr. King again in Selma, Ala., when he was released from jail where he had been imprisoned for leading demonstrations for the guarantees of voting rights. Again Martin Luther King, Jr., was the head of a movement that dramatized for the entire Nation outrageous denials of fundamental constitutional rights. And again his actions contributed to the adoption of corrective legislation, the Voting Rights Act of 1965. At the moment of his death he was making plans to lead another movement aimed at dramatizing the deplorable conditions which beset the ghetto areas of our cities and the deprived rural areas of our country. We will never know whether his leadership would have moved the Nation and Congress to action. But we do know that his tragic death left an emptiness and sadness in all of us. As a nation, we could ill afford the loss of a leader of Dr. King's compassion and dedication.

Surely there can be no question of the magnitude of Martin Luther King's contribution to this country. The goals and aspirations which he championed are goals for which every American must continue to struggle until the dream he had of one America becomes a visible and substantive reality. The official celebration of Dr. King's birthday would remind future generations of his great contribution and of the need to carry on his work. I urge the Congress to adopt promptly this resolution to make Martin Luther King's birthday a national holiday.

NOEL THOMAS DOWLING, HARLAND FISKE STONE PROFESSOR EMERITUS OF CONSTITUTIONAL LAW

(Mr. RYAN asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. RYAN. Mr. Speaker, Prof. Noel Thomas Dowling, an outstanding authority in the field of constitutional law and one of America's foremost educators, died at the age of 83 on February 11.

Noel Thomas Dowling was Harland Fiske Stone professor emeritus of constitutional law at the Columbia Law School, and for 35 years, preceding his retirement from regular teaching duties, he was nationally recognized as one of the most influential scholars and teachers of the law.

His record as a teacher, unusually broad, and his abilities were clearly the product of his vast experience, combined with giant intellect.

A native of Ozark, Ala., he spent his undergraduate years at Vanderbilt University before attending Columbia University, where he received a master's degree in 1911, and a law degree from the Columbia Law School the following year. Entering the Army in World War I, he served as a major in the office of the Judge Advocate General, and as Associate Director of the War Risk Insurance Bureau, which later was renamed the Veterans' Administration. When the war ended, he assumed a place on the faculty of the University of Minnesota.

About this time, the growing legal reputation of Noel Thomas Dowling attracted the attention of Harlan Fiske Stone, dean of the Columbia Law School, later to serve as Chief Justice of the United States. At Stone's urging, Professor Dowling accepted a position on the Columbia Law School faculty, in 1922, and in a short time was firmly established as one of the leading authorities on constitutional law. His advice was sought by Congress on numerous occasions, as well as by executive agencies, and many private companies of major significance. Among his many public services, Professor Dowling shared in establishing legislative drafting bureaus in both Houses of Congress and served as a frequent adviser to the Agricultural Adjustment Administration and the Tennessee Valley Authority.

During World War II, Professor Dowling served on the board appointed by the Secretary of the Navy to review the organization and practices of naval courts. In consequence of this, he later received the Distinguished Public Service Award "for exceptionally meritorious service to the Navy," the Navy's highest civilian honor.

Professor Dowling was a frequent contributor to many legal periodicals and newspapers of note. His books on legal matters and procedure are numerous, and all are highly respected.

In 1954, at the bicentennial celebration of Columbia University, Professor Dowling was honored by the presentation of the honorary degree of doctor of laws. The citation accompanying the honorary degree described him as:

> Expert in military law, advising our Navy on court procedures; called often, responding willingly, to public duty; as author, counseling his profession in important publications; honored by many, but most by grateful students for lessons of integrity, scholarly industry, and high professional competence.

Mr. Speaker, as one of Professor Dowling's grateful students, I am deeply saddened by his passing. He belonged to a select group of legal scholars at Columbia Law School who earned for that institution prestige and fame but, at least of equal importance, who knew how to teach and enjoyed teaching. Professor Dowling had a contagious enthusiasm for the law which stirred his students, and his deep commitment to the principles embedded in our Constitution inspired those who studied under him.

His influence upon several generations of law students was profound, and his significant contribution to the development of our legal institutions will endure for generations to come.

Prof. Noel Thomas Dowling shall be missed by everyone familiar with his work, and everyone familiar with his warm and generous spirit. I want to extend my deepest sympathy to Mrs.

Dowling and his two daughters, Janet and Elizabeth.

I include at this point in the RECORD the obituary which was published in the New York Times on February 13, 1969:

NOEL T. DOWLING, LAW PROFESSOR, 83—COLUMBIA SCHOLAR IS DEAD—EXPERT ON CONSTITUTION

Noel Thomas Dowling, Harlan Fiske Stone Professor Emeritus of Constitutional Law at Columbia University, died Tuesday in his home at 520 East 77th Street. He was 83 years old.

Professor Dowling, who for 35 years was one of the nation's most influential scholars and teachers of constitutional law, was a native of Ozark, Ala., and the son of a circuit-riding Methodist minister.

He graduated from Vanderbilt University in 1909 and received a master's degree from Columbia in 1911 and a law degree from the Columbia Law School the next year. In 1954, at its bicentennial celebration, Columbia conferred upon him the honorary degree of Doctor of Laws.

The citation accompanying the honorary degree described him as "expert in military law, advising our Navy on court procedures; called often, responding willingly, to public duty; as author, counseling his profession in important publications; honored by many, but most by grateful students for lessons of integrity, scholarly industry and high professional competence."

STONE CALLED HIM TO COLUMBIA

In World War I, Professor Dowling served as a major in the Judge Advocate General's Office and as associate director of the War Risk Insurance Bureau (now the Veterans' Administration). Afterwards, he taught law at the University of Minnesota.

Harlan Fiske Stone, later to be Chief Justice of the United States, was dean of the Columbia Law School and in 1922 was instrumental in calling Professor Dowling to join his faculty.

Among his many public services, Professor Dowling shared in establishing legislative drafting bureaus in both Houses of Congress. Government agencies, such as the Agricultural Adjustment Administration and the Tennessee Valley Authority, and private insurance companies that he served as constitutional consultant sought his advice in developing and defending legislation. In 1937, he assisted the Attorney General of Alabama in litigation sustaining the constitutionality of the Social Security Act.

During World War II, he served on a board appointed by the Secretary of the Navy to review organization and practices of naval courts. He received the Distinguished Public Service Award "for exceptional meritorious service to the Navy," the highest honor the Navy can bestow upon a civilian.

BOOKS USED IN MANY SCHOOLS

Professor Dowling was a contributor to legal periodicals and newspapers. His books include: "Cases on Constitutional Law," one of the most widely used law school texts; "American Constitutional Law," with Richard A. Edwards, a casebook for political science courses, and books on conflict of laws, public utilities and legal method. With Joseph P. Chamberlain and Paul R. Hays, he wrote "The Judicial Function in Federal Administrative Agencies."

In 1941, Mayor Fiorello H. La Guardia named him chairman of a fact-finding board in a city bus strike. Within 24 hours, Professor Dowling reported resumption of transit service.

He became professor emeritus in 1954 but continued to teach actively until 1958, and after that he continued his work as an adviser to the Legislative Drafting Research Fund at Columbia.

Surviving are his widow, the former Elizabeth Brown Molloy, and two daughters, Janet C. B. Dowling and Elizabeth M. Dowling.

A funeral service will be held Saturday at 2 P.M. at the Brick Presbyterian Church, Park Avenue and 91st Street.

SUPPLEMENTAL APPROPRIATIONS FOR URGENT HOUSING NEEDS

(Mr. RYAN asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. RYAN. Mr. Speaker, I have today introduced an omnibus supplementary appropriation bill to fund fully several vital housing and urban development programs which did not receive the full amounts authorized by Congress for fiscal year 1969. This bill would appropriate an additional $100 million to the homeownership and rental housing programs—sections 235 and 236—$35 million to the rent supplement program, $187.5 million for model cities urban renewal, and $650 million for overall urban renewal. An increase in funds in each of these programs to the level specified would bring the appropriation for each to the full amount authorized by Congress for fiscal year 1969.

This bill is identical to H.R. 5562, which I introduced on January 30, and combines in one overall form individual bills which I have previously introduced in this Congress. Those bills are H.R. 4305—which would appropriate $50 million to section 236—H.R. 4602—which would provide an additional $50 million to section 235—H.R. 3840—which would make $35 million more available for the rent supplement program—H.R. 4603—which would provide $187.5 million for urban renewal in the model cities program; and H.R. 4604—which would increase appropriation for overall urban renewal programs by $650 million.

I am joined today in introducing this bill by 29 other Members who are cosponsoring this legislation. A list of the cosponsors is appended at the conclusion of my remarks.

There is no more urgent priority facing Congress than the crisis of housing and jobs in our cities. With the passage of the 1968 Housing and Urban Development Act, Congress showed signs of recognizing the true dimensions of this problem. But then Congress failed to appropriate the full amounts authorized for the rent supplement program, the section 235 homeownership and section 236 rental assistance programs for lower income families, and model cities and urban renewal. If the goal of revitalizing our cities is to be realized, adequate financial resources must be committed to that task.

The Housing and Urban Development Act of 1968 proposed a goal over the next decade of the construction and rehabilitation of 6 million housing units for low- and moderate-income families. That act states:

> The Congress finds that the supply of the Nation's housing is not increasing rapidly enough to meet the national housing goal, established in the Housing Act of 1949, of the realization as soon as feasible of the goal of a decent home and suitable living environment for every American family. The Congress reaffirms this national housing goal and determines that it can be substantially achieved within the next decade by the construction or rehabilitation of 26 million housing units; 6 million of these for low- and moderate-income families.

The President's National Advisory Commission on Civil Disorders also recommended the annual construction of 600,000 units of low- and moderate-income housing. However, President Johnson, in the first annual report of the Nation's housing goals, was forced to reduce production goals for fiscal year 1969 and fiscal year 1970 to take into account the fact that Congress did not appropriate the full amount authorized for fiscal year 1969.

Today housing conditions continue to grow worse. Some 7.8 million families still cannot afford to pay for decent, wholesome housing. Some public officials have decided that shortages will have to be met by the private sector. But, as the December 1968 report of the President's Committee on Urban Housing points out, private enterprise alone cannot correct these housing deficiencies. That report states:

> We concluded that new and foreseeable technological breakthroughs in housing production will not by themselves bring decent shelter within economic reach of millions of house-poor families in the predictable future. To bridge the gap between the marketplace costs for standard housing and the price that lower-income families can afford to pay, appropriations of Federal subsidies are essential and must be substantially increased.

The magnitude of the problem confronting us is clear. Yet, in the first year of the 10-year housing goal established by the Housing and Urban Development Act of 1968 production schedules have not been met. One reason for this lag is the failure of Congress to provide adequate funding for programs which could reduce the critical shortage in housing which today exists in our major urban areas. Therefore, I previously introduced five supplemental appropriation bills to insure that these programs will receive the full amounts authorized by Congress for fiscal year 1969.

The omnibus bill which we are introducing today combines the necessary supplementary appropriations in one package, so that the many citizens groups which are concerned with meeting our housing goals can readily identify the legislation which would help to realize those goals.

The National Committee for a Confrontation With Congress, which was so instrumental in the adoption of the "jobs in housing" concept and the 10-year goal of 6 million units of low- and moderate-income housing embodied in the Housing and Urban Development Act of 1968, is particularly concerned about the importance of full funding. This knowledgeable grassroots organization will be mobilizing public opinion and rallying support for supplemental appropriations in order to implement the 1968 act.

Let me discuss each of these amendments now in greater detail.

SECTION 236

This bill proposes an additional appropriation of $50 million for fiscal year 1969 to carry out the low-income rental and cooperative housing programs administered under section 236 of the Housing and Urban Development Act of 1968. The supplemental appropriation requested in my bill represents the difference between the amount authorized for fiscal year 1969—$75 million—and the amount actually appropriated—$25 million.

Section 236 assistance benefits reduce the market interest rate—which includes principal, interest, and cost of insurance premium—to an amount commensurate with an interest rate of 1 percent. The tenant pays no more than 25 percent of his income.

The 1968 Housing and Urban Development Act envisioned a total of 720,000 units of housing to be funded over a 3-year period. But, at the present $25 million level, only 33,000 to 40,000 units could be funded during the current fiscal year. If the section 236 program were funded at the full $75 million level, it could produce 99,000 to 120,000 units and enable us to keep pace with production goals.

SECTION 235

The President's National Advisory Commission on Civil Disorders called for a massive attack on slum housing and the establishment of an ownership supplemental program to open opportunities for low-income families to become homeowners. Full funding of the section 235 program would help to meet the need articulated by that Commission.

This bill provides a supplemental appropriation for the section 235 homeownership program. This program provides subsidy payments based on the difference between 20 percent of the homeowner's monthly income and the monthly mortgage payment.

The 3-year authorization for the section 235 program in the 1968 Housing and Urban Development Act proposed a production goal of 500,000 units during that period of time. But only 33,000 units can be funded at the current appropriation level of $25 million. My bill, by bringing the appropriation to the full $75 million authorized, would allow 100,000 units to be funded, again allowing us to keep pace with goals specified in the 1969 act.

RENT SUPPLEMENTS

Each year the rent supplement program has been starved for funds, and each year it has required a prolonged struggle in Congress to retain the program. The administration's fiscal year 1969 budget request for rent supplements was slashed by over 50 percent, from $65 million to $30 million. This drastic reduction has already produced adverse effects on the operation of the program. Within the next month the Department of Housing and Urban Development's authority to enter into contracts for annual rent supplement programs will be completely exhausted. By increasing the appropriation for this program from $30 million to $65 million—as this bill proposes—35,000 more units of housing could be financed during the current fiscal year. This also would enable us to reach the 10-year goal of 6 million housing units for persons of low and moderate income.

The rent supplement program is the private sector complement to the low-rent housing program. Under the program the Federal Government pays an amount equal to the difference between 25 percent of the tenant's monthly income and the market rental cost. The aim of the program is to enable private enterprise to take a larger measure of responsibility in fulfilling our housing needs. But, as with other housing programs, inadequate funding has resulted in the program having very little impact. If we are to gain more momentum in tackling the needs of low-income families, then this program must be adequately funded.

MODEL CITIES AND URBAN RENEWAL

The final component of this omnibus supplementary appropriation bill would provide additional funds for the urban renewal program—in both the model city neighborhoods program and the overall urban renewal program. An additional $187,500,000 would be appropriated for model city neighborhoods for use in fiscal year 1969, and $650,000,000 in additional funds would be appropriated to the urban renewal program provided for by the Independent Offices and Department of Housing and Urban Development Appropriations Act of 1968. In the latter case, the appropriation would be brought from $750 million to the full authorization of $1.4 billion.

Presently there is a large backup of applications for urban renewal programs which must be funded if we are to rid our cities of the slums and meet the 10-year national housing goals.

Since one of the essential components of the model cities program is a substantial increase in the supply of standard housing of low and moderate cost as well as creating the maximum opportunities for employing the residents of the area in all phases of the program and enlarged opportunities for work and training the appropriation to the model cities program will serve double duty by helping to create additional job opportunities for low- and moderate-income families as well as increasing the amount of decent housing that is so desperately needed. This kind of investment in the future—which through one allocation provides both jobs and housing—should be given top priority by Congress.

It is the duty and responsibility of this Congress to insure that the Housing and Urban Development Act of 1968—unlike its predecessors—achieves the goals which were first outlined in the 1949 Housing Act. Twenty years ago Congress promised to facilitate the realization as soon as feasible of the goal of a decent home and a suitable living environment for every American family. It is now time to fulfill that promise and liberate millions of long-suffering Americans from the blight of inadequate housing.

The following Members of Congress have joined in cosponsoring this legislation:

JOSEPH P. ADDABBO, of New York;
FRANK J. BRASCO, of New York;
George E. BROWN, of California;
PHILLIP BURTON, of California;
JOHN CONYERS, JR., of Michigan;
EMILIO Q. DADDARIO, of Connecticut;
DON EDWARDS, of California;
LEONARD FARBSTEIN, of New York;
DONALD M. FRASER, of Minnesota;
JACOB H. GILBERT, of New York;
HENRY GONZALEZ, of Texas;
SEYMOUR HALPERN, of New York;
HENRY HELSTOSKI, of New Jersey
JAMES J. HOWARD, of New Jersey;
EDWARD I. KOCH, of New York;
ALLARD K. LOWENSTEIN, of New York;
SPARK M. MATSUNAGA, Hawaii;
ABNER J. MIKVA, of Illinois;
THOMAS P. O'NEILL, of Massachusetts;
RICHARD OTTINGER, of New York;
CLAUDE PEPPER, of Florida;
BERTRAM L. PODELL, of New York;
HOWARD W. POLLOCK, of Alaska;
ADAM CLAYTON POWELL, of New York;
THOMAS M. REES, of California;
OGDEN R. REID, of New York;
BYRON G. ROGERS, of Colorado;
BENJAMIN S. ROSENTHAL, of New York; and
JAMES H. SCHEUER, of New York.

REPRESENTATIVE HARSHA INTRODUCES A BILL TO INCREASE PERSONAL INCOME TAX EXEMPTION TO $1,200

(Mr. HARSHA asked and was given permission to address the House for 1 minute.)

Mr. HARSHA. Mr. Speaker, I am today introducing a bill which would increase the personal income tax exemption to $1,200. This would include the exemption for a spouse, for a dependent, and for old age and blindness.

This doubling of the present exemption of $600 would be an overdue step in the necessary direction of equity and justice for the too-long-overburdened taxpayer.

The present exemption was adopted in 1948; obviously, it is no longer realistic. In the nearly 21 years since this exemption was established, the cost of living paced by the cost of Government, has increased many times. This has resulted in an inflationary trend which has decreased the value of the relatively few dollars which the wage earner has been permitted to retain after his taxes have been deducted.

Actually, the increase to a $1,200 exemption would not match the rate by which the cost of living has increased and dollar value has decreased. It would, however, permit a major improvement in the taxpayer's position while posing no threat to the Government's position. To adjust itself to the relatively small revenue reduction the Government would merely have to trim a bit of the more obvious fat from its economic midriff and, in so doing, become a bit more healthy.

In other words, this would constitute a welcome move toward greater fiscal integrity and a demonstration of better faith toward the taxpayer.

I, for one, cannot subscribe to the theory that the way to fight the inflation which Government causes is to permit Government to siphon off a greater share

of the dollars which the Government arbitrarily decides it can spend a bit more wisely than the individuals who earn it.

The results of last November demonstrated that I am not alone in that position. I would, therefore, suggest that the time has arrived when the Congress begin to give the people the fiscal justice which they deserve and demand.

A doubling of the personal income tax exemption would be a very proper beginning.

ON HONORING THE LATE REVEREND MARTIN LUTHER KING

(Mr. HORTON asked and was given permission to address the House for 1 minute, to revise and extend his remarks and to include extraneous matter.)

Mr. HORTON. Mr. Speaker, although the tragic events of the spring of 1968 have become a part of history, the deaths of Martin Luther King and Senator Robert Kennedy weigh heavily on the minds of every American.

Early in this session, I received letters from the pupils in a fifth-grade class at School No. 9 in the inner-city of Rochester, N.Y.

Although young people of a free nation should not have to know grief and the anguish of a lost hero or loved one, these 10- and 11-year-old youngsters feel deeply the scar of Martin Luther King's death on our Nation. As has been done with other great Americans, they would like to memorialize Dr. King and his thought and accomplishments by honoring his birthday.

The thoughts of these youngsters, as recorded in letters to their Congressman, are worthy of the attention of our colleagues and accordingly I have included them as follows:

ROOM 104, ANDREW NO. 9 SCHOOL,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: I think that Dr. Martin Luther King's birthday should be a holiday, but I don't want to stop going to school, Martin Luther King wants us to get an education.

Dr. King was a great man, who wanted us to live with the white men. He didn't want any fighting, all he wanted was peace before he died. And when he died he wanted to be carried, not in a hearse but in a wagon drawn by two mules.

The way he died was brave. So keep us in school and let us get a good education and grow brave like Dr. King.

Yours truly,

JUDY WASHINGTON.

ROOM 104, ANDREW NO. 9,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: I like him. He liked color people and white. He helped people when they had no money. Dr. Martin Luther King was a famous Negro leader. He spoke lots of speeches to people. He went to church on every Sunday. He made many speeches trying to make peace.

Yours truly,

MICHAEL THOMAS.

ROOM 104, ANDREW NO. 9 SCHOOL,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: Martin Luther King was a very great man and everyone loved him. He always said "I have a dream" that he wishes that he saw the little "Black and White" children walking to school together. But someone had to go shoot him. He was nice to everyone and never did anything to hurt their feelings. He would always preach and say things that were right. He was such a great man and his name was famous, but anywhere you go you will hear his name. He was a very famous man and I think on his birthday we should stay home and or march like they did when he died.

Sincerely yours,

SHARON LATTA.

ROOM 104, ANDREWS NO. 9 SCHOOL,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: Would you please try to do something about Martin Luther King's birthday. Martin Luther King was a great negro leader. He would have been a world known man if he had not have been killed. How many more leaders would have died for togetherness for their country. This day January 15, should be remembered by all.

Yours truly,

WILLIE TONEY.

ROOM 104, ANDREWS NO. 9 SCHOOL,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: I think that we should have Dr. Martin Luther King, Jr.'s Birthday saluted and children not go to school. I don't mean to stay home and play not just lay around in the house either. But mean something that will let people know the way we feel about him. And I think January 16th, 1969 should be a National Holiday for us and every one else to salute his birthday.

I hope someone will stop this violence that's going on. I hope someone will stop violence.

Hope is always in my mind.

Yours very truly,

CRYSTAL BROWN.

ROOM 104, ANDREWS NO. 9 SCHOOL,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: I want to tell you why we like Martin Luther King. He was a famous man like George Washington and Columbus. So we think that January 15, should be a National Holiday.

Yours truly,

JEROME BROWN.

ROOM 104, ANDREWS NO. 9 SCHOOL,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN FRANK HORTON: Mr. Horton, Dr. Martin Luther King is a famous man throughout the world just as George Washington and Abraham Lincoln. So because of this we should make his birthday a National Holiday.

He was a spokesman of the people and he settled matters without a fight.

We celebrate George Washington's and Abraham Lincoln's as a National Holiday and so we should celebrate his (Dr. Martin Luther King's) birthday the same way.

Yours truly,

FRANK SZABO.

ROOM 104, ANDREWS NO. 9 SCHOOL,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: I like him cause he is a good man. Dr. Martin Luther King was a famous negro leader. He was a great man. He spoke lots of times. He went to Church every Sunday. His famous saying was, "to get something don't use violence."

Yours truly,

DONALD WYATT.

ROOM 104, ANDREWS NO. 9 SCHOOL,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: I really love Dr. Martin Luther King. My mother bought a picture that you can plug it up and it will light up. He is a great man. And do you know why I love him, because he did great deeds for our country. I think we suppose to have his birthday a national holiday, because everybody liked him. If I would have catch that man who killed him I would have killed him to. I'm glad Mrs. Martin Luther King didn't marry another man like Jackie Kennedy did. She loved her husband. And I still think that we should make his birthday a national holiday.

Yours truly,

ELOISE.

ROOM NO. 104, ANDREWS, NO. 9,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: January 15, should be a holiday because it's Martin Luther King's birthday. I think it should be a holiday because he was a famous man like Benjerman Franklen and George Washington. If some people have a problem he could sometimes help them with it. We Martin Luther King and if we help him he'll help us. When he's walking with the march he stops and makes a few speeches.

Yours truly,

RONALD BROWN.

ROOM 104, ANDREWS NO. 9 SCHOOL,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: I think that you should have Dr. Martin Luther Kings birthday a holiday. Can you tell me Why it is not a holiday. We have respect for Dr. Martin Luther Kings.

He did not lake to fight or kill he want peace. for our country. He was a nice man. Be for he died he said he was free free at last. Dr. Martin Luther Kings mame his son after him and his mane was Martin Luther Kings' Jr. All the presidents went to Dr. Martin Kings Death. Dr. Martin Luther King was buried in Atlanta, Georgia.

Yours truly,

ANNETTE JACKSON.

ROOM 104, ANDREWS, NO. 9,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: I think that you should have Dr. Martin Luther King birthday for a Holiday can you tell me why they did not have his birthday for a Holiday? I do not know. Dr. Martin Luther should have a birthday for a Holiday. Do you think that Martin Luther King should have his birthday for a Holiday? I think you do not like Martin Luther King because You do not want to give him his birthday for a Holiday. And he was such a nice man and you do not like him. Can you write me and tell me why you do not have his birthday for a Holiday. Just send the lettle to No. 9 School to me. And say "Hello," to his family for me. Thank you.

Your truly,

SHERYL SLOAN.

ROOM 104, ANDREWS NO. 9 SCHOOL,
Rochester, N.Y.

DEAR CONGRESSMAN HORTON: I hope it can be possible to have Mr. King's birthday as a holiday, because he is a famous Negro man. He wasn't afraid of anything. It would be a good idea, but I know that Dr. Martin Luther King would want us to have good schooling. . . . I will pray for him every night.

Yours truly,

MERDELL.

ROOM 104, ANDREWS NO. 9 SCHOOL,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: I think that Martin Luther King was a good man, because he tried to help us every body. Martin Luther King was not an outsider.

Dr. Martin Luther King went to church every Sunday. I like Martin Luther King because he tried to help us. I think that January 15 should be a holiday because that is the birthday of Dr. Martin Luther King. Dr. Martin Luther King loved every body in the world.

Dr. Martin Luther King died for us.

Yours truly,

KALEB WATSON.

ROOM 104, ANDREWS NO. 9 SCHOOL,
Rochester, N.Y.

DEAR CONGRESSMAN HORTON: Dr. Martin L. K. was a great man, and he made great speeches. When he died, he was not riding in a funeral car, he was pulled by two mules. Before he died, he said, when I die I want to be pulled by two mules. I stayed up and watched his funeral.

Yours truly,

ATHENA CHATMAN.

ROOM 104, ANDREWS NO. 9,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN FRANK HORTON: I think that (Dr. Martin Luther Kings) birthday should be a national holiday because he was a Nobel peace prize winner whose life was notably lacking in peace. As an embattled young minister he once owned a gun but got rid of it because to him possessing the weapon symbolized not defence but only his own spiritual death. He was an advocate of brotherhood who was jailed repeatedly, kicked, spat on, stabbed nearly to death, and finally murdered.

Yours truly,

STEVEN DOTSON.

ROOM 104, ANDREW SCHOOL NO. 9,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: I feel very bad about Mrs. King's husband. He was a very famous Negro, so I'm going to ask, Mr. Horton, what he is going to do about his birthday, Jan 15.

Yours truly,

JAMES.

ROOM 104, MARTIN LUTHER J.
ANDERSON NO. 9 SCHOOL,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: I think that he should be worshiped on his birthday and I think that we should not fight on his birthday.

Yours truly,

GEORGE.

ROOM 104, ANDREWS NO. 9 SCHOOL,
Rochester, N.Y., January 16, 1969.

DEAR CONGRESSMAN HORTON: I wish that on January 15th that it should be a national holiday. Because on that day is Doctor Martin Luther King's Birthday. Because he is a great man and he gave his life for the peace of America. He tried to make it a better America. He had a dream that he would make it a better place to live. And I am only one of a thousand people who want it to be a holiday in his memory.

Yours truly,

ROMAN WHITMORE, Jr.

ROOM 104, ANDREWS SCHOOL NO. 9,
Rochester, N.Y.

Congressman FRANK HORTON,
New House Office Building,
Washington, D.C.

DEAR CONGRESSMAN HORTON: Enclosed are the thoughts and questions of my fifth grade class.

These children are very sincere in what they have written to you. They know the Reverend Dr. King as the first real leader of their race. They are groping so hard for an identity with him that it would be unfair for you and I to let this pass unattended. Don't you think it is our duty to make January 15, a national holiday and to give these children the type of hero they can be proud of.

I'm sure that it will be a very proud day for them when they receive your answers to their questions.

Thank you.

JEROME J. OCHS.

Mr. Speaker, my reply in part to these young Americans, concerned about the loss of an outstanding leader, is as follows:

Thank you very much for your letter about Martin Luther King. I, too, think that Dr. King was a great man and a great American.

His goal was an America where men, women and children of all races have the opportunity to live and prosper together in friendship. His creed of non-violence and his work for the rights of his people won for Martin Luther King one of the highest honors the world can bestow, the Nobel Peace Prize.

As time passes, and the greatness of Martin Luther King is recognized by the test of history, his birthday, along with those of President John F. Kennedy, Senator Robert F. Kennedy, President Franklin Roosevelt, President Woodrow Wilson, President Abraham Lincoln and others, may one day be established as a National Holiday. Today, only the father of our country, George Washington, is so honored.

Because of your great pride in Dr. King, I have written a personal letter to President Richard Nixon, asking that he proclaim January 15th of each year, Martin Luther King Day.

I am very proud of you and your classmates. By writing to your Congressman about a problem you are concerned with, you are learning to exercise your rights as a citizen of a democracy.

Mr. Speaker, let there be no question that our young people do have compassion and understanding. Let us hope that they will never lose it. For on compassion and understanding, we can build a better and peaceful world.

CONGRESSMAN HORTON SUBMITS LEGISLATION TO REDUCE THE SOCIAL SECURITY TAX ON SELF-EMPLOYED

(Mr. HORTON asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous material.)

Mr. HORTON. Mr. Speaker, farmers and other small businessmen are painfully aware of the axiom "security does not come cheap." This is particularly true when applied to our social security laws as they affect the self-employed.

Under newly enacted social security rates, a premium self-employment tax of 1 percent is scheduled for 1969 and 1970. While employees will pay 4.4 percent, the self-employed person will pay 5.4 percent of his income for social security taxes.

Last year basic social security costs took as much as $460.20 per person from the self-employed. Another $39 went for medicare. In addition, increases in both these programs are scheduled for the years ahead.

By 1971, the self-employed will be paying a combined employment-medicare tax of 7½ percent on the first $7,800 of income. This means that the farmer, owner of a small business, or self-employed person may have to pay up to $585 a year for themselves and up to $440.70 for each employee they may hire.

It does not make sense to subsidize Federal programs designed to aid farmers and small businessmen while retaining laws on the social security books which penalize these same people with taxes at 150 percent of the rate paid by employees with the same income.

I am introducing a bill today which would relieve self-employed persons from these excessive social security tax burdens by scaling self-employment taxes down to the same rate that employees pay. The future tax rates would be adjusted upward to correspond with the Social Security Amendments of 1967.

This legislation is primarily designed to aid the small or part-time farmer and businessman who earns $7,800 or less a year.

It is necessary, Mr. Speaker, because more and more self-employed are becoming disenchanted with the worries and demands of being their own boss.

In a survey conducted last year by the National Federation of Independent Business, 78 percent of the 250,000 small business firms responding to the questionnaire supported this bill, which I originally introduced in the 90th Congress.

Surprisingly, the same survey also indicated that lower and lower aftertax earnings of the self-employed are making the salaried employee position more and more attractive for many self-employed. They reason the fewer headaches and less problems of the employed status are more desirable than fighting the battle of the self-employed.

The National Federation of Independent Business has strongly endorsed the concept and provisions of my bill.

I hope, Mr. Speaker, that like-minded colleagues in the House who are concerned with the future of America's small businessmen will join with me in support of this measure.

This Nation cannot afford to lose the initiative and creative genius of even one self-employed American who is forced to, or chooses to go out of business for himself because of inequitable and costly self-employment tax rates.

Historically small business has kept our economy healthy, competitive and growing. Equitable social security tax laws will help small business to remain the backbone of the Nation.

CONGRESSMAN HORTON INTRODUCES THE "AL SKINNER BILL" TO EXTEND SOCIAL SECURITY BENEFITS TO LOW-INCOME PERSONS OVER 72

(Mr. HORTON asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. HORTON. Mr. Speaker, one of the most rewarding privileges of a Member of Congress is the privilege of translating the ideas of citizens directly into legislative proposals.

One of the most distinguished public servants I know, and one who is himself a devoted public servant, is Sheriff Albert Skinner, of Monroe County, N.Y.

In the 90th Congress Sheriff Skinner informed me of a serious problem that is faced by many aged citizens over 72 years of age. These people find themselves ineligible for $35 monthly payment which the 89th Congress authorized for persons over 72, because they are recipients of State or local government pension payments.

Under the present provisions of section 228 of the Social Security Act, benefits are reduced based on the amount of other government pensions, received by

the potential recipient, while some other forms of income are not counted in the benefit reduction formula.

Thus, many persons receiving very small amounts of government pension, say $1,000 or less per year, receive reduced social security payments, while others with substantially greater sources of nonpension income continue to receive the full $35 per month.

I have also reintroduced today legislation which would effectively remove the retirement test from social security payments under title II of the act. Instead of the present earned income limitation, this bill substitutes a $7,000 per year limitation on income from all sources, thus removing the penalty unjustly placed on aged citizens who do not have large investment income to draw on during retirement.

The bill which I propose today would seek to apply the same theory to section 228 benefits. Instead of penalizing low-income recipients of Government pensions, my bill would reduce the over-72 benefits only where the recipient has yearly income exceeding $2,500—$3,750 for a couple.

This would mean that persons whose Government pension income is inadequate to provide a decent level of support would be eligible for the full $35 monthly payment. Those who have adequate income from nonpension sources would not receive the special over-72 benefit, which is paid to persons who have little or no social security covered employment.

Mr. Speaker, Al Skinner, although he serves the people of Monroe County as sheriff, is alert to their problems in many areas outside the realm of his law-enforcement duties. I should like to thank him publicly again this year for communicating this particular problem to me.

I hope that my colleagues will give this bill the full and prompt consideration it deserves.

CONGRESSMAN HORTON INTRODUCES A BILL TO SPEED SOCIAL SECURITY DISABILITY PAYMENTS

(Mr. HORTON asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. HORTON. Mr. Speaker, in addition to the other bills I introduced today to benefit the retired Social Security recipient living on a fixed income, I am also submitting a measure designed to speed disability payments to social security claimants.

The 6-month waiting period after application now required by law requires too many seriously disabled persons to undergo unnecessary financial hardships.

Generally those most in immediate need of disability benefits are those suffering from readily identifiable disabilities such as blindness or loss of limb. The validity of these handicaps can usually be identified in only a few days or weeks.

My bill directs the Social Security Administration to give immediate payment to any claimant who has been blinded, has lost a limb or is otherwise suffering from a disability which can be immediately determined as one of protracted duration and seriousness.

The 6-month waiting period now required by law thwarts and frustrates the purpose of the program. The disability insurance program was established to provide incapacitated persons with sufficient sums of money to insure their well-being during periods of major crisis.

This bill would eliminate needless suffering and financial hardship now endured by such claimants who have to foot the costs incurred during the first 6 months of their disability.

The Social Security Administration has already established an unofficial procedure for processing hardship claims within 10 days of notice. They can handle 1,400 such claims weekly.

This procedure could easily be adapted to speed insurance disability relief to persons qualifying under the provisions of my bill. The incapacities qualifying under this legislation are certain to persist during the 12 months required for compensation under the act.

CONGRESSMAN HORTON INTRODUCES LEGISLATION TO LIBERALIZE THE SOCIAL SECURITY RETIREMENT TEST, PROVIDE SOCIAL SECURITY STANDARDS-OF-LIVING INCREASES, AND INCREASE WIDOW'S AND WIDOWER'S BENEFITS

(Mr. HORTON asked and was given permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. HORTON. Mr. Speaker, I am vitally concerned with the role of the retired citizen in our economy today. Neglected and shoved aside after retirement, the older American is paying the cost of inadequate social security laws and feeling the pinch of an economy influx.

More than any other segment of our society, the older American is the one hardest hit by inflation.

To help make our social security laws more equitable, I am introducing three measures which are designed to pull the retired citizen back into the mainstream of American life by making his living more comfortable, and encouraging him to participate in the pursuits of our society.

This Nation has programs in desperate need of skilled and experienced guidance. Yet, our social security laws discourage retirees from accepting new employment.

We should encourage, not discourage, the participation of retired citizens in our economy. This Nation needs their talent, expertise, and leadership.

One good way to tap the talents of the elderly in all pursuits of American society and economy is to substitute a rational income test for the present retirement earnings income test.

The first bill I am introducing today would not allow a beneficiary's payments to be reduced unless the beneficiary's income was more than $5,960 a year.

Income under the provisions of this bill would have the same meaning as it does for income tax purposes. Under present law, each beneficiary under age 72, with the exception of disabled workers and disabled children, can earn up to $1,680 a year. If more than that amount is earned, a recipient's benefits are reduced by $1 for each $2 he earns between $1,680 and $2,880. When more than $2,880 is earned, $1 is reduced for each $1 earned.

Any persons earning less than $140 a month gets paid benefits regardless.

Mr. Speaker, it is easy to see this test is really a tax on earnings. Moreover, it applies only to income derived from work.

When a person has a large income from non-work sources, he receives full Social Security benefits regardless of his outside income.

In my bill, income has the same meaning as it does for income tax purposes. But, the amount of income is computed without regard to any exclusions, exemptions, offsets, reductions or deductions which might be applied for income tax purposes.

Instead of penalizing our retired Social Security recipients, this legislation would encourage our older citizens to play a truly meaningful role in American society with dignity, security, and respect.

Mr. Speaker, the burden our older Americans bear in an inflated economy is shocking. Inflation cost our retired elderly a regressive tax of 4 percent last year alone.

The second concept I am offering today provides an automatic standard-of-living increase in social security, old-age, survivors, and disability payments whenever there is a 3-percent rise in the Consumer Price Index. I am also submitting a similar proposal for retired railroad workers which applies this formula to the Railroad Retirement Act of 1937.

This legislation would allow social security recipients and railroad retirees to receive a percentage increase in benefits which exceeds the rise in consumer prices by an amount based on the corresponding rise in real per capita income.

This formula is designed to enable qualified recipients to share in productivity and real income improvements made by the economy. While most retired workers over 65 do not currently contribute to improvements in national productivity, their past membership in the labor force entitles them to share partially in the strength of the economy.

A standard-of-living increase such as I have proposed in these bills would allow beneficiaries to keep pace with inflation. The real value of benefit dollars should remain at the level set by Congress in the initial legislation authorizing these increases.

In considering the needs of today's widowed citizens, Mr. Speaker, I think it only equitable that social security recipients who are widows and widowers should receive the full benefits of their late spouse's pension.

The third bill in my social security package increases widow's and widower's benefits from the present 82 percent to a full 100 percent of the late spouse's pension.

Depriving widows and widowers of the money a late spouse has contributed to the social security fund serves no meaningful purpose. It is a law without conscience.

Economy measures enacted by Congress should not hit hardest those least able to bear the burdens of slowing down an overheated economy.

Mr. Speaker, I feel our social security laws should enable and encourage recipients to play a truly meaningful role in the American way of life. They should not restrict, penalize, and deprive our social security recipients of the little they already have.

PURDUE UNIVERSITY CELEBRATING ITS CENTENNIAL

(Mr. LANDGREBE asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. LANDGREBE. Mr. Speaker, Purdue University—Indiana's land-grant university—is this year celebrating its centennial.

The university is 16th in size among U.S. colleges and universities. Its enrollment on five campuses totals 36,700 students in the fall of 1968.

Purdue ranks first in the Nation in the number of BS degrees granted in engineering.

It has the largest graduate enrollment in pharmacy in the country.

It has ranked 13th or higher in Ph. D. degrees awarded in the United States since 1953.

It has cooperative and technical aid programs in Argentina, Brazil, and Afghanistan, as well as worldwide research in sorghum production.

It ranks ninth in the Nation in the number of doctorates awarded in biology, sixth in chemistry, fourth in engineering, third in agriculture, and first in pharmacy.

It enrolls more students in science courses than any other American university.

If the General Assembly of the State of Indiana had not established Purdue University in May 1869, and this university had never existed, the economic and social environment of the people of Indiana and of the Nation, as well, would be affected. Nearly 100,000 young men and women have graduated from Purdue University during its history. Had there never been a Purdue, there would be vacant fields on the farmlands of Indiana, since 90 to 95 percent of all of the red wheat grown in Indiana traces its origin to varieties developed by Purdue; cattle feeders would not have the benefit of improved rations brought about by the development of Purdue Supplement A; housewives might still have to use their own recipes for cakes and other pastry mixes, for Purdue developed the first commercial cake mix in the research laboratories of the university; the entire country roadmarking system, so valuable to firemen, doctors, and others performing emergency services, would be missing. This was a development of Purdue's engineering school.

In sports, Purdue has excelled in its championship football and basketball teams and become well-known for its contributions to intercollegiate competitions. The beginning of the Intercollegiate Conference of Faculty Representatives, known widely as the "Big Ten," began in 1895 when Purdue President James Smart called a meeting of the presidents of seven Midwestern universities to consider regulation and control of intercollegiate athletics.

Purdue has also excelled in its musical organization: its "All American" marching band with its majorette corps, with 350 members, believed to be the largest university band in the Nation, its concert and varsity bands, as well as its world-famous men's glee club.

One of Purdue's greatest assets is its president, Dr. Frederick L. Hovde. A graduate of the University of Minnesota, a Rhodes scholar at Oxford University, and a past lecturer in chemistry, he has been president of Purdue University since 1946. In addition, he has served on the National Defense Research Committee and as head or as member of numerous educational and scientific committees and task forces. He has received several awards recognizing his athletic, war, and educational achievements, and has been awarded honorary degrees by 18 colleges and universities.

In the field of space, Purdue has made a significant and unique contribution to the Nation. She is known as the "Mother of Astronauts" and has given two of her finest sons in Virgil S. Grissom and Roger B. Chaffee to the search for knowledge beyond the stars. In addition, Neil Armstrong, a 1955 Purdue graduate in aeronautical engineering, was commander of Gemini VII and is commander of Apollo 10, and may be the first human being to set foot on the trackless soil of the moon; and Eugene A. Cernan in Gemini IX added greatly to the U.S. store of space knowledge with a 2-hour space walk which, up to that time, has been a record.

These facts amply illustrate that Purdue University is not just another institution of higher learning, but a university with a role and a mission to serve the people of Indiana and the Nation.

As Purdue University looks forward to its second century of service to the Nation, we the members of the congressional Indiana delegation take this opportunity to extend to Purdue University our very best wishes.

LEGISLATIVE REORGANIZATION ACT OF 1969

(Mr. MIZE asked and was given permission to extend his remarks at this point in the RECORD.)

Mr. MIZE. Mr. Speaker, I speak today in support of the Legislative Reorganization Act of 1969, an act which I have cosponsored with many of our colleagues.

This proposal strengthens the role of the legislative branch of the Federal Government, by providing for:

First. More penetrating and effective congressional committee review of important legislative business.

Second. More comprehensive, thorough, and manageable control over the fiscal affairs of the Nation, through increased use of electronic data processing equipment, and modern management techniques.

Third. A qualitative and quantitative improvement in the information available to Members of Congress as a basis for important decisions which must be made by Congress alone.

Fourth. Improvement of Congress as an institution, through the establishment of a permanent Joint Committee on Congressional Operations, the removal of postmasterships and rural mail carriers from the patronage system, appointment to the service academies on a merit basis, and other measures appropriate at this time.

Fifth. Increased supervision of lobbying activities involving the work of the Congress, and the transfer of lobbying records and responsibility for their publication to the General Accounting Office.

MEASURES TO RESTORE PUBLIC CONFIDENCE

Mr. Speaker, this legislation represents a dramatic, yet cautious attempt to facilitate professional competence on Capitol Hill, and promote professionalism in the discharge of the public duty. Further, this proposal, through its modest initiatives, sets a course for the Congress which will lead to bolder initiatives, and ultimately to a restoration of public confidence in the Congress as a vital institution.

We have been told that these times are an "era of decline" for parliamentary democracy. Instant communications, the demands of society, the imponderable measure of sufficiency and proper employment of the forces of national defense, and the seemingly unlimited capacity of technology to achieve long-cherished goals in science and commerce, have all led to increased dependence on the executive branch of the Government for direction in human affairs. Congress, in contrast, has been viewed as cumbersome and inefficient.

CONGRESS IS COEQUAL YET UNEQUAL

The executive must never be permitted to retreat from the challenges of the times—everyone would agree to that. But the Congress, by the same token, should not be permitted to fail in its constitutional responsibility as a coequal branch of the Government of the United States. By failing to provide itself with the means to maintain the historic balance as an independent, coequal partner, the Congress has in effect fallen short of its constitutional duty.

This failure is exemplified by a review of the most basic congressional prerogative: control of the Nation's fiscal affairs. The White House has at its command the most modern management cost-control techniques, electronic data processing, and a host of other tools to aid in preparing the budget. The Congress, in whom is vested the responsibility of appropriation for the public welfare, has no comparable machinery for review of that same budget.

We all know, Mr. Speaker, as a practical matter, that the Federal budget is sufficiently complex to frustrate any individual Member's systematic analysis. Members of Congress can only grasp at straws in their review of Presidential requests for funds.

Corporate executives could not manage modern business without fully competent personnel for assistance and advice, nor could they manage private enterprise without the aid of management technology.

Coequal, yet unarmed, the Congress enters the contest each year at hopeless disadvantage. The President, his advisers, and the vast machinery of the executive branch represent our competitors in determining the proper level and direction of Federal expenditure. Without staff or equipment to advise realistic alternatives, and without the capacity to exercise fine-tuned management control, the Congress can only react with quill-and-ledger crudeness to the electronic data sophistication of the executive advocates.

If it has not been in the national interest for the Federal budget to have doubled in the past 4 years—and I do not think that it has been—the Congress must bear the constitutional responsibility for the increase. That the executive has advanced these requests with persuasiveness is irrelevant. The simple fact is that the Congress has been incapable of responding to the requests of the executive with well developed, constructive, convincing arguments in the alternative.

Congress must bear full responsibility, as the Founding Fathers intended, for review and control of the spending policies of the Federal Government. But the dominant influence of congressional opinion on the fiscal policies of the Nation has diminished because Congress has neglected to equip its Members with the proper administrative weapons for their tasks.

Mr. Speaker, the Legislative Reorganization Act of 1969 would provide the management tools Members must have to do the job.

CONGRESSIONAL VITALITY MUST REFLECT NATIONAL VITALITY

No doubt those Founding Fathers of imaginative mind and boundless spirit, such as Jefferson, Washington, and Franklin, who were scientists and engineers as well as statesmen, could foresee the probability—at least—of the modern technological explosion. The vast western expanse of the land, the restless imagination and industry of the people, and the evident national desire to create an empire on the North American Continent, could never be expected to become stagnant.

One crucial institution adopted at the Constitutional Convention was the Congress. That body was to reflect the habits and ambitions of the people, and provide a national atmosphere of energy and commitment to just causes for all time. It was further to provide a check upon the executive branch, through elected representatives of the people. The Founding Fathers of this Nation no doubt believed that the people would never be disappointed in the Congress as an institution, for the Congress was made continuously responsible to the people.

Today we cannot permit ourselves to frustrate that historic purpose through failure to adopt reforms which will facilitate the reestablishment of our proper congressional role.

Mr. Speaker, the essence of congressional responsibility is fiscal control. Today, we cannot adequately perform that task, and that is the most compelling case for adoption of the Legislative Reorganization Act of 1969.

CONGRESSIONAL REFORM CAN INSPIRE THE NATION

Many young men and women in this Nation and abroad are disillusioned. They feel the institutions upon which society is based cannot provide a forum for the debate of their most heartfelt views.

Perhaps if Congress were to initiate substantive reform, and thus demonstrate that institutions can perfect themselves from within, the lesson would not be lost upon the community at large. With evolution, not revolution, lies our best hope for meeting the challenges ahead.

Those that truly love their country, and its cherished system of government, will surely applaud efforts to perfect that system. Static government stagnates, and the restless energy of the people will not long tolerate such inaction. There are pressing problems to be resolved.

REPRESENTATIVE SKUBITZ INTRODUCES LEGISLATION TO ELIMINATE HEALTH DANGERS TO COAL MINERS

(Mr. SKUBITZ asked and was given permission to address the House for 1 minute.)

Mr. SKUBITZ. Mr. Speaker, I am introducing a bill which, if enacted into law, would be a long step forward in the elimination of the health dangers to coal miners resulting from the inhalation of coal dust.

Although there are no deep shafts in my congressional district today, there was a day when deep-shaft mining was a major industry in the southeast corner of my State of Kansas. I know the dangers that come when the coal dust level is too high—not only to health but also as a cause of mine explosions as well.

My father was a miner, as were my grandfathers and six uncles. I, too, worked in the mines for a short time.

We are deeply concerned with air pollution caused by the automobile and industry in general. Our concern is enhanced because it affects us personally. Is it not time we think of the health of those who help produce the real wealth of this country?

I do not say this bill is perfect. I do not know whether the standards of 3 milligrams of respirable dust per cubic meter of air is too high or too low.

One way to find out is to hold hearings on this measure and the other bills which have the same objective.

The reason I introduce this bill is because this whole matter must be brought out in the open and discussed.

EARTHQUAKE STUDY BILL INTRODUCED

(Mr. DON H. CLAUSEN asked and was given permission to address the House for 1 minute, to revise and extend his remarks and to include extraneous matter.)

Mr. DON H. CLAUSEN. Mr. Speaker, last December, Dr. Donald F. Hornig, then Director of the Office of Science and Technology, released a very important report entitled "Proposal for a 10-Year National Earthquake Hazards Program—A Partnership of Science and the Community." This report was prepared by an ad hoc interagency working group of the Federal Council for Science and Technology under the chairmanship of William T. Pecora, Director of the U.S. Geological Survey. Other Federal agencies participating in the study were: The National Science Foundation, the Departments of Commerce, Agriculture, Defense, Housing and Urban Development, Transportation, and Interior; and the Atomic Energy Commission and National Aeronautics and Space Administration.

The report recommended a 10-year program to—

Map in detail areas of the United States likely to be subjected to economically significant earthquakes:

Improve knowledge of geology to determine the instability of geological materials under earthquake motion, and to predict earthquake intensity;

Develop better criteria for site planning and design of structures to minimize potential earthquake damage;

Search for ways to predict significant earthquakes, in order to provide earthquake risk warnings and permit emergency; measure to be taken;

Determine whether it may be possible or useful to relieve subsurface stresses; and

Analyze the socioeconomic aspects of earthquakes, including the physical, social and opportunity damages, the psychological aspects, and the costs of prevention measures.

The report notes that "many moderate, a few severe and probably one great earthquake can be expected within the United States between now and the year 2000." Losses from an earthquake like that which occurred in San Francisco in 1906 would be $3 to $15 billion plus personal injuries.

Many areas in coastal California, including the area I represent in the First District, are subject to this hazard and other areas are not immune. The largest earthquake in U.S. history occurred in New Madrid, Mo., in 1811–12. If this earthquake were repeated today, it would strongly affect the cities of Memphis and St. Louis. The earthquake of November 9, 1968, in southern Illinois shows this area is still active. Other destructive quakes have occurred in Charleston, S.C.; St. Lawrence Valley, Alaska; and Hawaii. Even the city of Philadelphia was shaken by a small earthquake in December 1968.

The report points out that urban areas are growing in areas of earthquake risk. In California alone construction in earthquake prone areas is about $10 billion per year and may reach $20 billion per year in 10 years. Potential dollar losses are thus accelerating rapidly. The entire cost of the recommended 10-year program could be offset by a reduction of a few percent of the loss a single great earthquake might bring a few years from now.

The report's subtitle "A Partnership of

Science and the Community" emphasizes the joint efforts needed to meet this national hazard. The report highlights areas where present knowledge is inadequate to enable city planners, construction engineers and designers of public utilities to take proper account of earthquake risk.

Dr. Hornig noted that potential losses from earthquake could nevertheless be reduced substantially through application of present information in earthquake engineering and seismology. He referred to the Field Act in California as an example of that State's leadership in protecting its schoolchildren from this hazard by setting standards for earthquake-resistant school construction.

Dr. Hornig expressed his hope that research and use of existing knowledge to reduce earthquake losses would proceed simultaneously, and that the Federal Government would join with State and local governments to protect all Americans from this natural hazard to life and property.

The legislation which I am introducing today would authorize the Secretary of the Army, acting through the Chief of Engineers, to undertake investigations on the effects of earthquakes and seismic sea waves, or tsunami, on engineering structures. This legislation implements one of the recommendations of this very important report—the development of better criteria for site planning and design of structures to minimize potential earthquake damage.

The need for such legislation has been amply demonstrated by the difficulties encountered in collecting adequate information on the great Alaskan earthquake of March 1964. At the direction of the President, the Office of Science and Technology undertook to assemble a comprehensive scientific and technical account of that catastrophe. In this endeavor it was assisted by the National Academy of Sciences, and the latter called upon the Corps of Engineers to undertake a broad program of data collection and analysis. The special and time-consuming arrangements that were required in this instance clearly revealed the need for legislation which will enable some Federal agency, having a nationwide organization, to provide leadership and to take immediate action to collect engineering data when disastrous earthquakes occur. Moreover, the Alaskan experience demonstrates, as have many previous seismic disturbances, that not enough is known about the effects of earthquakes or about designing engineering structures to withstand such effects.

The Corps of Engineers not only has a nationwide organization—it has within that organization a wide range of technical talent, as well as much experience in dealing with natural disasters. Moreover, in designing and constructing dams, shore protection works, seawalls, levees, buildings and other engineering works, the Corps of Engineers has a great need for better information on the effects of earthquakes and seismic waves, and for improved methods of designing structures to withstand the effects of these phenomena.

Other Federal agencies, the States, educational institutions, scientific foundations, private firms and individuals, can and will make important contributions to the attainment of the objectives of the proposed legislation. It is not my purpose for the Corps of Engineers to enter into competition with, or to obviate the need for, any of the activities now underway. Rather, the Corps of Engineers should seek to complement these activities by undertaking the studies necessary to overcome deficiencies in engineering data collection and should relate findings to structural design criteria.

REPRESENTATIVE WYLIE COSPONSORS RESOLUTION EXPRESSING SENSE OF CONGRESS THAT CURRENT CHILD, YOUTH, AND MILITARY REDUCED AIR FARES ARE CONSISTENT WITH THE FEDERAL AVIATION ACT OF 1958

(Mr. WYLIE asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. WYLIE. Mr. Speaker, I am today cosponsoring a resolution expressing the sense of Congress that current child, youth, and military reduced air fares are consistent with the Federal Aviation Act of 1958.

Up until last month, when a Civil Aeronautics Board decision interpreted them as discriminatory, half fare tickets were an important factor in U.S. air travel. They allowed families to fly on their vacations together, when it might otherwise have been monetarily impossible. They stimulated our youth to travel greater distances for better educational opportunities. And most important, they gave the members of our armed services more time to be with their loved ones and less time in traveling when on leave.

The cosponsors of this resolution, Mr. HUNT, Mr. LUKENS, Mr. SCHERLE, and I do not feel that half fare tickets, issued on a standby basis, are discriminatory to full fare passengers in any way. They involve only those unpaid for seats that would otherwise remain vacant. We feel that the Civil Aeronautics Board decision misinterprets the intent of Congress.

PERMISSION FOR SUBCOMMITTEE ON IMMIGRATION, COMMITTEE ON THE JUDICIARY, TO SIT DURING GENERAL DEBATE TODAY

Mr. ALBERT. Mr. Speaker, I ask unanimous consent that the Subcommittee on Immigration of the Committee on the Judiciary be permitted to sit during general debate today.

The SPEAKER. Is there objection to the request of the gentleman from Oklahoma?

There was no objection.

REPUBLICAN CONGRESSIONAL CAMPAIGN COMMITTEE

(Mr. BROWN of California asked and was given permission to address the House for 1 minute, to revise and extend his remarks and to include extraneous matter.)

Mr. BROWN of California. Mr. Speaker, the remarks of the distinguished Democratic member from San Diego, Calif., pertaining to the delicious bill of fare offered to our Republican colleagues by the congressional campaign committee brings to my mind a recent communication enclosed in a letter sent to me by one of my constitutents. This communication was signed by the distinguished Republican Member from San Diego, the chairman of the Republican Congressional Campaign Committee. I dismissed the letter as merely another fund solicitation sent to the Republican faithful, rather a normal procedure. However, since the letter refers to a massive, but secret, program to win control of the Congress by defeating many of my esteemed Democratic colleagues, I think it appropriate to include it in the RECORD at this point to indicate how the funds are being raised to provide this delectable menu described by my California colleague. Only the names have been deleted to protect the innocent.

The letter follows:

NATIONAL REPUBLICAN CONGRESSIONAL COMMITTEE,
Washington, D.C., February 7, 1969.

DEAR MRS. B———T: We learned plenty in the last elections. I think we learned how to take control of the House in 1970.

It is true that while we only increased our numbers by 4 this election, we have picked up 52 seats in both Special and General Elections since 1964. But we are still 26 seats short of winning control of the House. We now have 192 Republican Members in the House. We must give each of these Congressmen special help because they will be targets for defeat in 1970 by the Democrats.

But now we know what we have to do in 1970. Hardly a day has gone by since the election that we haven't had a top-level meeting. The best political minds here on Capitol Hill. The best from back home. Result: the 1970 Victory Program.

Here I have to ask you to trust me. Details of the Program must be kept top secret. The plan would lose much of its vote-getting power if the Democrats learned about this new approach. But I am free to say this much: the Program is starting right now. And it is going to cost more than we have spent in any non-election year in our history. I wish I could tell you more at this time. But you can appreciate the need for secrecy.

We can't finance the 1970 Victory Program without your help, Mrs. B———t. Last time you sent us a most generous check. Would it be too much to ask you for that plus an extra $10 this time? I know it is asking a lot. But we want a Republican Congress in 1970. The 1970 Victory Program gives us the key. And you, Mrs. B———t, can help get that program started. Thank you, once again, for your wonderful help!

Gratefully,

BOB WILSON,
Chairman.

P.S.: Please enclose the top part of this letter when you send your check? It would help our volunteers. Thank you.

TRIBUTE TO THE HONORABLE PHILIP N. BROWNSTEIN, RETIRED COMMISSIONER OF THE FEDERAL HOUSING ADMINISTRATION

(Mr. McCORMACK (at the request of Mr. ALBERT) was granted permission to extend his remarks at this point in the RECORD and to include extraneous matter.)

Mr. McCORMACK. Mr. Speaker, last week, Philip N. Brownstein retired as

Commissioner of the Federal Housing Administration.

He stepped down after 33 years of service to the Federal Government and to the people of the United States. I bring this to the attention of the Members of the House because Mr. Brownstein's career typifies what is best in the civil service.

Mr. Brownstein's story smacks of the Horatio Alger, Jr., concept.

He started with the FHA in 1935 as a truck driver's helper. Fresh out of high school in his native Indiana, willing to work and wanting to learn. He did both. He worked by day and studied by night. In a few short years, he had his law degree.

After service with the Marine Corps during World War II, he returned to the Federal Government and worked with the Veterans' Administration where his star began to rise. It was in 1963 that President John F. Kennedy appointed Philip Brownstein as Commissioner of the FHA, the same agency where he had started off by helping a truck driver.

This set the stage for an extremely productive period in his Federal career, one that has benefited the agency, the agency's image, and more importantly, one that has benefited the low- and moderate-income families who make up a broad economic belt in the United States. He first turned his attention to the mechanics of the FHA operation, and within a short period of time, he had taken the swirling papers and put them in a no-nonsense track of accomplishment. The FHA was on a processing par with almost all private lending organizations and, in some cases, it exceeded their standards for dispatch and efficiency.

He then tackled the more difficult task—that of weaning away the FHA from its suburban orientation and bringing it back to the cities where it could do the most good. It was a conversion that was not without sweat and cries of anguish. But Philip Brownstein succeeded and in so doing gave the FHA a new outlook on what its role should be in providing better housing for all the people of our country, and for the poor and disadvantaged in particular. This approach led to the vast housing rehabilitation project in the Roxbury-Dorchester area of Boston. This is the largest single rehabilitation project in the country, and one which already has had a salutory effect on this neighborhood and the wonderful people who live there.

Many are living better, in more security and at prices they can afford, thanks to the diligency and skill which Philip Brownstein brought to his job.

There is still much to be done in the field of housing. We have not yet reached a position where we in the Federal Government can rest comfortably on our laurels. The needs of our poor are especially pressing, but at least we have started to provide them with the housing they need. We have provided the tools and the training for the men who can carry out the job. We have shown them the way to succeed.

The man who has consistently stood in vanguard was Philip Brownstein and to him we owe a debt of gratitude and a debt of thanks. He has served well the needs of his country.

RETIREMENT OF RICHARD L. EMBLY, HOUSE PRESS GALLERY SUPERINTENDENT

(Mr. ALBERT asked and was given permission to address the House for 1 minute, and to revise and extend his remarks.)

Mr. ALBERT. Mr. Speaker, next Friday the House of Representatives will lose the services of one of its most loyal and devoted aids.

Richard L. Embly, superintendent of the House Press Gallery, has elected to retire on February 28, 1969, after completing 30 years of service to this body.

Dick is the quiet and efficient administrator who skillfully assists all of us each day in the dissemination of news to our constituents and in communicating the deliberations of the House of Representatives to the reading public.

Dick's successor as superintendent of the House Press Gallery will be Benjamin C. West, who has served the Press Gallery with distinction for nearly 28 years.

Those of us who know Mr. West have every confidence that his service will meet the high standards set by Mr. Embly.

Originally from Maryland, Dick was appointed to the Press Gallery staff in 1939. Only 10 members of this House have served longer than has Dick Embly.

Dick has been a familiar figure at national political conventions and he has played a key role in the preparation of daily press facilities at those events and at other similar activities. Dick Embly is a good friend—respected by the House of Representatives and by his colleagues in the newspaper industry.

I am sure that all Members of the House join me in wishing good health and happiness to Dick Embly and his lovely wife in his retirement years.

Mr. GERALD R. FORD. Mr. Speaker, will the gentleman yield?

Mr. ALBERT. I will gladly yield to the distinguished minority leader.

Mr. GERALD R. FORD. Mr. Speaker, I am pleased to join with the distinguished majority leader in paying tribute to Richard L. Embly on the occasion of his retirement as superintendent of the House Press Gallery.

Perhaps few persons are aware of the extent to which the Press Gallery superintendent and his staff assist in the flow of information from the House side of the Capitol to the public via the press. Dick Embly has performed a valuable role in that process. He has helped to make the actions of the House clear to newsmen covering "The Hill," and he has served as a conduit between news sources in the House and the press.

Throughout all of his three decades on the Press Gallery staff, Dick Embly has served quietly but most capably. He has been of great service to this House.

There are but a few individuals who have served as superintendent of the House Press Gallery since it was established nearly a century ago. Dick Embly has the distinction of being only the third man to serve in that capacity.

Mr. Speaker, I am sure my colleagues join me in expressing the appreciation of the House for the services of Richard L. Embly. I wish Dick Embly and his wife, Elizabeth, every happiness in his retirement years.

Mr. ALBERT. I thank the distinguished gentleman from Michigan for his remarks.

ABM QUESTION

The SPEAKER. Under previous order of the House, the gentleman from California (Mr. COHELAN) is recognized for 60 minutes.

(Mr. COHELAN asked and was given permission to revise and extend his remarks and include extraneous matter.)

Mr. COHELAN. Mr. Speaker, we have taken this opportunity today to schedule this discussion of the ABM question in the hope that it would help focus—for ourselves, for the administration, and for the public—the difficult issues associated with the deployment of an anti-ballistic-missile defense.

I do not expect that we will today resolve our doubts or our differences. But I do hope that we will come away with a greater understanding and appreciation of the enormous magnitude of the ABM decision.

Last year when the House had its first opportunity to pass on the appropriations for the construction of an anti-ballistic-missile system, I introduced the amendments to delete all funds for ABM deployment. At that time neither the Congress nor the public had much discussed the serious implications of ABM deployment. Today we are more fortunate in that we have the benefit of a full-scale public debate of the consequences of ABM—on domestic priorities, on national security, international policy, and even on safety in our cities. I would hope that today's proceedings add to this important national debate.

In preparing for House consideration of the ABM deployment last spring, I conducted an extensive study of the available literature. I solicited the views of knowledgeable Congressmen, defense planners, industrialists, scientists, and foreign policy experts.

After this research, I concluded that it was not in the national interest for the United States to deploy an anti-ballistic-missile system.

This conclusion was based on my findings that the ABM threatens to escalate the arms race and is not necessary to a strong bargaining position with the Soviets; that it would probably not save lives in case of a Soviet nuclear attack; that it is not necessary to our defense against China; that the ABM would cost enormous sums that could be better spent at home; and that even if built that it would probably not work very well for very long.

In the months that have followed, nothing has occurred to cause me to alter these conclusions, and a good deal has

happened which has reinforced my convictions.

I would like today to review the reasoning that led to my opposition to ABM deployment, and to comment on some of the issues which have been raised since last spring.

I hope my colleagues who are present will feel free to volunteer any contributions they may choose to make in the course of the discussion.

First. ABM deployment threatens to escalate the arms race and is not necessary to a strong bargaining position with the Soviets.

Deterrence has been the defense of every nuclear nation against nuclear attack for the past two decades.

The United States and the Soviet Union have achieved the ultimate deterrent—an assured destruction capability. The offensive forces of both are so vast, and so invulnerable, that either country can absorb a surprise nuclear attack and still with absolute certainty destroy the attacking country; thus making any nuclear attack against them positively suicidal.

Both countries have responded over time to meet weapons advances by the other side which threatened the certainty of their assured destruction capability. Since responses must anticipate the worst plausible actions by the other side, and since long leadtimes require decisions based on relatively uncertain information, each side has overreacted to deployments by the other side. Today both the Soviet Union and ourselves possess such vast nuclear arsenals that we can destroy one another several times over.

We had until recently arrived at a plateau in nuclear armaments, with both sides relatively secure in the credibility of their deterrent. Now however, technological advances like ABM and MIRV threaten to coax us off the plateau and into the whirlwind of a resumed nuclear arms race.

Mr. GIAIMO. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. I am glad to yield to the gentleman from Connecticut.

Mr. GIAIMO. The gentleman has referred to the ABM and the MIRV in relation to our defensive capability. It seems to me that we should not in this discussion combine both the ABM and the MIRV together. It may well be that deployment of the ABM at this time could escalate both the Soviet Union and the United States into another phase of the expanding nuclear capability. But I do not think we should confuse a defensive weapon such as the ABM, which is questionable in its defensive capabilities, with an offensive weapon such as the MIRV, which should stand or fall on its own merits. I can envision my own support for MIRV's at the same time that I oppose strenuously the deployment of the ABM system.

Mr. COHELAN. As the gentleman so well knows, the MIRV question is tied in with the anti-ballistic-missile system, but I agree with the gentleman. The MIRV is an offensive system. It is a system that we are now going into further development. It is, in effect, a breakthrough technologically and it gives us an even greater capability than we now possess. It is essentially an escalation of the arms race.

Mr. GIAIMO. Mr. Speaker, will the gentleman yield further?

Mr. COHELAN. I yield to the gentleman from Connecticut.

Mr. GIAIMO. My point is this: For example, I am convinced that there are adequate and sufficient reasons why we should not deploy the ABM system at this time. The possible escalation of the arms race is one of the reasons.

On the other hand, I probably lean toward the theory that we may well want to deploy a MIRV system. So I believe they should both be treated separately and not treated in the same discussion as if they both would accomplish the same objective or that both must stand and fall together.

Mr. COHELAN. I think it is hard to carry on a discussion about strategic posture unless you discuss all of the weapon systems and the remarkable technological breakthroughs which have taken place, which, of course, have the effect of escalating the arms race, because with each increment, with each addition to the system, we get a response from the other side and, of course, the whole thing escalates. But I would agree with the gentleman that today we are trying to focus on one aspect of the strategic posture of this country which we feel is going to escalate the arms race, and that, of course, is the anti-ballistic-missile system. I feel that if we have to make any bets, I would prefer to bet on offense rather than on this system. But there is still a case to be made against the advance of further offensive systems.

Mr. YATES. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. I yield to the gentleman from Illinois.

Mr. YATES. The gentleman has stated, and rightly so, that in the confrontation we have with the Soviet Union today, our offensive capability can saturate their defenses just as theirs are acknowledged to have the ability to saturate ours. Those who support the anti-ballistic-missile system make reference to the fact that the Soviets are building what is referred to as an ABM system around Moscow. They make this argument with some trepidation.

In the hearings before the Department of Defense Subcommittee of the House Committee on Appropriations for 1969, Chairman GEORGE MAHON, of Texas, raised the question specifically with Dr. John Foster, who is the Director of Research and Development for the Department of Defense. On page 454 of part 2 of those hearings the following appears:

Mr. MAHON. What kind of attrition could the Soviet ABM system, which is based on the so-called Galosh missile and is deployed around Moscow, place on our ICBM's? Could we, for the most part, negate this system today without neglecting other important targets?

Mr. FOSTER. Mr. Chairman, to answer the latter part of the question, we can negate the Moscow system without neglecting important targets. The U.S. inventory, both current and planned for the future, is adequate to ensure penetration of the Moscow area defense system by sheer exhaustion of the defenses. That is to say, we calculate the maximum number of intercepts that their ballistic missile defense system could make; then we program a number of missiles into that area equal to the number they could intercept plus the number necessary to assure destruction of the targets.

The point I make is the leading expert of the Division of Research and Engineering of the Department of Defense and one of the leading strategists makes the point the Soviet ABM system is not any kind of obstacle or any kind of defense to the American offensive capability.

Mr. COHELAN. Mr. Speaker, I thank the gentleman for his contribution.

I would like to make one other comment at this juncture which is not in my prepared remarks. What we are really talking about here is whether or not we are going to go forward without further expansion of U.S. strategic forces. I think one of the most important pieces of literature on this subject, which I commend to my colleagues, was written by Prof. George Rathjens of the Massachusetts Institute of Technology in a little paper called "The Future of the Strategic Arms Race—The Options of the 1970's". He points out that in the line against further expansion of U.S. strategic forces, which was held during the early and mid-sixties, up until 1966, in nearly all the important procurement as distinct from research and development decisions, the strategic systems were negative.

There was a decision not to deploy a rail mobile Minuteman—and my colleagues on the Armed Services Committee at that time will recall the extensive discussions about this and the MLF and other systems for dispersion of the system. There was a decision not to deploy a rail mobile Minuteman and a decision not to proceed with the B–70 bomber force. This House voted the authorization for the B–70 when many of us argued it was not going to be used, and indeed it was rejected. And there was the cancellation of Skybolt and the decision not to go ahead with the full ABM system and new strategic manned aircraft. Consequently the budget for strategic forces dropped from over $11 billion in 1962 to less than $7 billion for fiscal year 1966 as the major strategic weapons programs came to fruition without any major new procurement decisions.

So one of the things involved in looking down the road is, are we or are we not going to expand U.S. strategic forces, and, of course, is there a need for it?

Mr. MATSUNAGA. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. Mr. Speaker, I yield to the gentleman from Hawaii.

Mr. MATSUNAGA. Mr. Speaker, the course that has been charted for this Nation by the proponents of the Sentinel anti-ballistic-missile system is one that is fraught with perils. To gain the unwitting acceptance of the American taxpayer, a so-called thin ABM system, with an estimated price tag of $4 to $6 billion, is initially advocated. The evidence reveals that this is in the nature of a junior model, since it avowedly would be directed against a possible nuclear attack from Communist China, as distinguished from one of much greater mag-

nitude and destructiveness which could emanate from Russia.

As if to employ the time-honored rationalization of "yes, we can afford the cheaper model," proponents in the same breath tell us that the cost of a full-scale model, that is, a Russia-oriented ABM system, has been pegged at $20 to $60 billion.

If history is to teach us any lessons, then we ought to face honestly the three conclusions to which we are led inevitably by any consideration of the proposed construction of a Sentinel system.

The first is that the actual cost of either ABM system, whether it is called Communist China-oriented or Russia-oriented, will greatly exceed the estimated cost. This conclusion requires no explanation. The implements of war have never given rise to unanticipated price reductions, nor have they remained at the level of estimated costs.

The second conclusion is that if we start with the cheaper model, so to speak, it will be merely a matter of time before we move on to the high-priced one. As a matter of principle, we have good reason to believe that the proponents of the "thin" ABM system are being less than candid. If the Sentinel is as effective as they claim, whether viewed in its deterrent or destructive aspect, then it would make more sense to construct the Russia-oriented system which would then be able to cope also with Communist China, admittedly the inferior nuclear power. It would make no sense at all to erect such a costly defense system which is aimed at possible acts of war or aggression by the lesser of two potentially hostile powers. There is the disturbing thought, therefore, that the "thin" ABM system is but a prelude to the time when, from coast to coast, and in Hawaii and Alaska, this entire Nation will be saturated with ABM sites.

This brings me to the third and final conclusion. This is the assumed invincibility of the Sentinel ABM system by many of its proponents. History would remind us of the lesson of another era, when the leaders of another nation conceived of a defense scheme and became convinced, before it was ever tested in battle, of its invulnerability. It was called the maginot line. Today, we know that the term "maginot line" is linked with costly failure and badly misplaced faith.

If this Nation's goal is peace, as Americans know it is, then we ought to lead the rest of the world in acts which are consistent with the achievement of our national goal. The speedy ratification of the nuclear nonproliferation treaty is such an act. The establishment of a Department of Peace is another. But the establishment of an ever-increasing number of ABM sites is definitely inimical to our efforts to bring peace to areas in the world where it does not exist, and to strengthen it in other areas where its existence is precarious. And from all the information I have been able to gather, the ABM is practically ineffective as a weapon for our national defense. The money could be put to much better use in countless other areas of our national life, or in the promotion of better relations between and among nations through positive nonmilitary programs. If we mean to seek peace then let us seek it by peaceful means.

Mr. COHELAN. I thank the gentleman for his contribution.

Mr. FARBSTEIN. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. I yield to the gentleman from New York (Mr. FARBSTEIN).

Mr. FARBSTEIN. I thank the gentleman for yielding.

First I want to join with the gentleman in the position which he has taken that the anti-ballistic-missile system, whether it is the thin or the thick, will defend nothing. I believe that is the position he has taken.

I voted against the appropriation for the antiballistic missile. That very same date, peculiar as it may seem, young men were demonstrating in front of the city hall in New York because they had no jobs. When I weighed these things in the balance, it appeared to me, in view of the knowledge we had as to the effectiveness of this anti-ballistic-missile system and the need of our people for assistance for their suffering, that the needs of our people came first. That is the reason why I voted against that appropriation.

Nothing has happened to date to change my mind. I would still vote against any appropriation for any anti-ballistic-missile system because I believe, for comparative purposes, it is useless except that it will sustain and maintain the present military-industrial complex.

I think that the needs of our people are too great today. I think that our people demand that their way of life be bettered rather than that the military-industrial complex be treated in such a fashion as to increase their profits.

I am satisfied, Mr. Speaker, that they should make money, but let them make it in civilian pursuits and not in a manner which would urge the expenditure of so much of our wealth simply because these organizations seek profits.

Mr. Speaker, I will not pursue this line very much further. All I say is I want to thank the gentleman from California for permitting me to raise my voice at this moment.

Mr. Speaker, the nonproliferation treaty and the antiballistic missile represents opposite approaches to achieving national security. It would be inconsistent for the United States to ratify the proposed treaty on nonproliferation with an article VI which will pledge its signers to seek disarmament negotiations and then proceed with deployment of an ABM system, which would have the effect of accelerating the atomic arms race.

To my mind, the discussion taking place today on the floor of the U.S. House of Representatives is a part of the dialog which will decide the path this country is to follow. The question is whether the United States places its reliance purely on military technology by adopting the costly ABM or whether it complements its currently great military capability with mutually beneficial attempts to negotiate reduction in the cost of armaments and curb proliferation of atomic weapons.

Before I could reject the peaceful approach for the purely military one, I would have to be convinced that the miiltary approach offered unquestioned greater security to this Nation, and then I still might have my doubts. The ABM does not appear to offer this unquestioned greater security.

I arrive at my conclusion by asking three questions. First, is the ABM system technologically feasible? Second, is it desirable in terms of safety to the American people and the objectives it is meant to carry out? And third, what are the consequences in terms of the international arms race and stability in our cities?

I. TECHNOLOGICAL FEASIBILITY

There is serious question of the technological feasibility of developing an effective ABM system. Former Secretary Robert McNamara told an audience a year and a half ago:

> If we could build and deploy a genuinely impenetrable shield over the United States, we would be willing to spend not $40 billion, but any reasonable multiple of that amount that was necessary. The money in itself is not the problem. The penetrability of the proposed shield is the problem.

He also quoted all of the science advisers to Presidents Eisenhower, Kennedy, and Johnson, as well as former Directors of Research of the Department of Defense, as being opposed to mounting ABM's against a possible Soviet attack. Almost all of these men have declared themselves opposed to any ABM deployment at this time. These are extremely competent men, not professionally biased, who are in the best position to appreciate the technical inadequacies of ABM's.

In more specific terms, these and other experts see the current ABM as having severe technological limitations which make it vulnerable to certain types of weaponry and thus ineffective as a missile defense. First, the Sentinel system is effective only against high-altitude missiles. Missiles fired from submarines or surface vessels, which come in at low altitude, could as a consequence stand an excellent chance of getting through such a defense. Second, the ABM operates on radar. Missiles encased in paint that absorbed—rather than reflected—radar beams might be able to totally evade the ABM defense as would missiles which scattered aluminum or other particles that could disrupt radar.

Third, and most fundamentally, we are told that man has yet to develop a defense against aircraft which is capable of destroying more than one plane in 20. Even assuming that the ABM could be developed to destroy eight or nine out of 10 much faster missiles it encountered, it would only take a single miss of a missile with a nuclear warhead to destroy New York City and 5 million people. Partial success would not be enough for an ABM system. It would have to be successful in knocking down every enemy missile to have any value at all.

Beyond this, the fast pace of weapons technology represents an additional factor to be weighed in considering technological feasibility. An ABM system developed today might be useless against a missile developed 10 years from now. In 1960, for example, missiles had a single

nuclear warhead. The Nike-Zeus, the proposed ABM of that period, would have cost between $20 and $30 billion and been ineffective against today's missile with multiwarheads by the time it was fully operational 5 or 6 years later.

These considerations suggest seriously whether an ABM system is today technologically feasible.

II. DESIRABILITY

Of greater significance than feasibility is whether in fact the characteristics of the proposed system make it desirable. To me as a human being concerned for the safety of my family and friends as well as for the survival of my country, the safety of any nuclear ABM system is of prime importance in weighing its desirability. I would think that safety to the population would also be the concern of the Defense Department. Yet, while the Department was describing the proposed system's "umbrella character" which, it declared, meant an ABM site need not be located nearby to protect a city, it went ahead and selected sites for the location of dangerous nuclear bomb-carrying ABM's right next to our largest cities including, I might add, my own city of New York.

The location of ABM's near large population centers creates the possibility that enemy fire might be drawn to a city which otherwise might not be aimed at civilian population centers. The Army's reply to those who express this concern is that the population centers are prime targets in any event. But who knows? Today, the Soviets might believe in attacking population centers; 10 years from now, they might be more interested in purely military targets. But if we should decide to keep the ABM's in large population centers like New York, then if the enemy decides to strike at the ABM's on the edge of Manhattan, they would in the process devastate New York City. If, on the other hand, they decided to attack both types of targets, we will have helped them kill two birds with one stone.

Location of ABM sites near large cities also creates the chance that if one of the clusters of H-bomb warheads in the ABM system should accidentally explode, the consequent loss of life could be catastrophic. The Army's reply to those who share this concern is that "there has never been an accidental nuclear explosion. The control devices are so good and so involved that an accidental explosion is not a danger." This sounds like a good attitude, the voice of experience. Many military personnel get accustomed to living with dangers. A soldier knows that the grenade he carries could blow him to bits if the pin were accidentally pulled; but after living with it on his belt for a year, he forgets about the slight danger. Even so, most civilians would prefer not to live on a powder keg without some very good reason for doing so. Nor did we hear much about the near-accidents, but in the case of one H-bomb dropped accidentally in North Carolina in 1961, it was reported that five of the safety devices had failed. Since there were six, there was no detonation. This threat to personal safety of large numbers of our citizens makes me question the desirability of the ABM system.

It also concerns me that the proposed ABM defense system involves exploding our own H-bombs over our own cities, in the hope of intercepting enemy ICBM's there.

The ultimate test of the desirability of something is to examine its fundamental aim. In the case of the ABM system, there is a great deal of confusion. We were originally told that an ABM system would be ineffective against the advanced Russian missile system, and that a "thin" and relatively inexpensive system would serve against the threat of the more "primitive" Chinese ICBM system. Subsequently, however, it was pointed out that the Chinese could quickly discover the "technological vulnerabilities" of the system and be able to make a few adaptions which would make even their more "primitive" system invulnerable to an American ABM. We have been hearing less about the Chinese since then. But if its objective is not to protect against the "suicidal" Chinese, what is the objective of the ABM system?

Even though we were previously told it was ineffective against the advanced Russian missile system, we are beginning to hear that it is to be used against the Russians. Secretary of Defense Laird testified before the Senate Foreign Relations Committee last week that the ABM system could be used as a bargaining point with the Soviets on arms control. If it is not meant to be used against the Russians and is ineffective against their missiles, how are we going to use it as a point of negotiation?

Even more confusing is the apparent disagreement between Secretary of State William Rogers and Secretary Laird over the desirability of beginning the ABM system before disarmament negotiations begin. If it is meant solely as a bargaining point, why invest a great deal of money on something that hopefully will not have to be completed?

There appears to be no generally agreed upon aim for the ABM system, which leads one to think that its real aim is simply to secure increasingly heavy appropriations for what former President Eisenhower called the "military industrial complex." We are already being told that the "thin" Chinese system will have to be "upgraded" and will cost twice the original estimate.

III. CONSEQUENCES

If the technical feasibility of the ABM is at best questionable and the desirability of the system is more than doubtful, the consequences of its deployment can be termed nothing less than catastrophic.

First, the likelihood of an attack and its intensity would probably be increased by our decision to deploy ABM's. The natural Soviet response to an American ABM system according to several authorities would be to build more missiles to penetrate it, just as we have already responded to their small ABM deployment around Moscow by adding more deliverable warheads. The Russians would also probably deploy a serious ABM system in response to ours; we would respond to that; and so on in an upward spiral. Intensification of the arms race increases the chances of nuclear war. As former Secretary of Defense McNamara declared in the same speech first announcing the decision to seek the ABM:

> If we opt for heavy ABM deployment—at whatever price, we can be certain that the Soviets will react to offset the advantage we would hope to gain. It is futile for each of us to spend $4 billion, $40 billion or $400 billion, and at the end of all the spending, and at the end of all the deployment and at the end of all the effect, to be relatively at the same point of balance on the security scale that we are now."

The heavy financial drain has to come from somewhere in terms of the Federal budget. It will no doubt come at the expense of our cities and of the poor and underprivileged. This further delay in making the kinds of investment that need to be made to upgrade the standard of life in the cities and throughout our Nation may well result in the creation of a society not worthy of defending militarily.

IV. CONCLUSION

The ABM system in which the American people are being asked to invest their future security is neither technologically feasible, desirable in terms of safety to the American people and the objectives it is meant to carry out, nor are its consequences anything less than catastrophic. A comparable investment in cleaning up our cities, air, water, and so forth, training our youth for jobs, strengthening our natural resources, and attacking the misery which breeds disorder both in our own society and in the developing countries will do far more to build American security and our leadership for peace.

(Mr. FARBSTEIN asked and was given permission to revise and extend his remarks and include extraneous matter.)

Mr. COHELAN. Mr. Speaker, I thank the gentleman, and I now yield to the gentleman from Michigan (Mr. CONYERS).

Mr. CONYERS. Mr. Speaker, I thank the gentleman for yielding.

It is on the point raised recently by the gentleman from New York as well as my distinguished colleague from Hawaii (Mr. MATSUNAGA) that I wish to comment.

With regard to the question as to what other purposes these very large sums of money might be more adequately used for, it seems to me, if I might say so, that this question is one that has given me the greatest concern. As one who has sponsored legislation consistently trying to eliminate poverty and unemployment and the increasing ghettos that mark the large cities of the United States of America, I think that these questions raised by the two previous speakers are very, very relevant indeed. I think the gentleman from California (Mr. COHELAN) has done us a great service. I would report to you in the State of Michigan and in the city of Detroit the concern is overwhelmingly with not only why a thin ABM system but what else might be done not only with the potential sums of money to be used but the actual sums of money already expended. It is in this vein that I urge all of the Members of this body to join with the gentleman in the well in

carefully reviewing the grave and important question which he has so timely presented here on the floor of the House today.

Mr. COHELAN. Mr. Speaker, I thank the gentleman for his contribution.

I want to comment that it should be absolutely clear to every one of us, certainly our minority report which we delivered last year made it perfectly clear, that as far as the defense of this country is concerned, we believe the security of our country is the primary consideration. But we also feel it is our responsibility as representatives of the people to give a much more careful analysis to defense expenditures and particularly to weapons systems of this character which affect the balance of our nuclear forces.

Mr. YATES. Mr. Speaker, will the gentleman yield to me on that point?

Mr. COHELAN. I yield to the gentleman from Illinois.

Mr. YATES. This is on the question as to what sort of defense the ABM system would be. Again I refer to the hearings of the Committee on Appropriations and the interchange between the gentleman from Texas, Chairman GEORGE MAHON, and Dr. Foster. Mr. MAHON commented upon a statement that Dr. Foster had made in his testimony before the committee that:

> The sophisticated and economic strength of the Soviet Union permit that country to hold a large part of the United States population hostage.

This was a statement that Dr. Foster had made to the Committee on Appropriations. Mr. MAHON asked this question:

> In your opinion, is there anything we could do today that would make your statement invalid? Is this just a fact of life based on the unilateral strength of the U.S.S.R., with which we must live ad infinitum?

Dr. Foster replied as follows:

> One hopes not, Mr. Chairman.
>
> I have tried to explain in the statement that we are making a major effort in research and development of the ABM defense in the hope that it may be possible to evolve a defense.
>
> In other words, we do not have one at the present time, but in the hope that we may evolve a defense that will protect our American people against an all-out Soviet attack.
>
> As you know, we do not feel that current technology permits this capability.

Then Mr. MAHON asks this next question:

> I do not detect a great deal of optimism that the United States will be able to perfect an airtight ABM system that would give us the security against attack that we would like to have?
>
> Dr. FOSTER. No, sir; I do not believe there is.

Then Dr. Foster goes on to say:

> On the other hand, we must realize that in the late 1950's very few believed that it was technically realistic to attempt to intercept an incoming ballistic missile. Now, just ten years later, we have demonstrated that is a straightforward matter, and it is a question of the economics of offense versus the economics of defense.

But, Mr. Speaker, the point is how. Even Dr. Foster admits—and he is one of the proponents of the ABM system—he admits that there is much to be accomplished in evolving this kind of a defense. In other words, one can only draw the implication from what he says that there are very great limitations in his own mind on the Sentinel ABM system, but not on the cost thereof. The cost would escalate at a tremendous rate.

Mr. BINGHAM. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. I am glad to yield to the gentleman from New York.

Mr. BINGHAM. I thank the gentleman.

I would like to join in commending the gentleman for the leadership that he has shown in constantly raising the issue with regard to the ABM system and the value of proceeding with the deployment of it.

I think it is literally impossible to exaggerate the importance of this issue. I think it is undoubtedly the most important issue that will come before this Congress, because it not only signals a whole new dimension in the arms race between ourselves and the Soviet Union, but it will also determine how we are going to use our resources in the coming years, whether we are going to use them on highly dubious military devices, or whether we are going to use them for the crying needs of our cities and the country as a whole.

I do feel, Mr. Speaker, it is regrettable that this discussion here today is so one-sided. I commend the gentleman for his initiative in taking this special order, but I feel it is a pity we do not have a debate. All those who are speaking agree, although I know that there are a great many Members in the House who do not agree with the views expressed. Perhaps the time will come when we will have an opportunity to debate all the aspects of this system.

Mr. COHELAN. As you know, when our little group circulated the letters in the House, we invited all Members to appear and take part in this discussion. It is a matter of great regret to me that we do not have an adversary proceeding as it is in order that we thoroughly ventilate this perplexing problem.

Mr. BINGHAM. Mr. Speaker, if the gentleman will yield further, I believe that the subject which we are discussing today is literally one of the most important ever to come before this House. For the proposed deployment of an ABM system represents a major new dimension in the strategic arms race between this country and the Soviet Union. It also constitutes a major turning point in the ordering of our own priorities for the use of the resources available to the Federal Government.

I shall not seek to duplicate what others have already said about the ABM both here and in the Senate. They have told us of the ABM's exorbitant costs and dubious utility; of the risks of accidental explosion close to urban centers; of the cycle of force and counter-force which the ABM will inevitably stimulate further. They have told us of the urgent needs of our own society to which resources sought for the ABM might better be dedicated: of persistent hunger and substandard housing; of polluted air and water; of choking cities and inadequate transportation systems; of failing schools, unequal opportunity, and wasted lives.

In the light of this overwhelming testimony, Mr. Speaker, I believe we in Congress, and the entire American people, must stand firm in opposition to deployment of an ABM system. I shall myself vote against any appropriations for site acquisition or for procurement of any components of such a system, and I would urge my colleagues to do likewise. I shall also undertake, insofar as possible, to stimulate concerned citizens to learn about the ABM system, for I believe that knowledge in this case will breed informed opposition. To this end, I am taking the lead in convening in the near future a meeting of community leaders in the New York City area to discuss the proposed ABM system and, hopefully, to agree on the means of most effectively insuring against its deployment.

Mr. Speaker, the letter which I am sending to these community leaders sets forth my position on this question. The text is as follows:

> DEAR FRIEND: When Secretary of Defense Laird announced a temporary halt in construction of a "thin" ABM system, millions of Americans breathed a sigh of relief. The voice of the American people seemingly had been heard—
>
> Protesting the emplacement of nuclear missiles in metropolitan areas;
>
> Protesting against a massive investment in new weapons systems which leading witnesses from the scientific community said would be largely ineffectual;
>
> Protesting against the fueling of a new stage of the world arms race on an unprecedented scale;
>
> Protesting the warped sense of priorities which advocated billions for dubious defense measures at the expense of urgent programs of human betterment at home and abroad.
>
> But the relief may well be only temporary. On February 9, the Secretary of Defense appeared on nationwide television (on "Face the Nation"). In his remarks, he laid such heavy stress on Soviet missile deployment that his own predilections in favor of bigger and better missilery were evident. When his current review of the ABM is concluded next month, it thus seems very likely that he will decide to proceed as originally planned with the Sentinel system.
>
> Where would such a green light for missiles leave us? The Sentinel system, you may recall, is designed to protect the United States against a "primitive" Chinese missile threat at a cost of $5 billion or more. For the price, we will get 15 sites equipped with long-range Spartan missiles, short-range Sprint missiles, or both. These sites will be tied to a complex radar network which will locate incoming missiles and guide the long-range Spartans to intercept the threat well outside the atmosphere. For missiles which get past the Spartans, the short-range Sprints will make a final try at close-in interception.
>
> There are just a few problems with this simple picture. For one, there is little reason to expect the Chinese to build a missile threat tailored precisely to fit our defenses. It would be simpler for them to fire short-range missiles from submarines, carry atomic weapons in with manned aircraft, or sail nuclear bombs into our harbors aboard cargo vessels bearing false registry—all of which would render the Sentinel system irrelevant. For another, the "thin" system would be far from infallible. It could be

overwhelmed by a concentration of attacking missiles or inexpensive decoys against a single sector, for example. Even without such a concentration, the odds are that some missiles would get through even if the Sentinel system functioned perfectly. And based on recent studies of the performance levels achieved by complex defense systems engineered in past years, perfect functioning is very unlikely.

Other problems exist, too. The explosion of a nuclear weapon creates a "shadow" effect which temporarily blacks out radar coverage. Thus the first long-range Spartan missile might successfully destroy the first attacking missile, only to leave our elaborate radar installations blind for several minutes to the next wave of attacks. And penetration aids—well-known, cheap, and easy to develop—can confuse even a working radar into sending missiles after decoys, thus further reducing the probability of a successful defense.

If the system won't really work against the "primitive" Chinese threat, what about the greater and more sophisticated Russian threat? Not here, either—unless we move to a "thick" system, at a cost variously estimated from $50 to $110 billion. Even then, we can assume the Russians would make comparable investments in improving their offensive missiles to penetrate our defenses—and in improving their own defenses—so that we would return in the end to a state of "sufficiency" in which we could assure each other's destruction. This, of course, is where we are today. What, then, is to be gained by spurring the arms race to these new heights, thereby diverting resources from essential domestic needs in both nations? But, Secretary Laird says, the "thin" system will at least be useful as a bargaining counter with the Soviets in the forthcoming talks (which we hope will get underway soon) on limiting offensive and defensive missiles. Why should they? If, as no one denies, the "thin" system is worthless against the sophisticated Russian offensive missiles, why should they lend it any weight in an eventual bargain?

In the meantime, millions of Americans could get used to having megaton nuclear warheads in their communities—and perhaps in their back yards. For the sites thus far investigated or selected are all in close proximity to the large urban centers that lie under their theoretical defensive umbrellas: 11 miles from the center of Boston, for instance, or 25 miles from the Chicago Loop. As military spokesmen have correctly said, there has never been an accidental detonation of a nuclear weapon and such an event is very unlikely. But it is *not* impossible, as they will also admit, and Spartan missiles would carry megaton warheads capable of totally devastating a five-mile radius around their silos. The fallout, of course, would carry much further—all the way to downtown Chicago, for example, if prevailing northwest winds happened to be blowing at their usual brisk pace. Even without an accidental explosion, the sites would certainly make the cities they are supposed to defend look like more appealing targets for an enemy attack.

What about New York? The Defense Department announced in November 1967 three sites which are already under consideration and has said that it may look at several others this spring before reaching a final decision. Central Park is not among the candidates, but the potential locations are not much more distant from midtown Manhattan. Cavens Point and Tenafly, both in New Jersey, are being evaluated, as is Sands Point, New York. Any one of these would bring megaton nuclear warheads within 16 miles of Times Square. Cavens Point, which juts into New York harbor from Jersey City, would reduce the distance to about 6 miles. My own 23rd Congressional District lies only a little more than a mile from the proposed site near Tenafly, on the west bank of the Hudson River north of the George Washington Bridge.

Is the decision irrevocable? Are we committed beyond recall to massive new expenditures on armaments, to a frantic pursuit of national security through ever-greater weaponry? Have we forsaken all chance of seeking world peace through a rule of law, through negotiation, through agreement on arms limitation and other matters of vital mutual interest? Or have we still a chance to change our course, to abandon the ABM and reduce military spending, to re-order our national priorities, and to put our resources to work for human betterment?

I believe that it is *not* too late. The voice of the American people has been heard once, and has temporarily checked the ABM system. That voice must be heard again, louder and clearer, if the halt to deployment is to be made permanent and the pressure for growing arms spending reversed. I urge you to join in this effort.

Mr. GROSS. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. I yield to the gentleman from Iowa.

Mr. GROSS. If the gentleman wants a quorum call, I shall be glad to make it.

Mr. COHELAN. I think that those who have a contribution to make know the time and place of the meeting and I rather suspect that under the circumstances a quorum call would be inappropriate.

Mr. GROSS. I just wanted to be accommodating.

Mr. COHELAN. I was hoping that my dear friend from Iowa would join in the discussion.

Mr. GROSS. At another time.

Mr. LONG of Maryland. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. I yield to the gentleman from Maryland.

Mr. LONG of Maryland. Mr. Speaker, I, too, want to compliment the distinguished gentleman from California for his leadership in developing this discussion. I could say a great deal on this subject, but I really think I shall confine my remarks to just one aspect of the problem.

It does seem to me that it has been pretty well conceded by both the proponents of the program and by the opponents of the program that an ABM system cannot at the present time, or for the foreseeable future, defend the United States against a nuclear attack.

Consequently, it seems to me that the main question concerning whether we ought to move on an ABM system would be, What about the future? Is it possible that we ought to be keeping research interest in this problem that would enable us to move ahead quickly if the time ever came that it was possible to develop an ABM system, and so that the United States would not be helpless if the Russians got it first, and we were not in any position to even get started on it?

So it does seem to me that the real question before us, then, is the state of the art sufficiently advanced to justify putting money into hardware at this stage, and do we have an advantage over putting money into hardware at this stage that we would not have if we allowed this whole thing to go for, say, another 5 years until the state of the art was sufficiently advanced?

I put this question to Secretary of Defense McNamara in the hearings on the 1968 Department of Defense appropriations, and here was his reply:

> My opinion is that we are most likely to advance the state of the art without a production program than we are with one. That may sound paradoxical, but I think it is true for this reason; any one of these programs—posture A let's say at $10 billion, if you would hold it to that, or posture B at $20 billion—is a fantastically large weapons program, larger than any other single weapons program in the history of the world. It would take so much attention from Western Electric and Bell Laboratories and the associated scientists and engineers, that I am sure the research program for advancing the state of the art would suffer.

Now, if this is true, if what Secretary of Defense McNamara was telling us at the time is true, then I believe this is a powerful reason for giving pause at this time for the whole program so that we can wait until we can see the whole picture.

Mr. COHELAN. I am especially grateful to the gentleman from Maryland for this particularly important contribution because, as my colleagues know, Dr. LONG serves as a member of the Subcommittee on Appropriations for Military Construction and probably knows more about this system than most of us do and certainly on the classified side of the material I am sure he is well informed.

Mr. ADAMS. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. I yield to the gentleman from Washington.

Mr. ADAMS. I thank the gentleman for yielding.

I want to carry on with the subject raised by the gentleman from Maryland. There is what might be classed as a technical iron curtain around military programs that prevents congressional debate on these topics. I speak from personal experience on this aspect of the ABM issue, because my interest in the ABM system was first aroused when it was indicated that one of the primary sites would be centered within the metropolitan area of the city of Seattle at a surplus Army fort. There were a variety of reasons why the citizens did not want this fort used for the ABM including their desire that the land be used for other purposes such as recreational or educational use.

During the course of our discussion with the Army a committee of scientists from the University of Washington and from other institutions in the area began to deal with this subject. These are men from the physics department and allied fields. They are not men who were social scientists with no expertise in the technical field or for some reason had a social reason for opposing the ABM. These men have a technical interest. Many of them have worked for the Defense Department, and other Government bodies. They became willing, during the course of the debate on the ABM site to come forward with technical publications and describe in detail how the system would

work and what would happen to the city of Seattle, and the Nation if this system were deployed at this time.

I believe the gentleman from California would agree with me that the primary issue today in this Congress is the deployment and site acquisition for this system. And as other of my colleagues have just mentioned, once this system commences then from a technical viewpoint, there will not be forward-looking research and development in the general sense but all energies will be directed toward hardware and then trying to update or change the obsolete hardware.

Mr. COHELAN. If the gentleman will forgive me for interrupting at this point, what there will be, will be a constant get-well program.

Mr. ADAMS. Exactly.

Mr. COHELAN. Those of us who have been involved in this R. & D. know that we are constantly faced with the problem of more and more money for get-well programs.

But it is not my purpose to discuss other missile systems, today.

Mr. ADAMS. We will not go back to the Nike-Zeus today?

Mr. COHELAN. That is right.

Mr. ADAMS. I would like to refer the Members, and particularly the members of the Committee on Appropriations and Committee on Armed Services and those other Members who support this system who have not read some of the recent technical articles on this subject, to some reference materials. First, I placed in the RECORD on July 11 of last year a report of scientists from our area as regarding the system.

Next the Scientific American magazine of March 1968 set a complete detailed explanation of the proposed Sentinel system which I will later ask to be included with my remarks.

Finally, I want to point out that this information is not classified, it is not overly technical, and every Member is very capable of exercising an informed value judgment as to whether this system should be built.

If you talk about the thin system, for example, it should be known that all the Chinese have to do against the Sentinel, with its Spartan and Sprint missile systems is to send forth one missile and explode it in the atmosphere to create an electronic blackout and then send a second missile right behind the first one and it will go through the system.

Another example is the problem of the Sprint system being built within a city if several of these explode at one time the entire area is subject to fallout.

Another example detailed in the Scientific American magazine article is the effect of the Spartan ABM missile on the incoming offensive missile. The missile is to be killed by the X-rays from the Spartan which melt the missile shield or by neutrons which fuse the inner workings of the missile. What happens then is the movement of the missile is not affected, and continues to come on in.

So the defenders will undoubtedly fire the Sprint missiles to be sure that the missile is dead.

If you fire several Sprints in a metropolitan area and do not have a fallout program, you can inundate the entire area with fallout even if a low yield missile is used.

Therefore, you must lock down the system and make it entirely automatic so the defenders do not panic. If you do that, however, the recent statistics reveal that our electronic program and guidance systems together with the radar computers and other various sophisticated electronic products that are necessary, are not working well. In fact, the recent evaluation shows the effectiveness of these systems has dropped in the past 10 years because of this detailed sophistication to below a 50 percent effectiveness. We have been able to correct some of these by working with them on a day to day basis in actual use until they function, but you will never be able to test this system in that fashion. It will be utilized only when needed. There is no other way to test it.

Mr. COHELAN. This has been discussed at some length but I would like the gentleman to cite the article to which he has referred.

Mr. ADAMS. This is the Scientific American of March 1968, and I would ask unanimous consent, Mr. Speaker, to revise and extend my remarks and to include within my remarks portions of the article in the Scientific American of March 1968.

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

There was no objection.

Mr. ADAMS. Mr. Speaker, my deep personal interest in the ABM system started with the proposal that a possible surplus World War I coast artillery fort in Seattle would be used as an ABM site. This area known as Fort Lawton was once declared surplus in 1936, and since then there have been various proposals for the use of this site as a regional park, campus for a local educational institution, or other public use.

Originally, the argument was made that this was the best location that could be used for an ABM site because of certain technical reasons. Fortunately, however, a group of scientists at the University of Washington in the physics department and other related scientific areas indicated to me that this was not the case, and made specific reference to published articles in the aviation press which described the system in detail. These scientists were also willing to take a public position that this site was not only unnecessary but would probably be detrimental to the defense of the metropolitan Seattle area, since this would bring attacking missiles into the area.

I then exchanged a great deal of correspondence with the Department of Defense and received special briefings from those in charge of the Sentinel system to check the information I had received. Since that time I have read many disquieting reports on the effectiveness of the new technical systems utilizing radar-computer technology.

On July 11, 1968, I placed in the CONGRESSIONAL RECORD the report I had received from the Seattle Association of Scientists of the Federation of American Scientists, dated May 29, 1968, which described in detail many of the technical defects in this system, the cost of the system, and questioned whether this system could even be effective as a thin system against the Chinese.

Today, I will refer to portions of an article in Scientific American for March 1968, and place them in the RECORD at this point, which describe the system in detail and why it is dangerous to believe that it can even be effective against a possible Chinese attack; and after that I want to discuss with you the general status of the anti-ballistic-missile system:

ANTI-BALLISTIC-MISSILE SYSTEMS

(NOTE.—The U.S. is now building a "light" ABM system. The authors argue that offensive tactics and cheap penetration aids could nullify the effectiveness of this system and any other visualized so far.)

(By Richard L. Garwin and Hans A. Bethe)

* * * * *

Known as the Sentinel system, it will provide for long-range interception by Spartan antimissile missiles and short-range interception by Sprint antimissile missiles. Both types of missile will be armed with thermonuclear warheads for the purpose of destroying or inactivating the attacker's thermonuclear weapons, which will be borne through the atmosphere and to their targets by reentry vehicles (RV's). The Spartan missiles, whose range is a few hundred kilometers, will be fired when an attacker's reentry vehicles are first detected rising above the horizon by perimeter acquisition radar (PAR).

If the attacker is using his available propulsion to deliver maximum payload, his reentry vehicles will follow a normal minimum-energy trajectory, and they will first be sighted by one of the PAR's when they are about 4,000 kilometers, or about 10 minutes, away [*see illustration on page* 26]. If the attacker chooses to launch his rockets with less than maximum payload, he can put them either in a lofted trajectory or in a depressed one. The lofted trajectory has certain advantages against a terminal defense system. The most extreme example of a depressed trajectory is the path followed by a low-orbit satellite. On such a trajectory a reentry vehicle could remain below an altitude of 160 kilometers and would not be visible to the horizon-search radar until it was some 1,400 kilometers, or about three minutes, away. This is FOBS: the fractional-orbit bombardment system, which allows intercontinental ballistic missiles to deliver perhaps 50 to 75 percent of their normal payload.

In the Sentinel system Spartans will be launched when PAR has sighted an incoming missile; they will be capable of intercepting the missile at a distance of several hundred kilometers. To provide a light shield for the entire U.S. about half a dozen PAR units will be deployed along the northern border of the country to detect missiles approaching from the general direction of the North Pole (illustration not shown). Each PAR will be linked to several "farms" of long-range Spartan missiles, which can be hundreds of kilometers away. Next to each Spartan farm will be a farm of Sprint missiles together with missile-site radar (MSR), whose function is to help guide both the Spartans and the shorter-range Sprints to their targets. The task of the Sprints is to provide terminal protection for the important Spartans and MSR's. The PAR's will also be protected by Sprints and thus will require MSR's nearby.

Whereas the Spartans are expected to intercept an enemy missile well above the upper atmosphere, the Sprints are designed to be effective within the atmosphere, at altitudes below 35 kilometers. The explosion of an ABM missile's thermonuclear warhead will produce a huge flux of X rays, neutrons

and other particles, and within the atmosphere a powerful blast wave as well. X rays, particles and blast can incapacitate a reentry vehicle.

* * * * *

One of us (Bethe) will now describe (1) the physical mechanisms by which an ABM missile can destroy or damage an incoming warhead and (2) some of the penetration aids available to an attacker who is determined to have his warheads reach their targets.

Much study has been given to the possibility of using conventional explosives rather than a thermonuclear explosive in the warhead of a defensive missile. The answer is that the "kill" radius of a conventional explosive is much too small to be practical in a likely tactical engagement. We shall consider here only the more important effects of the defensive thermonuclear weapon; the emission of neutrons, the emission of X rays and, when the weapon is exploded in the atmosphere, blast.

Neutrons have the ability to penetrate matter of any kind. Those released by defensive weapons could penetrate the heat shield and outer jacket of an offensive warhead and enter the fissile material itself, causing the atoms to fission and generating large amounts of heat. If sufficient heat is generated, the fissile material will melt and lose its carefully designed shape. Thereafter it can no longer be detonated.

The kill radius for neutrons depends on the design of the offensive weapon and the yield, or energy release, of the defensive weapon. The miss distance, or distance of closest approach between the defensive and the offensive missiles, can be made small enough to achieve a kill by the neutron mechanism. This is particularly true if the defensive missile and radar have high performance and the interception is made no more than a few tens of kilometers from the ABM launch site. The neutron-kill mechanism is therefore practical for the short-range defense of a city or other important target. It is highly desirable that the yield of the defensive warhead be kept low to minimize the effects of blast and heat on the city being defended.

The attacker can, of course, attempt to shield the fissile material in the offensive warhead from neutron damage, but the mass of shielding needed is substantial. Witness the massive shield required to keep neutrons from escaping from nuclear reactors. The size of the reentry vehicle will enable the defense to make a rough estimate of the amount of shielding that can be carried and thus to estimate the intensity of neutrons required to melt the warhead's fissile material.

Let us consider next the effect of X rays. These rays carry off most of the energy emitted by nuclear weapons, especially those in the megaton range. If sufficient X-ray energy falls on a reentry vehicle, it will cause the surface layer of the vehicle's heat shield to evaporate. This in itself may not be too damaging, but the vapor leaves the surface at high velocity in a very brief time and the recoil sets up a powerful shock wave in the heat shield. The shock may destroy the heat shield material or the underlying structure.

X-rays are particularly effective above the upper atmosphere, where they can travel to their target without being absorbed by air molecules. The defense can therefore use megaton weapons without endangering the population below; it is protected by the intervening atmosphere. The kill radius can then be many kilometers. This reduces the accuracy required of the defensive missile and allows successful interception at ranges of hundreds of kilometers from the ABM launch site. Thus X-rays make possible an area defense and provide the key to the Sentinel system.

On the other hand, the reentry vehicle can be hardened against X-ray damage to a considerable extent. And in general the defender will not know if the vehicle has been damaged until it reenters the atmosphere. If it has been severely damaged, it may break up or burn up. If this does not happen, however, the defender is helpless unless he has also constructed an effective terminal, or short-range, defense system.

The third kill mechanism—blast—can operate only in the atmosphere and requires little comment. Ordinarily when an offensive warhead reenters the atmosphere it is decelerated by a force that, at maximum, is on the order of 100*g*. (One *g* is the acceleration due to the earth's gravity.) The increased atmospheric density reached within a shock wave from a nuclear explosion in air can produce a deceleration several times greater. But just as one can shield against neutrons and X-rays one can shield against blast by designing the reentry vehicle to have great structural strength. Moreover, the defense, not knowing the detailed design of the reentry vehicle, has little way of knowing if it has destroyed a given vehicle by blast until the warhead either goes off or fails to do so.

The main difficulty for the defense is the fact that in all probability the offensive reentry vehicle will not arrive as a single object that can be tracked and fired on but will be accompanied by many other objects deliberately placed there by the offense. These objects come under the heading of penetration aids. We shall discuss only a few of the many types of such aids. They include fragments of the booster rockets, decoys, fine metal wires called chaff, electronic countermeasures and blackout mechanisms of several kinds.

The last stage of the booster that has propelled the offensive missile may disintegrate into fragments or it can be fragmented deliberately. Some of the pieces will have a radar cross section comparable to or larger than the cross section of the reentry vehicle itself. The defensive radar therefore has the task of discriminating between a mass of debris and the warhead. Although various means of discrimination are effective to some extent, radar and data processing must be specifically set up for this purpose. In any case the radar must deal with tens of objects for each genuine target, and this imposes considerable complexity on the system.

There is, of course, an easy way to discriminate among such objects: let the whole swarm reenter the atmosphere. The lighter booster fragments will soon be slowed down, whereas the heavier reentry vehicle will continue to fall with essentially undiminished speed. If a swarm of objects is allowed to reenter, however, one must abandon the concept of area defense and construct a terminal defense system. If a nation insists on retaining a pure area defense, it must be prepared to shoot at every threatening object. Not only is this extremely costly but also it can quickly exhaust the supply of antimissile missiles.

Instead of relying on the accidental targets provided by booster fragments, the offense will almost certainly want to employ decoys that closely imitate the radar reflectivity of the reentry vehicle. One cheap and simple decoy is a balloon with the same shape as the reentry vehicle. It can be made of thin plastic covered with metal in the form of foil, strips or wire mesh. A considerable number of such balloons can be carried uninflated by a single offensive missile and released when the missile has risen above the atmosphere.

The chief difficulty with balloons is putting them on a "credible" trajectory, that is, a trajectory aimed at a city or some other plausible target. Nonetheless, if the defending force employs an area defense and really seeks to protect the entire country, it must try to intercept every suspicious object, including balloon decoys. The defense may, however, decide not to shoot at incoming objects that seem to be directed against nonvital targets; thus it may choose to limit possible damage to the country rather than to avoid all damage. The offense could then take the option of directing live warheads against points on the outskirt of cities, where a nuclear explosion would still produce radioactivity and possibly severe fallout over densely populated regions. Worse, the possibility that reentry vehicles can be built to maneuver makes it dangerous to ignore objects even 100 kilometers off target.

Balloon decoys, even more than booster fragments, will be rapidly slowed by the atmosphere and will tend to burn up when they reenter it. Here again a terminal ABM system has a far better chance than an area defense system to discriminate between decoys and warheads. One possibility for an area system is "active" discrimination. If a defensive nuclear missile is exploded somewhere in the cloud of balloon decoys traveling with a reentry vehicle, the balloons will either be destroyed by radiation from the explosion or will be blown far off course. The reentry vehicle presumably will survive. If the remaining set of objects is examined by radar, the reentry vehicle may stand out clearly. It can then be killed by a second interceptor shot. Such a shoot-look-shoot tactic may be effective, but it obviously places severe demands on the ABM missiles and the radar tracking system. Moreover, it can be countered by the use of small, dense decoys within the balloon swarms.

Moreover, it may be possible to develop decoys that are as resistant to X-rays as the reentry vehicle and also are simple and compact. Their radar reflectivity could be made to simulate that of a reentry vehicle over a wide range of frequencies. The decoys could also be made to reenter the atmosphere—at least down to a fairly low altitude—in a way that closely mimicked an actual reentry vehicle. The design of such decoys, however, would require considerable experimentation and development.

Another way to confuse the defensive radar is to scatter the fine metal wires of chaff. If such wires are cut to about half the wavelength of the defensive radar, each wire will act as a reflecting dipole with a radar across section approximately equal to the wavelength squared divided by 2π. The actual length of the wires is not critical; a wire of a given length is also effective against radar of shorter wavelength. Assuming that the radar wavelength is one meter and that one-mil copper wire is cut to half-meter lengths, one can easily calculate that 100 million chaff wires will weigh only 200 kilograms (440 pounds).

The chaff wires could be dispersed over a large volume of space; the chaff could be so dense and provide such large radar reflection that the reentry vehicle could not be seen against the background noise. The defense would then not know where in the large reflecting cloud the reentry vehicle is concealed. The defense would be induced to spend several interceptors to cover the entire cloud, with no certainty, even so, that the hidden reentry vehicle will be killed. How much of the chaff would survive the defensive nuclear explosion is another difficult question. The main problem for the attacker is to develop a way to disperse chaff more or less uniformly.

An active alternative to the use of chaff is to equip some decoys with electronic devices that generate radio noise at frequencies selected to jam the defensive radar. There are many variations on such electronic countermeasures, among them the use of jammers on the reentry vehicles themselves.

The last of the penetration aids that will be mentioned here is the radar blackout caused by the large number of free electrons released by a nuclear explosion. These electrons, except for a few, are removed from atoms or

molecules of air, which thereby become ions. There are two main causes for the formation of ions: the fireball of the explosion, which produces ions because of its high temperature, and the radioactive debris of the explosion, which releases beta rays (high-energy electrons) that ionize the air they traverse. The second mechanism is important only at high altitude.

The electrons in an ionized cloud of gas have the property of bending and absorbing electromagnetic waves, particularly those of low frequency. Attenuation can reach such such high values that the defensive radar is prevented from seeing any object behind the ionized cloud (unlike chaff, which confuses the radar only at the chaff range and not beyond).

Blackout is a severe problem for an area defense designed to intercept missiles above the upper atmosphere. The problem is aggravated because area-defense radar is likely to employ low-frequency (long) waves, which are the most suitable for detecting enemy missiles at long range. In some recent popular articles long-wave radar has been hailed as the cure for the problems of the ABM missile. It is not. Even though it increases the capability of the radar in some ways, it makes the system more vulnerable to blackout.

Blackout can be caused in two ways: by the defensive nuclear explosions themselves and by deliberate explosions set off at high altitude by the attacker. Although the former are unavoidable, the defense has the choice of setting them off at altitudes and in locations that will cause the minimum blackout of its radar. The offense can sacrifice a few early missiles to cause blackout at strategic locations. In what follows we shall assume for purposes of discussion that the radar wavelength is one meter. Translation to other wavelengths is not difficult.

As shown by the preceding article, even if the missile were "killed" by X-ray penetration the missile would continue to appear on the radar screens as approaching the target and the defense would not know whether it was "dead" or "alive." The defense would have to be fully automated otherwise the defenders would undoubtedly fire all their short-range missiles at the incoming vehicle.

It is sometimes claimed that an anti-ballistic-missile system will be good because it is defensive and it is better to place one's resources in a defensive race than in an offensive race. A related argument is to say that it is better to have imperfect defense than to have no defense at all. Both of these statements are not valid because unless the ABM is a perfect shield, which it is not, it is in reality no defense at all. Our present defense against an all-out nuclear attack from the Soviets, which will not be changed by our deployment of any foreseeable ABM system, is our second-strike capability which permits us to absorb a first strike and respond with enough destructive power to destroy the Soviet Union as a civilized country. Under these conditions neither country would be able to win an all-out nuclear exchange which robs any rational motive for such a war. The reaction of the Soviets to our deployment of the present Sentinel system will be exactly as our reaction was to their ABM system. It was not to build another ABM system but to revamp all of our present warheads so as to make them more capable of penetrating any foreseeable future Russian ABM deployment. By this means we will have increased by many times the number of deliverable warheads at our disposal. The end result will be that we will have even greater deliverable destructive power than we had before the deployment of their ABM system. To expect the Russians to respond in any other way to our ABM deployment would be naive and wishful thinking. In fact it is reasonable to say that the large increase in Russian deployment of ICBM's which has occurred in the last year can be directly attributed to their anticipation of our ABM system.

ABM's are therefore not our defense, but our ICBM's which maintain our deterrent capability, are. Because of the action-reaction mechanism—just described—ABM's can strategically be interchanged with ICBM's. If we deploy an ABM system to protect our Minutemen, this is equivalent to increasing the number of deliverable Minutemen that we can return to the attacker. A more direct way to accomplish the same is to simply build more hardened Minutemen missiles. However, the use of ABM's does add a new dangerous dimension to our national security. This danger is the psychological factor that the country or its leaders may feel that they are truly protected. In this case we or the Russians might then feel that the concept of winning an all-out nuclear war makes sense, which could produce such a war. The ABM system can only increase the arms race without changing our defensive posture, and adds the dangerous psychological dimension of giving us a false sense of security.

There might be some who would still want to maintain the fiction that the thin ABM system is to be oriented only against the Chinese and therefore the Russians need not react. Recent pronouncements have made it clear that the system is to be intended against the Russians to be used either as a negotiating point or as a first step to developing technology for an anti-Soviet system. However, there is another important argument against a so-called thin Chinese oriented system. If we start off with a "thin" system, there will come a period when such a system can be penetrated by the Chinese. The point at which this will occur is a matter of debate. Some people feel that this will occur even before the system is built. However, whenever such a point is reached the same reasoning that justified the anti-Chinese system in the first place will require the United States to modify and expand the system so as to keep it in step with the development of the Chinese offensive capabilities.

This means that such a system will inevitably be expanded into a "thick" system. The Army clearly had this in mind in their initial plans for deploying these missile sites near population centers, even though such location is not a requirement for the Sentinel system, but is a requirement for a "thick" system which depends on point defenses of Sprint batteries around each population center in the United States.

Furthermore, for a "thick" system to have any hope of being effective, it must be coupled with a major fallout shelter program. To ignore the need for a major fallout shelter program when proposing a "thick" system is misleading, to say the least, since the effect of exploding short-range Sprint nuclear missiles around a metropolitan area will create a tremendous fallout problem even with low yield missiles. The psychological impact on our society of such a fallout program and its threatening nature to the Soviets has been amply discussed in the past when this idea was resoundingly rejected by the American people.

Now we have also heard that we should begin deployment in order to get arms control talks started. If we want to get the Russians to take their ineffective ABM apart, then we must have an ineffective system of our own to take apart. Frankly, I cannot believe that this argument is more than a last-ditch attempt to justify deployment for its own sake.

Another, even worse excuse is that we must deploy this ineffective system in order to learn how to build a good one. Anyone in technology knows the difference between R. & D. and deployment. We are supposed to accept deployment in the guise of research. But deployment means the end of research. R. & D. has to be done before the system is built. When we deploy, we freeze the design. Deployment of an ineffective system can only slow up our search for effective defense.

I urge my colleagues on the Armed Services Committee, the Appropriations Committee, and Foreign Affairs Committee to hold public hearings on whether to deploy this system now or continue research and development while the President and his Executive departments carry on negotiations with the Russians on the whole subject of the arms race.

Mr. COHELAN. I thank the gentleman.

Mr. KOCH. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. I yield to the gentleman from New York.

Mr. KOCH. Mr. Speaker, I thank the gentleman for arranging this debate so as to give us an opportunity to put our remarks in the RECORD.

What we see here today is really a discussion of the classic salami tactics.

We are told that a thin ABM system will cost $5 billion and that a thick ABM system will cost $50 billion. But from past experience with Government figures, we know that the thin system will cost $50 billion and the thick ABM system will cost $500 billion. This is the cost that we should address ourselves to. It is the whole concept of employing this kind of situation at this time when we are on the verge, at least in the other body, of discussing the nuclear nonproliferation treaty.

What we are doing is escalating. I want to tell you this is some race, Mr. Speaker.

I want to refer to what occurred in New York in the late fifties and the early sixties when this question was up to impose upon the State the bomb shelters. That was the answer in the late fifties and early sixties. They were going to spend billions of dollars, and today as we look back on that we see that it is an

utter joke. But if we had let them do what they wanted to do, and if we had not stopped it, we would have been stuck with these garages underground, which could not even be used, of course, for cars.

But there is something that I also would like to bring to your attention, and that is the safety of the cities themselves. We have a situation where they tell us that these missiles are safe, that the antiballistic missiles are no danger to the cities in which they are physically located.

We know that that is not the truth. We know that the same experts in the Army, the same experts in the Pentagon told us that there was no danger when they flew with the hydrogen bombs. But ask the people in the tomato fields of Palomares in Spain; ask the people in Greenland; ask them in South Carolina. Those same bombs which accidentally fell there did have radioactive danger, even though we were told they did not.

Our trouble in this situation is that the Sprint, because it is to be available immediately, because as soon as the button, or whatever it is they touch to set it off, has to be immediately available, and so it has to be armed on the site, and it is the electronic and mechanical impulses and provisions that prevent its detonation in the city.

But do you know that five of the six electronic and mechanical devices which were to control those hydrogen bombs that [fell accidentally and] had leakage—they did not go off, but they had leakage at the sites I told you—that five of the six safety factors failed, and that if the sixth one had failed there would have been hydrogen bomb explosions at those very sites, one of which would have been in South Carolina?

It is clear to me that what we are doing is this: We are investing in a system which has no military purpose, with the expenditure of billions of dollars, because that is what the Army wants. It does not make any difference if the system is outmoded the day it is put on the drawing boards. They want to keep it up. And it is our job to stop them.

Mr. COHELAN. I thank the gentleman from New York.

Mr. REUSS. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. I yield to the gentleman from Wisconsin.

Mr. REUSS. I thank the gentleman.

Mr. Speaker, like the gentleman from California, I have had to get my information on the ABM as best I can, and I do not mean to suggest that the issue of its usefulness is entirely settled in my own mind. I cannot help but observe, however, that first the Pentagon sought to sell us on the basis that it would protect our cities against the Red Chinese. Then that not having exactly been bought, the switch was made to protecting our cities against the Soviet Union. And because of difficulties, not the least of which has been the objection on the part of many city-dwellers, the current attempt from the Pentagon seems to be to base the ABM program on a desire to harden our Minutemen missile sites throughout the country.

Whatever the rights and wrongs, whatever the validity of this proposed ABM as a defense instrument, the great point, it seems to me, and one that has been well made already by the gentleman from California, is that action by one side of the great confrontation inevitably leads to a reaction, and frequently a wild and possibly uncontrollable reaction, from the other side.

There is no doubt that, looking back, we overdeployed our intercontinental ballistic missiles during the alleged missile-gap period of the early and middle 1960's. Now the Soviet Union is reacting and catching up, and by this summer it is said they will be just about caught up.

If we now start deploying the ABM, the next step will be some variant of the MIRV to pierce the ABM. But since there is no way to police the MIRV, although there is a way to police the ABM, we may indeed have let the genie out of the bottle, because both sides could then wildly over-react.

Which brings me to what I think is the essential point of this debate, and that is that the time to start negotiating about missiles with the Soviet Union is now.

Our distinguished former colleague, whom I was delighted to see on the floor of the House just a moment ago, the Secretary of Defense, Mr. Laird, just a few days ago on "Face the Nation" said that before missile talks can start, "There must first be progress not only in Paris, but also in the Middle East."

Now, I hope there is progress in Paris, and I hope there is progress in the Middle East. But the time to begin those negotiations with the Soviet Union does not depend upon what happens in Paris. It does not depend even on what happens in the Middle East. We should start now, before contractors get a vested interest in the deployment of the ABM, by negotiating on missiles with our opponents on the other side.

If we do not deploy the ABM, this will, no doubt, disappoint those units of the industrial complex—Western Electric, General Electric, McDonnell-Douglas, Raytheon, Martin-Marietta, and some others—that have been banking on a multimillion-dollar program.

I would hope that the scientific genius of those great industrial companies could instead be turned loose on the great problems of the American people, the problems of air and water pollution, the problems of new methods of building homes and schools, and working toward some of the great scientific breakthroughs which are so desperately needed.

So my contribution, if I may make one to this afternoon's debate—and I am so grateful to the gentleman from California for initiating it—is that rather than deploy ABM, let us now at once, not waiting for the solution of other problems, start negotiating with the Soviet Union toward a diminution of missile strength on both sides.

Mr. COHELAN. Mr. Speaker, I thank the gentleman from Wisconsin for his contribution.

I would like to comment on that, because the gentleman from Wisconsin has raised a very interesting point about the apparent shift in ground in support of the program. All we know is from what we read in the newspapers, our good friend and former colleague, the Secretary of Defense, has indicated that they may be changing their posture, since there has been so much attack on deploying missile radar sites and perimeter radar sites in and around cities.

There are other major problems I could develop, but I wanted to point out there are relatively a large number of ways of increasing the chances that our missiles will survive attacks without putting up an ABM hardening system around our presently existing so-called hard sites.

Many of us have spent endless hours in committee hearings on hardening up those sites so that they would survive. We have a survivable system now, and it seems to me a kind of last-minute thought in an effort to try to keep the ABM system in being to insist on this shift in ground.

Mr. YATES. Mr. Speaker, will the gentleman yield at that point?

Mr. COHELAN. I yield to the gentleman from Illinois.

Mr. YATES. Mr. Speaker, as a matter of fact, in the current appropriation for the Department of Defense there are funds for hardening the sites even further and for protecting them against possible attack.

Mr. COHELAN. But it is not only that. We can increase hardening of our sites by adopting a rail or truck mobile system, or we can increase our submarine launching capability, or we can deploy ABM's. But by no means has the ABM been proven the most effective or least expensive of these options.

Furthermore, the effect of this further hardening is to increase our offensive capability, and this, in turn, adds fuel to the arms race.

Mr. McCARTHY. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. Mr. Speaker, I yield to the gentleman from New York.

Mr. McCARTHY. Mr. Speaker, I thank the gentleman for yielding. I am going to ask permission to revise and extend my remarks, but I inject this at this moment on this action-reaction cycle which the gentleman from California and the gentleman from Illinois have just alluded to.

This could go on forever. I do not see any end in sight unless, as the gentleman from Wisconsin suggested, we take advantage of the willingness now of the Soviet Union to sit down and talk about this. It is the only way to break this action-reaction cycle. We are poised now at a critical point. They have injected new elements into this picture which could involve massive spending by both nations in the seventies without any increase in security.

So, I think the most critical point is that the United States should indicate its willingness to sit down with the Soviet Union and discuss this matter of ABM's and related matters, and hopefully we can achieve an end, or at the very least, a diminution of this escalation. Otherwise, there will simply be no end to it.

Mr. Speaker, I thank the gentleman for yielding.

Mr. COHELAN. Mr. Speaker, I agree with the gentleman from New York. I would just like to make an aside on that, which is incidentally part of my prepared text, but it has been argued by some that we should prepare to deploy the ABM's to strengthen our position in discussions with the Soviets.

In my judgment, this is not valid. Our defense experts, including former distinguished Secretary of Defense Robert McNamara, have advised us the best American response—which is what the gentleman from Connecticut (Mr. GIAIMO) was pointing out—to the deployment of an effective Soviet ABM system is to improve our offensive arsenal to insure a sufficient number of our warheads can be delivered on target to maintain our second strike capability. Then we can offer to trade off Soviet restraint with ABM for similar U.S. restraint in deployment of improved offensive forces.

Mr. TUNNEY. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. I yield to the gentleman from California.

Mr. TUNNEY. I thank the gentleman for yielding to me and for having brought this matter before the House, because I feel, as do some of my colleagues, this is one of the most important issues facing the country at this time.

I personally believe that one of the key factors is whether or not the United States can afford the ABM system. I am talking now about dollars and cents; I am not talking about whether we can afford it spiritually in the reaction and counterreaction on the part of the Soviet Union.

We are talking in terms of $60 billion to $100 billion, and about a system which may very well not work. We already have spent, since the end of World War II, about $19 billion on missile systems which were never completed or when developed were found to be obsolete. Six billion dollars of these funds were spent on weapons systems which were designed to protect us from a Soviet missile attack.

So I believe, when we look at the overall problem, looking at the things we need in this country and looking at what we need in the way of a defense structure in other parts of the world, there is a question whether we can afford it.

I should like to quote from Mr. George Rathjens, who recently wrote a report "The Future of the Strategic Arms Race" for the Carnegie Endowment for International Peace, which already has been quoted today. I should like to quote a brief statement:

> Let it be assumed that a given target is defended by 50 interceptors, that the Chinese have 25 ICBM's with a reliability of 80 per cent, and that each interceptor has an 80 per cent chance of destroying an ICBM. According to this scenario, there is no more than about a 50 per cent probability that sentinel would succeed in preventing all 25 ICBM's from hitting their target.

Then he goes on to point out that each time the Chinese increased their complement of ICBM's in an arithmetical proportion we would have to increase our defense structure in a geometric proportion.

So I feel it is impossible for the United States at this time, with the kind of information we have available to us, to go ahead with this program.

Mr. Speaker, T. S. Eliot has said:

> We shall not cease from exploration and the end of all our exploring will be to arrive where we started and know the place for the first time.

It is now apparent that Secretary of Defense Laird has all but decided to resume the deployment of the ABM system despite the fact that strong doubts have been raised as to its utility and its effectiveness. I believe that a more rational approach would be to freeze further deployment of the ABM pending more research and development. Let us explore this vital issue thoroughly so that we may know what we have, where we are, and where we are going to lead the American people.

In September of 1967, Robert McNamara said:

> Every ABM system . . . now feasible involves firing defensive missiles at incoming offensive warheads in an effort to destroy them. What is overlooked is that any such system can rather obviously be defeated by an enemy simply sending more offensive warheads, or dummy warheads, than there are defensive missiles capable of destroying them.

The advocates of the ABM have been unable to agree with certainty as to justification for its immediate deployment. The preliminary justification given was the threat of a Chinese missile threat by the mid 1970's. Later the "future Chinese threat" was abandoned in favor of justifying the "thin" ABM as a base for the future development of a "thick" ABM for use against the Soviet Union. Secretary Laird indicated that he viewed the thin ABM only as a bargaining factor in negotiations with the Soviet Union over the limitation of the nuclear arms race. More recently the Secretary appears to have retreated to the position that the deployment of a thin ABM should continue as protection against a future Chinese missile threat. However, many scientists argue that the thin ABM will be obsolete by the time it is ready to cope with a mid-1970 Chinese missile threat. They argue that the Chinese could quite easily incorporate in their first generation ICBM's the necessary penetration aids to enable them to overcome the thin ABM.

Mr. Speaker, the cost of building a thin ABM will, in all probability, exceed $9.4 billion plus 10 percent or almost $1 billion a year for maintenance. Before we agree to commit such a large sum of money I feel we should, at the very least, have clear and convincing justification.

Furthermore, if the rationale for the thin ABM is that it is a base for the eventual construction of a thick ABM, we are speaking of costs ranging anywhere from $60 to $100 billion plus an annual 10 percent maintenance cost.

A recent report written by a former Bureau of the Budget employee responsible for evaluating weapons systems performances concluded that many performed poorly or were outright failures. The report demonstrated a close correlation between so-called crash programs to develop new weapons systems and subsequent poor performance or cancellation.

The ABM is a relatively new weapons system which has undergone only superficial testing. Yet its immediate deployment is being pushed with the assurance that it will work.

Many scientists have raised doubts as to its reliability. Since the ABM will only be tested once—when it is actually used—I believe that more research and development should be undertaken to resolve serious doubts which question its reliability.

Deployment of the thin ABM near several of our major cities has created a fear of accidental nuclear explosion. Considerable anxiety is being generated among a great many citizens and yet we cannot even be certain that the ABM will protect them. Moving the ABM sites into rural areas is not a solution, since there is a strong possibility of a thick ABM will follow requiring sites adjacent to major cities.

Secretary of State William Rogers has reportedly said that he hoped that the decisions on the deployment of the ABM could be deferred pending negotiations with Moscow on limitation of the nuclear arms race. Thus the division on the issue of immediate deployment of the ABM extends from the scientific community to within the new administration itself.

Mr. Speaker, I would like to conclude by an additional quotation from Mr. George W. Rathjens:

> The issue is whether the possible utility of Sentinel in saving lives in the unlikely event of a Chinese nuclear attack is sufficient to justify the costs, the risks that the United States might act on the basis of misplaced confidence in its effectiveness, and the undesirable impact of the decision on the Soviet-American strategic balance. Any conceivable flexibility Sentinel may give in dealing with Chinese aggressiveness or with the accidental launch of missiles against the U.S. is probably negligible compared to these considerations.

Mr. Rathjens is a professor at the Massachusetts Institute of Technology and his conclusion, backed up by other well-known scientists, is clear evidence of the need to freeze present ABM deployment and proceed with more research and development on weapons systems needs.

Mr. Rathjens continues:

> It must be borne in mind that the offense can choose any target on which to concentrate its attack: the defense must defend all. The range of the Spartan interceptor, which is used with the Sentinel system, implies that not 50 interceptors, but about 500 would have to be deployed throughout the United States if every important target were to be within the effective defensive range of 50 Spartan missiles. Thus, even with a twenty to one superiority in numbers of interceptors over the number of Chinese missiles, the picture is far from comforting.
>
> When one considers that a single one-megaton warhead detonated over one of the larger U.S. cities would produce about one million fatalities, it is clear that those who claim a damage-denial or near damage-denial capability for Sentinel are assuming an extraordinarily high level of effectiveness.
>
> As the Chinese capabilities grow, the defense problem will become even more diffi-

cult. This is illustrated by an extension of the sample calculation: if the numbers of Chinese ICBM's and United States interceptors are both doubled, the chance of at least one Chinese missile getting to its target rises to over 70 per cent, to over 90 per cent if the numbers of ICBM's and interceptors are both quadrupled, and so on. In the long run then (and it may not be too long a run), defense clearly becomes a losing game even against a relatively weak adversary. The costs of defense required to maintain any given level of protection will rise much more sharply than the costs of improving the offense.

I thank the gentleman from California for giving me this opportunity to make this statement.

Mr. COHELAN. I am very grateful to my distinguished colleague from California for his comment and also for his citations.

I would hope that Members who want to pursue this subject further—and we have only 8 minutes left, by the way, on my special order—would devote their attention to page 4244 of the RECORD for February 24, 1969, wherein I inserted several articles which explore this general subject.

Mr. BURTON of California. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. I yield to the gentleman from California (Mr. BURTON).

Mr. BURTON of California. Mr. Speaker, former Vice President, Hubert H. Humphrey wrote in January of this year:

> The fundamentals of the missile controversy are not beyond the comprehension of the American people, and certainly no decision of the magnitude of ABM should be taken on their behalf without greater evidence of their informed consent than can be said to exist presently.

I share this view and commend my distinguished colleagues for scheduling the special order so that some of the many facets of this question can be further viewed by the American people.

They have a right to know what they are buying and we have an obligation to engage in this dialog so that they can know.

We are asked to support a limited ABM system at an estimated cost of $5 billion. Why? To deter a potential threat from the Soviet? No. Former Secretary of Defense Robert McNamara tells us it will not serve this purpose. Besides, he says, in effect, the offensive deterrent we already possess is sufficient to accomplish that goal.

This, we are told, is to be a limited ABM—aimed at the "Chinese" threat. In my view, there is a sufficient contradiction here, alone, to cast doubt on the proposal. For if, in the Secretary's view, sufficient offensive deterrent exists in relation to the Soviet, then why is it not also sufficient to deter a threat from any other and, in this case, admittedly lesser source?

I should like to make it clear at this point that I am not advocating the concept of offensive deterrence but pointing up at least one substantial contradiction which is the start of a strong thread of doubt concerning the whole argument in favor of deployment of an ABM system.

If the concern is miscalculation by China of our position and our potential, that concern finds remedy not in escalation of the arms race but in escalation of the peace race—in meaningful attempts to establish contact so that miscalculation will not occur out of ignorance, or be the result of fear that is natural to those too long cut off from participation in the vital dialog within the community of nations.

The thread of doubt about the wisdom of ABM continues to grow as one contemplates the needs of the people in our cities, the hunger of the rural poor, the medical needs of the aged and disabled, the need for improved education of our youth and so many other domestic needs. These needs could be met with this $5 billion, or whatever the larger figure which would inevitably result. It is not the cost alone of ABM which gives one pause, but the growing knowledge that it is a useless cost which will spiral as demands for more complex systems reflect the escalation of the arms race which this initial deployment would cause.

If history were to teach us anything, we should be able to grasp the almost physical principle that in the affairs of nations "for every action there is an equal reaction." ABM will call for more sophisticated weapons systems of any potential adversary. More sophisticated weapons systems by them call for greater deterrence in some form by us—Where, I ask, does it end?

This is the purpose of the dialog in which we now engage. We pause to contemplate the next step and the consequences that will follow.

It can be argued that ABM is useless before it is built.

Serious question can be raised about the wisdom, even the morality, of so great an expenditure at this time for so questionable a goal.

It can be argued that such a system is not necessary even if you were to grant a certain validity to arguments concerning a Chinese threat.

The overriding factor in my opposition to the deployment of the ABM is that this act thrusts us into a new spiral in the arms race from which we have toiled so desperately to escape.

Negotiations on arms reductions seem to be within our grasp.

We have pending before the Senate a nuclear nonproliferation treaty which demands action.

These and other steps have been taken in the last decade in the long road toward peace and toward the rule of reason and not of arms in the affairs of nations and of men.

To be deterred from this course by so questionable a goal, so doubt ridden a project as ABM is folly and history would record it so.

For, in the closing words of Robert McNamara's speech to the United Press International Editors and Publishers in San Francisco, in September, 1967:

> In the end, the root of man's security does not lie in his weaponry.
>
> In the end, the root of man's security lies in his mind.
>
> What the world requires in its 22nd Year of the Atomic Age is not a new race towards armament.
>
> What the world requires in its 22nd Year of the Atomic Age is a new race towards reasonableness.
>
> We had better all run that race.
>
> Not merely we, the administrators, but, we, the people.

These, then, are the considerations which determine my opposition to the ABM system.

It is our responsibility, in the words of the prophet Isaiah, to:

> Undo the heavy burdens and to let the oppressed go free.

We have the opportunity to loose ourselves from the heavy burdens of a spiraling arms race and to free our people from the oppression of hunger, want, and suffering which still stalk major segments of our people in this bountiful land.

It is a responsibility which I do not take lightly nor was the course which I advocate arrived at hastily. It is a course of opposition to the ABM demanded, in my view, by reason, by humanity, by deep concern for the future of this Nation, its people, its leadership within the community of nations, and its place in history.

Mr. MIKVA. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. I yield to the gentleman from Illinois.

Mr. MIKVA. Mr. Speaker, it is my privilege to join my distinguished colleagues, including my colleague and friend from California (Mr. COHELAN) and from Illinois (Mr. YATES) in discussion of an issue which may have more impact on shaping the future of our country than any other issue to come before this Congress. While the cost of development and deployment of the Sentinel anti-ballistic-missile system may or may not break us, the way in which we resolve this question will be the clue as to how we will resolve all of our priority problems. It seems to me that it will also determine in large part whether Congress has any real role in this question of defense spending and priorities of whether the military both proposes and disposes and Congress merely rubberstamps.

There are, Mr. Speaker, as my distinguished colleagues have pointed out and will further document innumerable reasons for us—the elected Representatives of the people—to question the soundness, the necessity, and the effectiveness of the Pentagon's proposed Sentinel ABM system. As the growing flood of constituent mail amply proves, the citizens of this Nation are concerned, not to say deeply distressed, by the danger to the safety of their families and communities which is posed by present plans for deployment of the Sentinel system.

In addition to the safety problems which the proposed Sentinel system presents, there are serious questions of the efficacy of the proposed system, its tremendous cost, its destabilizing effects on international relations and our present disarmament negotiation efforts, and so on almost ad infinitum. Many of

these reasons for opposing the present deployment of Sentinel have received widespread public attention, and are the source not only of public concern but in some cases of excruciating public apprehension. Today, however, I would like to concentrate on some of the arguments against Sentinel which have not been so well covered or so thoroughly discussed. I do this not to detract one whit from the importance of concerns which have been expressed about Sentinel's safety, but to emphasize that in addition to these immediate and pressing considerations there are more fundamental criticisms of Sentinel—criticisms which go to the very heart of the program—which cast doubt upon the program's whole conception. I raise these fundamental objections, Mr. Speaker, to underline the fact that even if the Pentagon should be convinced by public outcry to abandon the present deployment scheme—an occurrence rare enough in itself to be worthy of some note—and even if it should decide on "hard site" deployment as some sources now indicate it will, this new deployment arrangement will not overcome the basic, far-reaching inadequacies in the present Sentinel program. What I am saying is that this proposed Sentinel system scares our own citizenry a lot more than it scares any potential enemy.

In order for any discussion of the pros and cons of the Sentinel ABM system to have the proper bite, it must be remembered that these missiles are untested—and untestable. In other words, the only thing we know for sure about this system is that we do not know anything for sure about the system. The computer component of this system is heralded by friend and foe alike to be a great computer. However, as we are reminded over and over again, a computer is only as good as its imput. Computer science has not reached the point where we can "imput" a program to cover all of the unknown variations on an offensive theme—whether that theme speaks Chinese or Russian. To say it another way, if the Chinese or whoever else we are defensing against would let us see their missile system, there is little doubt that the computer could work out a defense. Until someone can make sure that we see their offense, there is great doubt that the Sentinel can program a defense.

A callous story that came out of the war between China and Japan in the 1930's had to do with casualty figures and the population of the two countries. A mythical Chinese communique reported that in a particular battle the Japanese had suffered 5,000 casualties and the Chinese 10,000 casualties. The Chinese communiqué concluded that if that rate were to continue pretty soon the Chinese would win the war. A twist of that story is relevant to the dollar expenditure here. Distinguished scientific sources advise us that at the very least the Sentinel ABM system means $5 of defense expenditure for us for every dollar of offense by the other side. I ask you to think for a moment as czar of all the Russian offenses or war lord of all the Chinese offenses. Does not the Sentinel ABM system tickle your fiscal funny bone?

Consider the conclusions of Prof. George W. Rathjens as he talked about the Sentinel and its mathematical probabilities. I quote from his treatise "The Future of the Strategic Arms Race" published by the Carnegie Endowment for International Peace, as follows:

> Third, there is the fact, mentioned earlier, that damage denial is a much more demanding task than simply reducing damage by small amounts. The extreme difficulties involved can be illustrated by a simple calculation. Let it be assumed that a given target is defended by 50 interceptors, that the Chinese have 25 ICBM's with a reliability of 80 per cent, and that each interceptor has an 80 per cent chance of destroying an ICBM. According to this scenario, there is no more than about a 50 per cent probability that Sentinel would succeed in preventing all 25 ICBM's from hitting their target. It must be borne in mind that the offense can choose any target on which to concentrate its attack; the defense must defend all. The range of the Spartan interceptor, which is used with the Sentinel system, implies that not 50 interceptors, but about 500 would have to be deployed throughout the United States if every important target were to be within the effective defensive range of 50 Spartan missiles. Thus, even with a twenty to one superiority in numbers of interceptors over the number of Chinese missiles, the picture is far from comforting.
>
> When one considers that a single one-megaton warhead detonated over one of the larger U.S. cities would produce about one million fatalities, it is clear that those who claim a damage-denial or near damage-denial capability for Sentinel are assuming an extraordinarily high level of effectiveness.
>
> As Chinese capabilities grow, the defense problem will become even more difficult. This is illustrated by an extension of the sample calculation: if the numbers of Chinese ICBM's and the United States interceptors are both doubled, the chance of at least one Chinese missile getting to its target rises to over 70 per cent, to over 90 per cent if the numbers of ICBM's and interceptors are both quadrupled, and so on. In the long run then (and it may not be too long a run) defense clearly becomes a losing game even against a relatively weak adversary. The costs of defense required to maintain any given level of protection will rise much more sharply than the costs of improving the offense.

In other words, we are talking about an untested 5-to-1 plan that claims to be 50 percent effective. That sounds like the prognosticator who stated that he was 95 percent right—12 percent of the time.

And when the fiscal funny bone stops aching, it is perfectly obvious that our adversary will in fact spend the $1 to force us to spend $5 or more. And such an escalation makes any "thin" ABM system automatically a "thick" ABM system. Mr. Speaker, a thin ABM system is like a malignant cancer. It will feed off itself until it devours the whole budget and our whole wherewithal—unless this Congress has the courage to ask "why"? If we ask "why" and refuse to authorize a go-ahead until we receive candid answers, then maybe we can avoid this budget buster that probably will not work.

The gentleman from Hawaii mentioned the maginot line.

Some months ago a little squib appeared in the newspaper advising that the French were selling off the maginot line at less than salvage value prices. The maginot line was the Sentinel system of the last generation. It defended against nothing except unemployment in the bunker building business—and nearly bankrupted France on the way. At the projected prices for the Sentinel system, we may not be as lucky as France.

Mr. COHELAN. I thank the gentleman from Illinois.

Mr. LOWENSTEIN. Mr. Speaker, will the gentleman yield?

Mr. COHELAN. I yield to the gentleman from New York (Mr. LOWENSTEIN).

Mr. LOWENSTEIN. Mr. Speaker, I appreciate the courtesy of the gentleman from California.

I wish this could be a debate today. What a pity that the people who favor this program are not here to explain it, perhaps even to defend it against some of the charges that have been made against it. But at least to explain it, because there are many of us who have questions, and the absence of anyone to answer those questions cannot but add to the grave doubts that have developed among concerned Americans about the desirability of the program.

But instead of clarification and debate, we must today settle for another airing of unanswered questions, questions we begin to suspect may, in fact, be unanswerable. Questions which seem rather basic if we are to decide rationally on the merits of this proposal. What, for instance, is it hoped that an ABM system would achieve?

At first we were told we needed a "thin" system, to protect America against China. This theory appears to postulate the ascendancy to power in China of a mad dictator. Such a dictator would have to be intent on destroying his country, since an attack on the United States would presumably subject China to massive retaliation. But for the ABM system to have any relevance to the behavior of a mad Chinese dictator we would have to come into power as late as 1974, which is when China will first have the capacity to launch a missile attack, and not later than 1976, by which time she will have the capacity to penetrate the thin system.

Even some proponents of the ABM seem to feel that a possible defense against a hypothetical mad Chinese dictator inconveniently in power during a few months in the mid-1970's may not be a fully persuasive reason to spend enormous sums of money, especially since our best military experts have assured us that our antimissile deterrent is more than adequate anyway.

So now, Mr. Speaker, we hear increasingly that perhaps the ABM is needed to defend us against possible Russian attack. But this line of reasoning raises other serious questions.

Secretary McNamara himself seems unsold on this kind of reasoning. He has explained that the thin system would not be very helpful in the event of a Soviet attack; but his further comments seem more significant in this discussion:

> The danger in deploying this relatively light and reliable Chinese-oriented ABM system is going to be that pressures will develop

to expand it into a heavy Soviet-oriented ABM system. * * * The so-called heavy ABM shield—at the present state of technology—would in effect be no adequate shield at all against a Soviet attack, but rather a strong inducement for the Soviets to vastly increase their own offensive forces. That, as I have pointed out, would make it necessary for us to respond in turn—and so the arms race would rush hopelessly on to no sensible purpose on either side.

So one is really tempted to echo the comment of the distinguished Senator from South Dakota, Senator MCGOVERN:

I believe the proponents of this system owe us a clear statement of why they want this system built and against what it is to protect us.

It is, of course, a bit odd at this late date to be obliged to raise so basic a question, but the suspicion hovers that we may, in Dick Barnett's phrase, be faced with the specter of a massive weapons system in search of a rationale. Mr. Speaker, this Nation wants to be secure, needs to be secure, has the right to be secure.

But great foolishness can be committed in the name of noble purpose, in the pursuit of important goals. To chart "security" is not to achieve it, and the only thing one can be sure of buying if one spends vast new sums of money are vast new tax burdens and a greater national debt.

Such tax burdens and debts do not seem to me a contribution to national security. So, I think we ought to be very sure that new weapons systems entailing vast new expenditures will, in fact, make us more and not less secure, before we embark upon them.

Nor does the unearthing of the military's reasons for wishing to retain our bases in Spain seem particularly reassuring.

It appears, Mr. Speaker, that we are urged to spend large additional sums of money to help protect General Franco from a potential invasion by hoardes of Algerians, and from an equally imminent people's revolution to be launched apparently from the Spanish Sahara, the Spanish colony in Africa called Rio Muni.

Perhaps the value of this kind of reasoning is that it makes the mad Chinese dictator setting out to destroy as much of China as quickly as he can seem relatively plausible.

I thank the distinguished gentleman from California for helping to turn the spotlight on this whole problem—perhaps as grave a problem as we shall face this session.

Mr. DENNIS. Mr. Speaker, will the gentleman yield for one question?

Mr. COHELAN. I will be glad to yield to the gentleman. I have 2 minutes left, but we will get some more time.

Mr. DENNIS. It will take me less time than that.

I am in no position as a private citizen here without any access to technical information to give the other side of this debate which has been called for here today by several of the speakers. But it does occur to me that this complicated matter cannot possibly be this one-sided.

As I have sat here and listened to the discussion, one question has occurred to me and that is this: Let us suppose that we do nothing to get and develop or deploy this defense system at this time and that we put all of the money and energy and attention which might otherwise have gone into it into various other good works and then the Chinese Communists do fire off an intercontinental ballistic missile within the next 2 or 3 years? After we have pursued that course, what will the gentleman say then, or will the RECORD of today's proceedings look as good to the gentleman then as they do now? In other words, would the gentleman wish to stand by it and have it read then as eagerly as he is doing now?

Mr. COHELAN. Mr. Speaker, just one comment: I am delighted that the gentleman had the feeling to get up on his feet and to raise this very important question. I only wish there were others there on your side of the aisle and on our side of the aisle as well who would have raised such a question, because in our more complete paper we discuss this in great detail under the category that the ABM system is not necessary for the defense against China. And I am not going to take the time now other than to refer the gentleman to the defense posture hearings which were held last year and the data he wanted that appears on page 9033 where there appears an extensive discussion of the matter.

Mr. Speaker, I want to assure my colleague of his every right to be skeptical about not having these devices. Many of us here have spent a great deal of time and much work on these problems, especially some of us who work on certain special committees have certain advantages, and this is why this makes the problem so tough. This is why we are ventilating the subject as we are today. But, believe me, in this time we have pointed out the arguments. I think the logic of the argument is on our side of the question. Let us be very frank. We started out with an anti-Chinese rationale—and the record is replete with excuses for the defense against China with the thin system. But when one listens to Senator RUSSELL and when one reads the hearings over in the other body, it is very clear that this support for ABM is based upon a Russian-oriented system. And if one reads former Secretary of Defense McNamara's speech of September of last year, one will find that throughout the entire speech he said to orient this system against the Soviets would be utter folly.

Mr. Speaker, I should like to conclude with some detailed remarks and a quote from the former Secretary of Defense Mr. McNamara's speech of September 1967 announcing the ABM deployment because I think these remarks are really what we are talking about in making this decision—in addition to the technical problems that are involved. It is essentially a question of moral philosophy. I think that the distinguished Secretary gave us some good thoughts on this subject and I shall quote him in due course.

Mr. Speaker, nearly a year ago, after an extensive study, I concluded that the United States should not deploy an anti-ballistic-missile system.

After considering all the arguments advanced by the Department of Defense, I was not convinced of the wisdom of deploying a light Chinese-oriented ABM.

I concluded that the ABM probably would not work, that it would be enormously expensive, that it would threaten to escalate the arms race, that it was not necessary to our defense against China.

I have not in the ensuing months had any reason to alter my conclusions. Today I would like to again review with you the reasons for my opposition to the light ABM system.

First. ABM deployment threatens to escalate the arms race, and it is not necessary to a strong bargaining position with the Soviets.

The mechanics of action and reaction in the nuclear arms race are clear. Each side defends itself from nuclear attack by maintaining forces which are numerous enough, and invulnerable enough, to survive a surprise nuclear attack, and still literally destroy the attacking country.

Since the United States and the Soviet Union each know that the other is strong enough to absorb a surprise attack and still destroy the attacker, both countries know that nuclear war means the certain destruction of both countries. In sum, both countries know beyond any doubt that it is suicidal to launch a nuclear attack against the other.

On the basis of this deterrent, the world has existed for 23 years with nuclear weapons but without nuclear war.

If either side increases its offensive or defensive capabilities to the point where the other side feels that its deterrent—its ability to assure beyond doubt that any attacking country will be destroyed—is threatened, that country will have to respond by increasing its offensive or defensive capabilities. Since both sides will have to plan for the worst plausible case, and since leadtimes will require relatively uninformed estimates of the intentions of the other side, both sides are likely to build more weapons than they need to maintain their assured destruction capability. In fact, both countries have done so in the past. Under these circumstances, in case of a nuclear attack, the damage on both sides is likely to be greater, and numbers of lives lost larger, than if neither side had proceeded to deploy new weapons.

We had, until recently, arrived at a plateau in nuclear armaments, with both sides relatively secure in the credibility of their deterrent. Now, however, technological advances like ABM and MIRV threaten to coax us off the plateau and into the whirlwind of a resumed nuclear arms race.

Unfortunately, it seems likely that it will be even more difficult to halt the arms race once these new systems are deployed.

Let me take just a minute to explain.

Since each country's defense depends on the certainty with which it can destroy the other, deployment of a nationwide missile will reduce the certainty of

destruction and will therefore require deployment of weapons systems to overcome the additional defense. But the effectiveness of the other side's ABM defense cannot be known with a high degree of certainty. Thus, much greater amounts of offensive force than are really necessary will be deployed. The other side will feel more threatened by the increased offense, and will have to respond by deploying more or better offensive or defensive systems. This in turn will affect the other side, and so on in a never ending spiral.

The fact that the leaders of the Soviet Union have expressed an urgent interest in discussions to limit offensive and defensive missile deployments is a clear indication that the Soviets, too, understand the logic of the arms race—understand that both sides will be induced to spend billions and yet still not add to their security.

It has been argued by some that we should proceed to deploy the ABM to strengthen our bargaining position in these discussions with the Soviets. In my judgment this contention is not valid.

Our defense experts, including former Secretary McNamara, have advised us that the best American response to the deployment of an effective Soviet ABM is to improve our offensive arsenal to assure that sufficient numbers of our warheads can be delivered on target to maintain our second strike capability. Thus the trade off for Soviet restraint in ABM deployment is a similar restraint by the United States in the deployment of improved offensive forces.

Moreover, if the ABM does not work, or is viewed as unlikely to work by the Soviets, our forbearance from deploying an ineffective system is not likely to do much to strengthen our case in negotiations. As I will point out shortly, there is good reason for the Soviets to question the effectiveness of our system.

It should also be remembered that there is enormous waste of resources entailed in building an ABM system, only to negotiate an agreement to pull it out.

One further note of caution is in order. It may be that no formal agreement on missile deployment restraint will be possible. Yet it may be that a mutual unwritten detente could be achieved. Thus, if we do deploy the ABM we will have placed our entire reliance on obtaining a formal agreement of limitation and we will have foreclosed the possibility of mutual unilateral restraint.

Second. The ABM is not necessary to our defense against China.

In his original announcement of September 18, 1967, Secretary McNamara described the Sentinel ABM as a light, Chinese-oriented ballistic missile defense. Thus the question arises whether the ABM is necessary to our defense against China.

First, it should be remembered that the same awesome offensive force which provides our deterrent against Soviet attack is available against China. Moreover, because of the vulnerability of Chinese air defense, it may be that even our Air Force alone possesses the capability to destroy China should she attack us. Thus it is absolutely clear to the Chinese that if they attack us, their country will without any doubt be destroyed.

In addition, our experience to date has shown the Chinese to be quite reserved in their actions, despite their extravagant rhetoric. This reserve is an indication of a strong appreciation of the realities of our military force.

It has been argued however that the Chinese might irrationally decide to ignore our deterrent and attack anyway. If this is the case and the Chinese are irrational and undeterrable, then there seems to be no reason why they should not attack with biological or chemical weapons, or high fallout nuclear warheads, or missiles in orbit, or fractional orbit, or from submarines—all of which are methods of delivery against which the Sentinel ABM is no defense.

I think it should also be pointed out that even if the Sentinel would work to protect against a Chinese attack, it seems unlikely that we could be so certain that it would work completely that a President of the United States could afford to risk millions of lives and ignore the threat by the Chinese that they would launch their missiles. Thus even the limited Chinese ICBM force, would deter the United States, even if we had an ABM.

To this is added the fact that the defense advisers of the United States have expressed a willingness to forgo the deployment of the Sentinel Chinese-oriented ABM if the Soviet Union would agree to forgo further deployment of their ABM and other offensive systems. This would seem a tacit admission that there is little need for a Chinese-oriented ABM.

Third. The ABM probably will not work.

It is of course difficult for laymen to pass judgment on the effectiveness of the advanced scientific technology involved in ABM systems. However, several highly distinguished and well informed scientists, some even former presidential science advisers, have expressed the view that for a broad range of reasons, the ABM is unlikely to work with the high degree of effectiveness required. I would like to explore these technical objections in a little more detail.

In evaluating the performance of an ABM system in defending against nuclear attack one must realize that the defense must be extremely effective. If even one warhead gets through, it could take the lives of millions of people. The most effective air defenses ever built are probably only about 10 percent effective, and they certainly are not more than 50 percent effective. Yet an antimissile defense must be nearly 100 percent effective if it is to defend the lives of the people it is to protect. It is difficult to imagine that any defense with the present technology could be designed with this high degree of effectiveness.

Moreover, design and construction of the ABM system will be the most complicated engineering task ever undertaken by man. Almost all complicated defense systems have not worked perfectly at the outset. Yet the ABM will have to work perfectly the very first time it is called on to act under a nuclear attack. A further complication is added by the fact that the system cannot effectively be tested as a whole except under the conditions of an actual nuclear attack and then it is too late to make corrections.

Added to these complications are the possibilities that water cooled computers will fail under the stress of attack, or that thermonuclear detonations will cause the intricate and essential electronic systems to black out, or that human links will fail under the pressures of an attack.

Further still the arguments of Dr. Hans Bethe and Dr. Richard Garwin have not to my knowledge ever been satisfactorily refuted. Bethe and Garwin contend that simple targeting strategies can exhaust ABM batteries and, therefore, defeat the system, and that relatively cheap and easy-to-build devices can destroy the effectiveness of our ABM radars and computers. These devices might include clouds of metal chaff, metallic coated balloons, electronic counter measures, nuclear explosions, multiple warheads, and nose cone hardening against X-rays.

Added to these technical obstacles is the further problem that the ABM now proposed is designed to protect only against a modest attack coming from the north by relatively unsophisticated intercontinental missiles. Thus the system would not be effective against orbiting warheads or fractionally orbiting warheads coming from directions other than the north. It would not protect against submarine launched missiles. And of course it would not provide any defense against air attack, biological or chemical weapons, high fallout nuclear warheads or any other means of unconventional attack to which an irrational power might resort.

In addition to these technical arguments, two more, which are generally overlooked in the discussion bear on the question.

One of the uncertainties about ABM defenses is their ability to function effectively after nuclear explosions have caused large electrical disturbances. Some people believe it will not be possible to adequately determine ABM effectiveness under these conditions without actual tests in the atmosphere. Accordingly some people have predicted that strong pressures will mount to resume atmosphere testing in order to refine the reliability of our ABM system against a more sophisticated attack than that with which it is now designed to deal.

Atmospheric testing is of course banned by the Atmospheric Nuclear Test Ban Treaty. Detonations in the atmosphere in the past, as well as those continuing tests by the French and the Chinese have had, and are having, more serious consequences than many of us realize. The entire biology of plant and animal environments has been affected by the ingestion and spread of radioactive materials like Strontium 90. The effects on gene pools and future generations are still not clear. But what is clear is that there is a significant price to pay for tampering with nature through nuclear explosions. I think little more need be said to caution against the resumption of atmospheric testing.

A second little-discussed item is the

potential need for a massive fallout shelter program. Since it is possible to attack a city's population by exploding a bomb causing large amounts of fallout, away from the city, and then allowing the radioactive and deadly fallout to waft over the city, no terminal ABM defense can be expected to provide adequate population defense without an adequate fallout shelter program.

It is true that an area defense which destroys incoming warheads outside of the atmosphere does not require a system of fallout shelters. However, even the Sentinel system contemplates some penetration of the area defense, and, therefore, it provides a terminal defense in the atmosphere for destroying incoming missiles which get that far. Even the Sentinel cannot provide highly effective population protection against an attacker capable of penetrating the area defense, even if each city had a terminal defense, unless there are also adequate fallout shelters.

Thus, I remind my colleagues that ABM defense may still require extensive fallout protection. And I remind you, too, of the rigors of a "hardened society," living with backyard shelters, mountains of supplies, regular drills in getting underground, and all of the other costs of such a massive shelter program. These costs were largely determinative in our decision not to deploy the Nike-Zeus ABM in the early 1960's.

In sum, there are a large number of technical considerations raised by responsible, experienced scientists which indicate that the ABM is likely not to work effectively. On this present record, I can only conclude that there is a good chance the system will not work. And so in deciding on deployment, I think we must keep in mind that we may be spending billions, and risking a massive escalation in the arms race, all for a system which may not work.

Fourth. ABM will cost enormous sums that could be better spent at home.

There has been a good deal of discussion of the costs of ABM deployment. Figures of from $3.5 billion to $100 billion have been discussed. As I understand it the latest official Defense Department estimate is that the Sentinel will cost $5.8 billion to deploy.

However, I think it is only fair to call the attention of my colleagues to the misleading nature of this figure. First, this figure does not include any of the research and development costs which predated the decision to proceed with Sentinel deployment. Nor does this figure include the sums for research and development of a more advanced ABM system. This figure does not include either the very large sums expended over the last several years to increase the capacity of Atomic Energy Commission facilities to produce the large numbers of warheads necessary to deploy the Sentinel ABM and the Poseidon multiple warhead missile.

In addition it is estimated that the ABM system will cost from $500 million to $1 billion annually just to operate and maintain. For the 5 years of the anticipated life of the Sentinel this adds $2.5 to $5 billion to the $5.8 billion estimate.

Then, of course, there are the statements by the proponents of the Sentinel noting that in order to meet the anticipated technological advances, it will be necessary to expand and modify the system deployed for $5.8 billion. The costs of this expansion and modification have, to my knowledge never been officially disclosed. But from statements made by defense officials it is reasonable to assume that these get well costs will be of the same magnitude as the original capital outlay, or about another $5 billion dollars. Thus the present indication is that by the end of the mid 1970's the United States will have put $15 to $20 billion into Chinese-oriented ABM deployment and operation exclusive of prior research and tooling up costs. In case anyone needs reminding, these are enormous sums, in fact they amount to 22 to 30 percent of the personal taxes paid by individuals last year.

And these sums would be spent in addition to the maintenance of an awesome deterrent in air, naval, land, and missile armaments which we now possess against the Chinese. This is indeed a high price to pay for redundancy, and a system which has a significant probability of not working well.

Of course, too, there are large, pressing needs for these funds and the talented scientists and engineers they employ in solving increasing problems of urbanization, racial tension, crime and the like which are now perplexing us.

The costs of deployment are not in money alone. They exist in the number of scientists and engineers whose time and talent will be devoted to deployment and not to further research in ABM or other defense, or even social development technology.

Then too we pay the price of continued feeding of the military-industrial bent of our society. It would seem desirable to strive to reorient these powerful and potentially extremely constructive and dynamic forces.

Thus, I can only conclude that we would be spending extraordinarily large sums to augment our defense against the Chinese, and that we would not significantly be increasing our security, and we would reduce the resources available to meet the problems of our people and our cities in a time of crisis.

Defense expenditures can no longer be treated as sacred cows. In addition to ABM there are a dozen other major programs deserving of close scrutiny and reduction. Some extremely knowledgeable men have suggested that as much as $9 billion could be pared from the defense budget with no loss of security.

Now would not seem too soon to begin this scrutiny and reallocation of resources.

Now, Mr. Speaker, these arguments are all ones that have been made before, by myself and others. But even these considerations are not the only ones which compel me to the conclusion that we had best not deploy the ABM system.

What are the implications of deploying in our cities dozens of nuclear warheads, each 50 to 100 times more destructive than those which destroyed Hiroshima? While the chances of accidental detonation are small, are they small enough to take the risk and to add to the anxiety of those who live nearby?

What are the implications of ABM deployment on the provisions of the Nuclear Nonproliferation Treaty which obligate us to negotiate arms limitations in "good faith?"

What are the chances that once we deploy a limited ABM we will not be impelled by the "mad momentum" of the arms race to deploy an even larger, more expensive but ineffective ABM?

What are the implications of adopting a strategic posture which attempts to maximize our position after a nuclear attack, rather than devoting all our resources to deterring attack in the first place?

All of these and many more are serious, indeed profound, questions which must be resolved to decide on ABM deployment. In my view they counsel that we decide against ABM deployment.

In concluding, let me read to you the last few somber paragraphs of Secretary McNamara's speech announcing the ABM decision:

> The road leading from the stone axe to the ICBM—though it may have been more than a million years in the building—seems to have run in a single direction.
>
> If one is inclined to be cynical, one might conclude that man's history seems to be characterized not so much by consistent periods of peace, occasionally punctuated by warfare; but rather by persistent outbreaks of warfare, wearily put aside from time to time by periods of exhaustion and recovery—that parade under the name of peace.
>
> I do not view man's history with that degree of cynicism, but I do believe that man's wisdom in avoiding war is often surpassed by his folly in promoting it.
>
> However foolish unlimited war may have been in the past, it is now no longer merely foolish, but suicidal as well.
>
> It is said that nothing can prevent a man from suicide, if he is sufficiently determined to commit it.
>
> The question is what is our determination in an era when unlimited war will mean the death of hundreds of millions—and the possible genetic impairment of a million generations to follow?
>
> Man is clearly a compound of folly and wisdom—and history is clearly a consequence of the admixture of those two contradictory traits.
>
> History has placed our particular lives in an era when the consequences of human folly are waxing more and more catastrophic in the matters of war and peace.
>
> In the end, the root of man's security does not lie in his weaponry.
>
> In the end, the root of man's security lies in his mind.
>
> What the world requires in its 22nd Year of the Atomic Age is not a new race towards armament.
>
> What the world requires in its 22nd Year of the Atomic Age is a new race towards reasonableness.
>
> We had better all run that race.
>
> Not merely we the administrators. But we the people.

Mr. Speaker, at this point, I would like to insert in the RECORD, under the permission previously granted to include extraneous matter, the excellent paper I

referred to earlier by Dr. George Rathjens:

THE FUTURE OF THE STRATEGIC ARMS RACE: OPTIONS FOR THE 1970'S

(By George W. Rathjens, visiting professor of political science, Massachusetts Institute of Technology)

INTRODUCTION

As the end of the decade draws near, the United States and the Soviet Union must face major decisions regarding strategic forces and policies that will set the pattern for the 1970's. These decisions must be taken in the light of the inescapable fact that the United States and the Soviet Union bear responsibility for the fate of the whole world; for a thermonuclear exchange would imperil the survival of mankind.

Specifically, both countries must consider:

(1) whether to procure major systems such as new manned bombers, new strategic missiles, and ballistic missile defenses;

(2) what strategic force levels are appropriate—a problem of particular immediacy for the U.S.S.R. because of the current rapid growth of its missile force;

(3) what positions they should adopt regarding negotiations to end the arms race.

Unfortunately, there has been much confusion about these points. Thus, there is:

(1) dispute about the appropriate measure of adequacy for strategic forces—in particular, about the relationship between quantities of strategic weapons and their possible political utility;

(2) a serious problem in weighing short-term advantages of decisions regarding strategic weapons against consequences that, in the longer run, may be harmful, considering probable adversary responses;

(3) an unresolved conflict between the desire to minimize the probability of nuclear war and the desire to minimize damage should it occur;

(4) the question of what should be the response to the emergence of Communist China as a nuclear power.

The author does not claim to treat these issues with complete impartiality. The paper will serve its purpose if it alerts the reader to the fact that this is a critical time of decision regarding the strategic arms race, and if it persuades him that decisions regarding procurement of specific weapons ought not to be made without most careful consideration of the relationships between such factors as the qualities of weapons systems, the objectives to which acquisition of strategic nuclear forces will contribute, the national interests of the United States and its adversaries, and America's responsibilities toward its allies and the rest of the world.

I. THE PRESENT STRATEGIC BALANCE

To a large extent the present strategic capabilities of the United States represent the realization of plans developed during the last years of the Eisenhower Administration and at the beginning of the Kennedy Administration.

In part this is a consequence of the long lead-time required for the translation of a concept for a new strategic weapons system into an operational capability. But it is also due to the fact that the broad directions in which the United States and the Soviet Union were headed became apparent during the Eisenhower Administration. The development of the hydrogen bomb and ballistic missiles made it almost inevitable that the 1960's would be a period of mutual deterrence during which neither the United States nor the Soviet Union could derive any winning advantage in a nuclear war. They could easily destroy each other regardless of who struck first, even if they had defenses. Recognition of those facts set the pattern at the beginning of the 1960's for the strategic forces that the United States has since deployed; and the size of those forces was all but established by the end of the first year of the Kennedy Administration. Thus, by the time of the presentation of the budget for fiscal 1963 (late 1961), it was clear that: the Titan II force would be limited to 6 squadrons; there would not be an expansion of the B-52 force beyond 14 wings nor an operational B-70 force; and the size of the Polaris fleet would be set at 41 boats. The number of Minutemen was set at 800, raised to 950 the following year, and still later to the present level of 1,000.

This rapid growth of American strategic forces was in large measure due to concern that the Soviet Union might have a significant superiority in strategic systems during the early 1960's—a concern that arose at the time of the election of 1960 but which was rapidly dissipated by improved intelligence indicating that the "missile gap," if any, would be in favor of the United States.

The projected size of the U.S. strategic force was set as large as it was—at 1,054 intercontinental ballistic missiles, 41 Polaris boats each with 16 missiles, and about 650 intercontinental bombers—in part because of uncertainty about possible Soviet actions and the importance given to hedging against the worst possible contingencies. There was, however, another factor that made a large force attractive—a desire to have a capability to limit damage to the United States by destroying Soviet offensive capabilities. Indeed, there was pressure, particularly from the Air Force, to expand "counterforce" or "damage-limiting" capabilities by enlarging the strategic offensive forces beyond the levels finally decided on.

This pressure was resisted because of: (a) the probability of a compensating or overcompensating expansion in Soviet offensive forces; (b) the unlikelihood of a war developing in a way that would permit a U.S. attack to catch a significant fraction of the Soviet bomber and missile force on the ground; (c) the relatively small diminution in damage to the United States that would result from additional American counterforce capability, even if circumstances should develop under which the United States would attack before all of the Soviet strategic offensive force had been launched. With time, the last of these arguments became increasingly persuasive as it became apparent that the Soviet Union would emulate the United States in making its forces relatively invulnerable by dispersing its ICBM's in "hardened" underground protective sites, and by building a submarine-based missile force. Thus damage-limiting arguments played a diminishing role in the rationalization of the United States strategic force posture, as shown, for example, by a comparison of former Secretary of Defense Robert S. McNamara's Ann Arbor speech of 1962 and his more recent statements.[1]

The demand by the Army to improve American "damage-limiting" capability by deploying an anti-ballistic missile (ABM) defense system was also resisted simply because its performance seemed inadequate. To those with decision-making responsibility it seemed clear that any ABM deployment by the United States would easily be offset by modest improvements in Soviet strategic offensive capabilities.

Thus, the line against further expansion of U.S. strategic forces was held during the early and mid-1960's. Up to 1966, nearly all of the important procurement, as distinct from research and development, decisions regarding major new strategic systems were negative: the decision not to deploy a rail-mobile Minuteman; the decision not to proceed with the B-70 bomber force; the cancellation of Skybolt; and deferrals of decisions to go ahead with a full-scale ABM system and a new advanced manned strategic aircraft. Consequently, the budget for strategic forces dropped from over $11 billion in 1962 to less than $7 billion for fiscal 1966, as the major strategic weapons programs came to fruition without any major new procurement decisions. (These figures, and others that appear later, do not reflect the total cost of the U.S. strategic program since certain research and development and other costs are not included. Also, the figures may be slightly deceptive in another respect since they are not converted to constant dollars. However, relative to the year-to-year budget changes, the correction for inflation would be small.)

While the size of the U.S. strategic force approached the levels specified at the beginning of the Kennedy Administration, Soviet strategic forces were growing rapidly, and they continue to do so. However, this growth has lagged several years behind that of the United States, and still lags far behind in intercontinental bombers and especially in Polaris-type submarines (see Table I). In numbers of ICBM's the Soviets are rapidly approaching the United States; but some of theirs are still "soft," or unprotected against the effects of a nuclear explosion, while in the case of the United States all the soft missiles were phased out several years ago.

TABLE 1.—UNITED STATES VERSUS SOVIET INTERCONTINENTAL STRATEGIC NUCLEAR FORCES

	United States [1]	U.S.S.R.	
	October 1968	October 1967	October 1968
ICBM launchers [2]	1,054	720	900
SLBM (sea launched ballistic missiles) launchers [3]	656	30	75–80
Total intercontinental missile launchers	1,710	750	975–980
Intercontinental bombers [4]	646	155	150–155
Total force loadings, approximate number of deliverable warheads	4,206	1,000	1,200

[1] The size of the U.S. strategic force has not changed significantly since mid-1967.

[2] Excludes ICBM test range launchers which could have some operational capability against the United States. The Soviets also have medium range ballistic missiles (MRBMs) and intermediate range ballistic missiles (IRBM's) which are capable of striking Eurasian targets.

[3] In addition to the SLMB's on nuclear-powered submarines, the Soviets also have SLBM's on diesel-powered submarines, whose primary targets are believes to be strategic land targets in Eurasia. The Soviets also have submarine-launched cruise missiles, whose primary targets are believed to be naval and merchant vessels.

[4] In addition to the intercontinental bombers, the Soviets also have a force of medium bomber/tankers capable of striking Eurasian targets.

Source: Department of Defense, Secretary of Defense Robert S. McNamara, "Approach to the Fiscal Year 1969–73," program and fiscal year 1969 budget, in U.S. House of Representatives (90th Cong., 2d sess.), Department of Defense Appropriations for 1969, hearings before a Subcommittee on Appropriations, pt. I (Feb. 14, 1968), pt. 147; some of the figures are based on a statement by Secretary of Defense Clark M Clifford, Oct. 25, 1968; see New York Times, Oct. 26, 1968.

Measuring strategic strength

The rapid growth in Soviet capabilities, coupled with the fact that the number of U.S. launchers and strategic aircraft have been constant and are expected to remain the same for some time, has naturally led to questioning, particularly in Congressional hearings, about whether the United States continues to have "superiority" in strategic capabilities vis-à-vis the Soviet Union; about

Footnotes at end of article.

whether the loss in "superiority," if it has occurred, could have been prevented; about future trends; and indeed about the whole range of questions regarding feasible and desirable objectives for strategic forces.

Until recently the most common measure of strategic strength was the number of delivery vehicles possessed by each side, that is, the numbers of bombers and deployed missiles. By this measure the United States has maintained superiority over the Soviet Union for several years—superiority in numbers of intercontinental bombers, in numbers of Polaris-type submarines, and in numbers of ICBM's (or at least ICBM launchers). The measure was not entirely satisfactory, however, in that it did not take into account qualitative differences in the various missile and bomber systems. American bombers and submarines were generally believed to have superior performance capabilities. In addition, some bombers and missiles carried substantially larger payloads than others.

With the beginning of the era of multiple individually targetable reentry vehicles (MIRV's), the measure is even less satisfactory, since some missiles can carry several warheads, while others carry only one. Thus, in the last few years, when discussing the question of force strength, Administration spokesmen have argued that the number of warheads is a more meaningful measure than numbers of missiles and bombers.

Critics of Johnson Administration policy have claimed that the Soviet Union has, or soon may have, greater strategic strength than the United States because its missiles, while fewer in number, could in the aggregate carry more "megatons" since more of their missiles are large.

If any of these measures—number of delivery vehicles, number of warheads, or number of megatons—is to be meaningful, it is necessary to take into account the expected interactions during a nuclear exchange. To do that, survivability and penetrability factors have been introduced. Thus, the Johnson Administration has spoken of the number of warheads that could be delivered on target as the most appropriate measure of strength. But even that is not entirely satisfactory.

To get the ultimate measures, that is, the capability to inflict damage on the adversary and to limit damage to oneself, one must also take into account the match of the weapons with the targets. When this is done, the differences between the Soviet Union and the United States are not significant. Even if there were a preemptive attack by the Soviet Union weighted heavily toward attempting to destroy American strategic offensive capabilities, the United States could with high confidence inflict over 50 per cent fatalities in retaliation. And the situation is symmetric. In former Secretary of Defense McNamara's posture statement for fiscal 1969,[2] it is estimated that in an all-out nuclear exchange in the mid-1970's each country could inflict 120 million fatalities on the other in retaliation. This is probably a lower limit on the actual expected damage, in that indirect and delayed effects of a nuclear attack, such as fatalities from fire storms, maldistribution of resources and fallout are generally not fully considered in making such estimates.

Despite some uncertainty about the absolute levels of damage that each side might experience and about the recuperative ability of such heavily damaged societies, there seems little reason to doubt that in a full-scale nuclear exchange at this time, the United States and the Soviet Union would suffer about equally and grievously. The foundations of society in each country would certainly be destroyed.

In view of the damage-inflicting capabilities of the two sides, the present situation is one of considerable stability. Even, and perhaps particularly, in the event of extreme crisis where attack seemed imminent, there would be a powerful moderating effect on both sides. Preemptive attack would be unlikely, since neither could hope to reduce damage to itself to a degree that would make such an attack seem rational if there were any possibility of avoiding the holocaust.

Yet despite the stability that does exist, there remains concern about instability and the consequences of escalation. Thus, the very existence of strategic forces may also serve to deter or at least inhibit the superpowers from commitments of conventional forces or even political commitments, if there is a significant risk of a superpower confrontation that could lead to uncontrollable escalation.

Conflicts about objectives

There would be little disagreement with the foregoing assessment of the present strategic balance. Yet there is disagreement about the objectives that have been and might be served by our present strategic forces.

First, there is dispute about two closely related issues: whether during the last few years the numerical superiority that the United States has had in strategic forces has conferred on it some advantage in dealing with the Soviet Union; and whether strategic "superiority" would be meaningful in the future. The figures in Table I do indicate a continued large U.S. superiority in numbers of bombers, sea-launched ballistic missiles, and deliverable warheads. For all practical purposes, however, the present situation can be characterized as one of strategic "parity" in the sense that both the U.S.S.R. and the United States can wreak unacceptable damage on each other.

But, in fact, neither "superiority" nor "parity" is at this point a very useful concept, and is not likely to be in the foreseeable future. Even large changes in capabilities could not be translated into useful political power. In the view of many this was already true by the early 1960's. They would hold, for example, that the Cuban missile crisis was resolved as it was because the United States was prepared to intervene with conventional strength that the Soviet Union could not match; and that the existence of strategic forces for both sides served simply to deter escalation. Others argue, however, that it was not just the strategic strength on both sides and the fear of escalation, but rather actual U.S. superiority in strategic strength that served to deter the Soviet Union from moving on Berlin or elsewhere as a response to the "quarantine" of Cuba.

While there may have been a basis for this distinction in the early 1960's, it would be difficult to make such a case under present circumstances. The strategic forces of both sides are too large. Thus, as far as deterrence is concerned, the point has certainly been passed by now where both sides have "sufficiency"—probably a more useful concept for describing the present strategic balance than either "superiority" or "parity."

If the Soviet strategic retaliatory force were either doubled or halved, while that of the United States remained constant, there would very likely be no discernible effect on U.S. resolve to stand up to the Soviet Union in a crisis. Yet many Americans continue to feel that the United States should still strive for "superiority." This feeling is grounded not in the expectation that numerical superiority in strategic strength could be translated with confidence into any politically useful option, but rather in a desire for a return to an earlier era when it seemed that the wealth of the United States could almost guarantee superiority in any contest the country chose to enter. During the last decade the United States has become aware that it cannot count on wealth or industrial capacity to provide it with the kind of superiority in exploitable strategic strength that it had vis-a-vis the U.S.S.R. in the 1950's; nor does it solve other problems such as Vietnam and the cities. This has been a disillusioning and frustrating experience, and it is not surprising that many Americans should wistfully seek to recapture the past and look for scapegoats who can be blamed for letting it escape.

Second, despite recognition that both societies would be destroyed by an all-out nuclear exchange, it is argued that American forces should be structured so that we can, in the event of war, "come out a little better than they do."[3] Or, as Senator Richard Russell put it, "If we have to start over again with another Adam and Eve, then I want them to be Americans and not Russians—I want them on this continent and not in Europe."[4] Whatever their reaction to Senator Russell's apocalyptic remark, most Americans would probably agree that the the first quotation expresses a desirable objective. But many believe it could only be pursued at the expense of an increase in the absolute level of damage to the United States or in the risk of war, or both, and doubt whether it is worth the price.

Third, there exists a difference of opinion regarding the extent to which the United States can or should rely on the possibility of escalation as a deterrent to actions by the Soviet Union other than direct attack against the United States. This controversial point has been one of the critical considerations in NATO policy during the last few years (others being the closely related question of the relative capabilities of NATO and Warsaw Pact forces to fight a conventional war and the question of Soviet intent).

Finally, there is dispute about whether strategic weapons could serve as a deterrent or a response to Soviet or other nonnuclear attacks of limited objectives. The possibilities seem unrealistic or remote. As far as the Soviet Union is concerned, the risks of escalation are too large. As regards other adversaries, including Communist China, it is difficult to imagine a realistic provocation that could not be dealt with by other means, and to which a limited strategic nuclear attack would be judged an appropriate response. (The problems of objectives will continue to be serious ones as the United States develops policies and postures for the 1970's. They are discussed further below.)

That there is as much consensus in the United States as there is, both about the consequences of a nuclear exchange and about the present roles and limitations of strategic forces, is in part due to the fact that the Soviet-American strategic balance has not changed qualitatively in several years. Although the budgets submitted for strategic weapons have increased dramatically—some 40 per cent from the fiscal 1967 budget to that for fiscal 1969—because of the time lag between the obligation of money and the impact on operational capabilities, the present U.S. posture does not yet reflect this recent escalation in strategic budgets. In fact, the present operational force is probably changing less rapidly than at any time since 1945—a reflection of the low strategic budgets of fiscal 1965 through 1967. Thus, there has been time for argument, and at least some resolution of differences and maturation of opinion about the present situation, if not about future prospects and objectives.

But unless the United States modifies its present plans, its posture will soon begin to change qualitatively and rapidly as its operational forces begin to reflect decisions made during the last two years regarding such new systems as Sentinel, Poseidon, Minuteman III, and the FB-111 bomber. Soviet operational forces, in addition to growing rapidly, may also change in new qualitative ways if the U.S.S.R. deploys some systems it apparently has in development, such as frac-

Footnotes at end of article.

tional orbital bombardment systems (FOBS) and land-mobile ICBM's.

We are in effect at a crossroad. The United States and the Soviet Union now have a better chance than they are likely to have in the foreseeable future to make decisions that may enable them to avoid or at least moderate another spiral in the strategic arms race. Such a race will not only be expensive and dangerous for both countries, but may also produce more disagreement in the United States about realistic and desirable strategic force objectives.

II. FACTORS AFFECTING STRAGETIC DECISIONS

During the early 1960's there was hope, albeit without real encouragement from the Soviet Union, that even if one could not see an end to the Soviet-American competition in the strategic area, there might at least be a period of stability commencing in the late 1960's and carrying on into the 1970's—a perpetuation of the kind of qualitative balance that actually obtains today. This would imply the willingness of each side to rely on the capability of its strategic forces to deter any attack by the other, and an acceptance of the fact that with "sufficiency" in strategic offensive forces, little would be gained either by further growth in those forces or by deploying active defenses against them. Three considerations now make the realization of that hope questionable.

First, there is no evidence of a levelling off in the growth of Soviet strategic offensive capabilities, despite the fact that, at least as regards ICBM's, the Soviet force is now about equal in numbers to that of the United States.

Second, the development of some sort of nuclear capability is becoming easier for the lesser powers as the technology and the use of nuclear power become more widespread. Of particular concern is the fact that the Chinese nuclear program has moved ahead more rapidly than expected at the beginning of the decade.

Third, technological developments have led some to believe that there may be an increased possibility that in the event of a nuclear exchange, the superpowers might be able to limit damage to themselves to levels substantially below those that would result with present capabilities. Implied here is the belief that preemptive attack, the use of active defenses, or a combination of the two might be highly effective in destroying adversary defensive forces.

The chances of continuing the present stable situation into the 1970's may be enhanced if some restraint can soon be placed on these developments. It may be possible to buy time through the implementation of the nuclear non-proliferation treaty, and by reaching agreement with the Soviet Union to constrain the deployment, and possibly the development, of new strategic offensive and defensive capabilities. Realistically, however, it must be recognized that, even if implemented, such agreements may not suffice. For example, the fact that Communist China will not be a party is a serious defect.

On the other hand, it is probable that without such agreements, or at least reciprocal unilateral restraint, a new spiral in the arms race will be one of the burdens of the 1970's. In the United States the beginnings are already reflected in the sharp rise in the budget for strategic systems.

*The Anti-Ballistic Missile Defense Possibility**

With the possible exception of the nth country problem, it has long seemed that the most serious threat to stability is the possibility of an offense-defense race: deployment of ABM systems; followed by compensating or over-compensating expansion of adversary offensive capabilities; followed in turn by further improvements in defenses, and so on. In the United States the prevalent view has been that such a cycle of action and reaction would be a futile exercise leading to no improvement in either American or Soviet security and to greatly increased expenditures for both nations. This conclusion, which contributed to the refusal of the U.S. Administrations of the last decade to deploy an anti-Soviet ABM system, was based on two considerations:

(1) no technology appeared in sight that would permit deployment of a defense that could not be offset by less expensive improvements in adversary capabilities;

(2) the Soviet Union would, it was believed, react to any U.S. defensive deployment by making just such improvements in its offensive capabilities.

On the first point there has been little dispute, certainly little in the American technical community. The second is more contentious. It has been argued by ABM proponents that one cannot be sure the Soviets would react to a U.S. defensive deployment as former Defense Secretary McNamara and others have postulated they would. Although they might continue to expand their offensive capabilities, it is conceivable that this would not compensate fully for the effects of a U.S. active defense.

On the Soviet side, there was no evidence during the early 1960's that decision-makers were prepared to accept the prevailing American views about the action-reaction phenomenon, or about the intrinsic advantage of the offense and the futility of defensive deployment.

Within the last few years there have been changes that might indicate some convergence of Soviet and American views. It has been noted that the Soviet ABM program is not proceeding as rapidly as the Americans had expected. Indeed, there is no evidence of deployment of any system other than that around Moscow. This, plus the professed Soviet willingness to enter into negotiations to control both offensive and defensive systems, may be indicative of some disillusionment regarding the feasibility of deploying really effective defense systems; of concern about the very large costs; or of concern about the action-reaction arms race implications of ABM deployment.

On the U.S. side there has been increased interest in ABM defense, in part triggered by concern about the more rapid than expected development of nuclear capabilities by Communist China, but also based on a somewhat changed view regarding the technical problems and possibilities of defense.

Although most of the American technical community would agree that the offense continues to have an advantage over the defense, there is an enormous range of views held by experts regarding the difficulties of penetrating defenses. In recent months this has been brought out especially in discussions about the probable effectiveness of a defense (Sentinel) to cope with a possible Chinese offensive threat (see Appendix). At one extreme, Richard Garwin and Hans Bethe have argued that overcoming a defense such as Sentinel would be relatively easy, and that even the Chinese could, and quite likely would, incorporate in their first generation of ICBM's the necessary penetration aids to enable them to do so.[5] At the other end of the spectrum, Johnson Administration spokesmen have maintained that it is within U.S. capability, at a cost of only $3 billion to $5 billion, to limit damage to the United States from a Chinese ICBM attack in the 1970's to a very low level.

The most extreme claims have been made by John Foster, the Pentagon's Director of Defense Research and Engineering—"I have reasonably high confidence that the Sentinel system, when first deployed, will provide damage *denial* against the Communist Chinese"[6]—and by Deputy Secretary of Defense Paul Nitze who stated, "We are confident that this sophisticated defense can provide us with high assurance of denying damage to the United States from the type of attack the CPR [Chinese People's Republic] will be able to launch in the mid-70's. With further foreseeable improvements we believe we can maintain such protection at least until the 1980's."[7]

The difference in judgment regarding the effectiveness of Sentinel is in part due to a difference in opinion about Chinese capabilities; but beyond that, there is a great range of opinion in the technical community regarding how well Sentinel would be expected to perform against Communist China or the Soviet Union. Some skeptics argue that the defense may fail catastrophically, considering its great complexity and the fact that it will never be possible to test the system adequately in peacetime.

MIRV's

One of the few comforting things about the present strategic balance was noted earlier: even if a nuclear holocaust seemed imminent, there would be little incentive for either of the superpowers to initiate a preemptive counterforce attack, because their strategic forces, particularly those of the United States, have been developed and deployed so that they can "ride out" an attack against them. The U.S. bomber force is in a sufficient state of alert so that, given the warning of missile attack which one can reasonably expect, a large fraction could be airborne before the arrival of Soviet missiles. The part of the Polaris force that is at sea—and it is the larger part—is believed to be almost invulnerable, considering present Soviet anti-submarine warfare capabilities. And American ICBM's have been deployed with sufficient spacing between them, so that it is unlikely that more than one could be destroyed by a single Soviet warhead. Furthermore, the underground silos are believed to provide considerable protection against the blast effects of a nuclear explosion. Consequently, given the combination of yield and accuracy which, it is believed, characterize the present Soviet ICBM force, several Soviet missiles would be required on the average to destroy a single Minuteman or Titan.

The most serious threat to the present stability is the possibility of the development of systems for delivering several warheads from a single booster, each against a separate target, all with greater accuracies than have been realized so far. Such multiple individually targetable reentry vehicles (MIRV's) now appear technically feasible, and the United States has announced its intention to equip both some of its land-based missiles (Minuteman III) and its sea-based missiles (Poseidon) with such reentry vehicles. This raises the at least theoretical possibility that with a preemptive attack the United States could destroy all of the Soviet fixed missiles, and other targets as well, with an American missile force smaller than the force it was attacking. Conversely, the Soviets could in principle destroy the American Minuteman and Titan force with a few hundred ICBM's, if each had several warheads that could be delivered with high accuracy.

The MIRV threat is not an immediate one to either side. It will take a major effort to develop the concept and the accuracies required for an effective counterforce capability. But there is no doubt that it is technically feasible. It is just a matter of time, engineering effort, and money—probably lots of all three.

The American decision to go ahead with the Minuteman III and Poseidon programs was taken only partly because of desire to have a greater "damage-limiting" capability

*Unless otherwise specified, references to ABM are to systems designed exclusively or primarily to defend population and industry. For further discussion of the ABM problem, see Appendix.

Footnotes at end of article.

than would otherwise be available in a missile force with a fixed number of launchers. The decision to procure systems employing MIRV's was specifically keyed to concern about Soviet ABM developments,[8] and to the view that the United States must have a capability with a high degree of assurance of inflicting some specified level of damage on the Soviet Union. A number of other options could have been relied on as the prime means of defeating a possible Soviet ABM defense, for example, precursor nuclear bursts to produce radar blackout; electronic jamming; decoys and chaff; saturation of radar discrimination capability; targeting of ABM radars; or combinations of these. Certainly, with a heavy emphasis on such penetration techniques, there would be a high probability of getting through any defenses. Such options do not offer quite the assurance of success that exhaustion through the use of MIRV's might offer (assuming that the number of adversary interceptor missiles is known). But neither is any of these other measures, or combinations of them, quite so likely to produce an expansion in Soviet offensive forces, for they do not pose a threat to those forces. MIRV's must pose such a threat in Soviet eyes, just as Soviet MIRV's would to the United States.

In its attachment to "assured destruction" as a measure of deterrent adequacy, and in focusing on MIRV's to maintain it, the United States may end up paying a price that in the long term could be a heavy one. Such high assurance was not always an American requirement. In the pre-missile era there was considerable uncertainty, probably more than many liked to admit, about how well bombers could penetrate defenses. The United States had an adequate deterrent because there was a reasonably high probability that it could inflict a very high level of damage on the Soviet Union. It may be that with the uncertainties that ABM defenses will introduce, the United States will want or be forced to rely again on a reasonably high probability, rather than on near certainty, of being able to inflict a high level of damage on our adversaries as a deterrent. This will be particularly true if in striving for near certainty, the arms race is fueled in ways that may result in a net diminution of United States security. The "assured destruction" concept probably served to limit expansion of American strategic forces in the past few years. But in the years just ahead, as the uncertainties now implicit in ABM's and MIRV's become explicit, this concept could be used to justify almost unlimited expansion of strategic forces.

There are, of course, possible threats to strategic relatiatory forces besides MIRV's and ABM's. But none of the others seems quite as serious. The development of fractional orbital bombardment systems (FOBS) could enhance Soviet capability to attack American aircraft on the ground by surprise. But that development is being countered by improved warning systems. Advances in antisubmarine warfare (ASW) could lead to some increase in the vulnerability of the Polaris fleet if the United States did nothing to counter the development. But ASW is likely to be a losing game for some time, since any improvements will be offset, or more than offset, by improvements in the missile-launching submarines or, if need be, by extension of the range of the missiles they carry.

Concurrent development of MIRV and ABM

While the possibility of either ABM or MIRV development provides a stimulus to the arms race, in their combination there is a more serious threat. It is conceivable that one of the superpowers, with an ABM system, might develop MIRV's to the point where it could use them to destroy the bulk of its adversary's ICBM force in a preemptive attack. Its air and ABM defenses would then have to deal with a much degraded retaliatory blow, consisting only of the sea-launched forces and any ICBM's and aircraft that might have survived the preemptive attack. Problems of defense in such a contingency would be formidable; however, they would be significantly less difficult than if the adversary's ICBM force had not been seriously depleted. The defense problem would be relatively simple, particularly if the bulk of the adversary's retaliatory capability were, as is true for the United States and to a far greater degree for the Soviet Union, in its ICBM's, most of which would presumably have been destroyed.

It may seem unlikely that either superpower would initiate such a preemptive attack, in view of the hypothesized capabilities, the great uncertainties in effectiveness, particularly as regards defenses, and the disastrous consequences, should even a relatively small fraction of the adversary's retaliatory force get through. But with both MIRV's and ABM's such a preemptive attack would not seem as unlikely as it does now. It would not necessarily be irrational if an uncontrollable nuclear exchange appeared almost certain and if by striking first one could limit damage to a significantly lower level than if the adversary were to strike the first blow. (This point is discussed further below.) In short, if one or both of the two superpowers had such capabilities, the world would be a much more unstable place than it is now.

Obviously, neither superpower would permit its adversary to develop such capabilities without responding, if it could, by strengthening its retaliatory forces. But the response problem becomes more difficult if the adversary develops both MIRV's and ABM's than if he develops only one.

Against a MIRV threat alone there are such obvious responses as greater reliance on sea-launched or other mobile systems. Such responses are likely to be acceptable because, while the costs of highly survivable systems are large (perhaps larger by an order of magnitude than the costs of simple ICBM's), only relatively small numbers of such secure retaliatory weapons would be required to provide an adequate "assured destruction capability." Indeed, a force the size of the present Polaris fleet might be adequate.

The response to ABM alone might also be kept within acceptable limits because the expenditures required to offset the effects of defense are, as indicated earlier, likely to be small compared to the costs of the defense.

But if it is necessary to acquire retaliatory capabilities, which are costly on a unit basis because of the MIRV threat, in sufficient numbers to saturate or exhaust ABM defenses, the total cost could be very great. Indeed, if one continued to rely heavily on exhaustion of defenses as the preferred technique for penetration, the offense might no longer have a significant cost-effectiveness advantage over the defense.

Thus, the concurrent development of MIRV's and ABM's raises the specter of a more precarious balance of terror a few years hence, a rapidly escalating arms race in an attempt to prevent the instabilities from getting out of hand, or quite possibly both.

Communist China and the Sentinel decision

It is difficult to grasp the implications of new technological factors for a rational strategic force policy for the 1970's. This would be so even if one had only bilateral U.S.-U.S.S.R. relationships to consider, but the emergence of China and possibly other States as nuclear powers compounds the difficulties. The problems have begun to come into focus as policy-makers have been forced to ponder:

(1) whether it is desirable to try to inhibit the spread of nuclear capabilities to other countries;

(2) what price the United States might be willing to pay to do so;

(3) what the chances of success of inhibiting nuclear spread might be;

(4) what the response should be to developments that the United States cannot prevent.

The first three questions have been at the heart of the debate on such issues as the NATO multilateral force (MLF), U.S. policy regarding control of fissionable materials and technology relevant to nuclear weapons development, and the nuclear non-proliferation treaty.

The first question—whether it is desirable to inhibit the spread of nuclear weapons—has been answered in the affirmative, at least by the United States and most other countries. The United States has not only decided that the spread is undesirable, but has also applied fairly stringent controls on its exports of nuclear fuel and equipment, despite some political and economic costs. And, in agreeing on a formulation of the non-proliferation treaty acceptable to the Soviet Union, the United States has incurred criticism, whether justified or not, from some quarters in Europe.

Nevertheless, the prospects for limiting the spread of nuclear weapons capabilities are not good. The technology for building both warheads and delivery systems is now within the reach of perhaps a dozen powers that do not have nuclear weapons; and with the growing use of nuclear reactors, an even larger number of nations will soon have quantities of plutonium adequate for limited stockpiles of nuclear weapons. The development of capabilities that would be significant against one of the superpowers could be an expensive proposition, particularly if one of them deployed limited ABM defense systems and if the emergent nuclear power desired high confidence of penetrating that defense. But nuclear capabilities that Israel might consider adequate against the Arab states, or India against Pakistan, could be acquired at costs that are not large compared to the present defense budgets of those nations.

There is some hope that these developments can be prevented or at least delayed by the nuclear non-proliferation treaty. But even if that treaty comes into effect, accession by India, for one, appears unlikely. In any case there is the particularly worrisome problem of China.

Whether our strategic offensive forces would alone be adequate to deter a Chinese nuclear attack requires judgments about the vulnerability of China and the rationality of its leadership.

Because a relatively small fraction of it is urban, China's population is far less vulnerable than that of the United States or the Soviet Union to nuclear attack (except to an attack with large yield weapons relying heavily on fall-out). However, China's modern industry is heavily concentrated and could be destroyed with a small number of nuclear weapons. These could be delivered without significantly compromising American capabilities against the U.S.S.R. This is true not only because U.S. strategic offensive capabilities are so large relative to actual requirements for retaliation against either country, but also because Chinese air defenses are so poor that the United States could use bombers with great flexibility, and with only moderate losses, to deliver an attack of almost any weight against China.

Thus, the only impediment to relying on strategic offensive capabilities as a deterrent to Chinese nuclear attack is possible irrationality of the Chinese leadership. On this point there is an extraordinary divergence of opinion. Some, for example, Air Force Chief of Staff General J. P. McConnell, argue that the Chinese are highly irrational,[9] but the record hardly suggests that. On the contrary, despite a notorious record of vituperation, the Chinese have been rather careful

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in the actual use of force, particularly when there was any likelihood of open conflict with the United States or the Soviet Union.

However, one does not have to subscribe to the McConnell view to admit the possibility of Chinese nuclear attack, particularly in response to great provocation. As long as there is any possibility, possession by China of an intercontinental nuclear capability will serve to some degree as an effective deterrent to large-scale U.S. actions against China. This is particularly true considering that the interests in the Far East over which the United States and China might come into conflict are not likely to be vital to the Americans, and the damage the United States might suffer, should the Chinese retaliate, could be very great.

Indeed, the desire to have a deterrent with regard to the United States may well have been one of the major motivations for the extraordinary effort China has made to develop a nuclear weapons capability. (Other reasons are prestige, and possible use to coerce its neighbors in Asia.)

Recognizing that a Chinese nuclear attack, however irrational, could not be discounted completely, the United States made the decision to deploy Sentinel. But one must wonder about its effectiveness in coping with China's nuclear capablity. The Johnson Administration made it clear that Sentinel was to be bought largely because of its anticipated effectiveness in reducing damage to the United States in the event of a Chinese ICBM attack in the 1970's.[10] This is an objective it may well accomplish. Will it have any other value? It will hardly diminish the prestige that China has acquired through possession of a nuclear capability; on the contrary, the decision to deploy Sentinel will tend to magnify the importance of the Chinese achievement. And Sentinel is hardly a direct response to the possibility that China might threaten its neighbors with nuclear attack, although it was claimed by the Johnson Administration that Sentinel would reinforce confidence in Asian states that the United States would come to their aid if they were threatened by China.[11]

Sentinel could conceivably do that by restoring whatever freedom of action the United States might have felt it had to intervene in Asia before the Chinese acquisition of an intercontinental nuclear capability, but only if there was extraordinarily high confidence in the system's effectiveness; otherwise, the Chinese nuclear capability would still be able to serve what may have been its primary purpose—deterrence of the United States. Can one have that high confidence? Probably not, considering the many uncertainties involved in the effectiveness of ABM systems (see Appendix). (This argument seems sound to the extent that one is concerned about most kinds of action one might take against China. In a contingency where the United States would be prepared to use nuclear weapons in the numbers required for an effective attack against Chinese ICBM capabilities, it might have some confidence that Sentinel could actually intercept whatever, if any, Chinese ICBM's had survived an American preemptive attack. That is the one option that might be significantly more acceptable if the United States had Sentinel than if it did not.) But that is only one side of the coin. The other in some ways more worrisome possibility is that the United States might base vital decisions on misplaced confidence in Sentinel.

Another aspect of the decision to deploy Sentinel is its possible impact on the Soviet-American strategic relationship. In short, it would appear that the Sentinel decision has very serious implications. The issue is whether the possible utility of Sentinel in saving lives in the unlikely event of a Chinese nuclear attack is sufficient to justify the costs, the risks that the United States might act on the basis of misplaced confidence in its effectiveness, and the undesirable impact of the decision on the Soviet-American strategic balance. Any conceivable flexibility Sentinel may give in dealing with Chinese aggressiveness or with the accidental launch of missiles against the United States is probably negligible compared to these considerations.

The role of uncertainty in the dynamics of the arms race

As the foregoing discussion indicates, uncertainty about adversary intentions and capabilities may well be the most powerful stimulant of the arms race. Its pernicious effects can be illustrated by several examples:

(1) American reaction, indeed over-reaction, to uncertainty in the case of the "missile gap";

(2) the Soviet decision to deploy the so-called Tallinn air defense system, possibly made in the expectation that the United States would go ahead with deployment of B–70 bombers or SR–71 strike reconnaissance aircraft;

(3) the Sentinel decision.

An even better illustration is the United States response to the Tallinn system (which until recently was thought to be an ABM system) and to the possible extension of the Moscow ABM system into a country-wide system. In order to have high assurance of its ability to get through possible Soviet ABM defenses, the United States has embarked on the development of various penetration aids and even of new missiles—Minuteman III and Poseidon.

All these examples have in common the fact that if doubt exists about adversary capabilities or intentions, prudence requires that one respond, not on the basis of what one expects, but on a considerably more pessimistic projection. The United States generally bases its plans—and makes much of the fact—on what has become known as the "greater-than-expected threat." In so doing, the Americans—and presumably the Russians—have often over-reacted. The extent of the over-reaction is directly dependent on the degree of uncertainty about adversary intentions and capabilities.

The problem is compounded by lead-time requirements for response. According to the Johnson Administration, the decisions to go ahead with Minuteman III, Poseidon, and Sentinel had to be made when they were because of the possibility that in the mid-1970's the Soviets might have a reasonably effective ABM, and the Chinese an ICBM, capability.[12] And the Soviets had to make a decision to develop the Tallinn system (if the decision was made because of the B–70 program), long before the American themselves knew whether they would deploy an operational B–70 force.

Once the decisions to respond to ambiguous indications of adversary activity were made, it proved impossible to modify the response, even when new intelligence became available. For example, between the time of announcement of the Sentinel decision and the Congressional debate on the appropriation for it, evidence became available that the Chinese threat was not developing as rapidly as had been feared. Yet despite this information, those in the Congress who attempted to defer the appropriation for Sentinel failed. Similarly, at this writing, as the Poseidon and Minuteman III programs begin to move forward with momentum, it seems much less likely than it did at the time of their conception that the Soviet Union will deploy the kind of ABM system that was the Johnson Administration's main rationale for these programs. On the Soviet side, the Tallinn deployment continued long after it became clear that no operational B–70 force would ever be built.

Of the kinds of weapons development that can stimulate over-response on the part of one's adversary, it is hard to imagine one more troublesome than anti-ballistic missile defenses. Besides uncertainty about adversary intentions, and the need, because of lead-time requirements, for early response to what the adversary might do, there is the added fact that the uncertainties about how well an ABM system might perform are far larger than in the case of strategic offensive systems. The conservative defense planner will design his ABM system on the assumption that it may not work as well as he hopes—that is, he will over-design it to take into account as fully as he can all imaginable modes of failure and enemy offensive threats. But the offensive planner will assume that the defense might perform much better than he expects and will over-design his response. Thus, there is over-reaction on both sides. These uncertainties result in a divergent process: an arms race with no apparent limits other than financial, each round more expensive than the last. Also, because of over-reaction on the part of the offense, there may be an increase in the ability of each side to inflict damage on the other.

All one needs to make this depressing possibility a bleak reality is a triggering mechanism. The Soviet ABM program, by stimulating the Minuteman III and Poseidon programs, may have served that purpose. And, perhaps unintentionally, the Chinese nuclear program also may have triggered an action-reaction chain, of which the Sentinel response is the second link.

It can be assumed that there will be considerable pressure and effort to make Sentinel highly effective against a "greater-than-expected" Chinese threat. But such a system will undoubtedly have some capability against Soviet ICBM's. Soviet decision-makers, who must assume that Sentinel might perform better than they expect, will at least have to consider this possibility as they plan their offensive capabilities. More important, they will have to respond on the assumption that the Sentinel decision may foreshadow a decision to build an anti-Soviet ABM system. Although the Johnson Administration has argued that there need be no such response (Assistant Secretary of Defense Paul Warnke has argued that "because our proposed deployment poses no possible threat to the Soviet deterrent, it need lead to no acceleration of the Soviet-American strategic arms race."[14] And former Secretary of Defense McNamara has stated, "There will not be any misunderstanding by the Russians because they are sophisticated enough to see, in the development plans that will be made public, the distinction between Chinese-oriented and Soviet-oriented population protection systems"[15]) several facts seem to contradict this:

(1) there has been support for the Sentinel decision as a first step toward an anti-Soviet ABM deployment, particularly by the Joint Chiefs of Staff and such influential Senators as Richard Russell of Georgia. (General Earle Wheeler, Chairman of the Joint Chiefs of Staff, stated that he was satisfied with the Sentinel decision because "everything is being done that will contribute to the type of defense which the Joint Chiefs have been advocating [i.e., a full-scale ABM]."[16] He and General Harold K. Johnson also alluded to the possible expansion of Sentinel to a Nike X (i.e., anti-Soviet) type system.[17] Senator Russell has stated "I consider it [Sentinel] primarily the beginning of a system to protect the people of this country against a Soviet missile atomic attack."[18])

(2) Secretary of Defense Clark Clifford has acknowledged that Sentinel will complicate the Soviet attack problem;[19] (This is also apparent from former Secretary of Defense McNamara's last posture statement, which included an estimate that, should the Soviets fail to respond to the Sentinel deployment by providing penetration aids for their missiles, U.S. fatalities would be reduced

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from 120 million to about 100 million in the event of an all-out war in the mid-1970's.[19])

(3) Sentinel will include components that could easily be integrated into an anti-Soviet system;

(4) Because of the Sentinel program, production lines will have been established that will shorten the leadtime for an anti-Soviet ABM deployment.

Thus, it is probably not a question of whether the Soviet Union will respond to Sentinel. One must consider instead whether the U.S.S.R. will limit its response to one that does not require a U.S. counter-response, and whether it is too late to stop the Sentinel deployment.

With such examples in mind, it is apparent that reduction in uncertainty about adversary intentions and capabilities is a *sine qua non* to curtailing the strategic arms race. There are a number of ways of accomplishing this (in addition to intelligence collection, which obviously makes a great contribution).

First, there is unilateral disclosure. In the case of the United States there has been a conscious effort to inform both the American public and the Soviet leadership of the rationale for many American decisions regarding strategic systems and, to the extent consistent with security, of U.S. capabilities. This has been done particularly through the release by the Secretary of Defense of an annual posture statement—a practice which, it is hoped, will be continued by the United States and emulated some day by the Soviet Union. This would be in the interest of both countries. Because there has been no corresponding effort by the Russians, the United States probably over-reacts to Soviet decisions more than they do to American decisions. (At least, it is easier to trace a casual relationship between Russian decisions and U.S. reactions than vice versa.)

Second, negotiations to curtail the arms race, even if abortive, or any other dialogue may be very useful if such efforts result in any reduction of uncertainty about the policies, capabilities, or intentions of the parties.

Finally, some weapons systems may be less productive of uncertainty than others that might be chosen instead. For example, it is likely to be less difficult to measure the size of a force of submarine-launched or fixed missiles than that of a land-mobile force. Similarly, it would be easier to persuade an adversary that a small missile carried only a single warhead than would be the case with a large vehicle. Such considerations must be borne in mind in evaluating alternative weapons systems.

In short, while uncertainty about adversary capabilities and intentions may not always be bad—in some cases, the existence of uncertainty contributes to deterrence—the U.S. and the Soviet Union would seem well advised to make great efforts to avoid giving each other cause to over-react to decisions because of inadequate understanding of their meaning.

Economic considerations

It has been pointed out that in terms of total obligational authority, the annual American budget for strategic forces has risen about 40 per cent in the last three years: from some $6.7 billion for fiscal 1966 to $9.6 billion for fiscal 1969. A major part of this increase arises from the three new strategic programs—Poseidon, Minuteman III, and Sentinel. The estimated total cost of the three amounts to about $10 billion over several years.

If no other new strategic programs are begun before these are completed, it might be possible to get through the next few years without the budget for strategic forces growing much beyond that proposed for fiscal 1969. However, that seems unlikely. Aside from the probability that the actual costs of the aforementioned programs will exceed the estimates, other developments are in sight.

Johnson Administration spokesmen have made it clear that Sentinel will have to be upgraded to take into account improvements in Chinese capabilities. This could be very costly since it would probably require the addition of terminal defenses for cities and a comprehensive fall-out shelter program. Thus, upgrading Sentinel could easily cost an additional $1 billion to $3 billion per year starting in the early 1970's, with costs increasing rapidly thereafter.

Second, there is the possibility of expanding the Sentinel system into a full-scale anti-Soviet ABM system. In that case the costs would probably be at least $5 billion a year shortly after the expansion began.

Third, there is a proposal to develop an improved air defense system involving an airborne warning and control system (AWACS) with a ten-year cost of $10 billion to $12 billion.

Fourth, there is pressure for a new advanced manned strategic aircraft (AMSA) to replace the B-52's, a program that may cost $10 billion spread over several years.

Finally, there is a possibility, already under consideration, of new U.S. strategic missile programs. The possible vulnerability of American strategic forces to a Soviet MIRV threat would provide one impetus for such programs. A massive Soviet ABM program would be another. The character and magnitude of the American response would depend on which of these Soviet developments was of concern to the United States. If both were, the U.S. response could well cost $3 billion to $5 billion per year.

Thus, if one considers only the programs now under way and under serious consideration, during the early 1970's, the U.S. can expect annual budgets for strategic forces of between $12 billion and $25 billion. By the late 1970's, costs could be even higher.

The impact of these high levels of expenditure, particularly over a long period of time, on economic growth and on the ability to meet other demands of society, cannot be dismissed lightly. If one makes the assumption that the United States could otherwise maintain a high level of unemployment, the social costs of allocating 2 per cent of GNP in the early part of the next decade to a strategic weapons program, and possibly a larger fraction during the latter half, are glaring. On the other hand, if the American economy would otherwise be operating with substantial unemployment, the effect might be relatively small, even at a level of $25 billion per year. Even then, however, a large fraction of the country's advanced engineering talent would be committed to endeavors that produce little spin-off relevant to major social problems. If full employment is achieved as a consequence of large military programs, short-term economic problems may be avoided. However, in so doing, the country is denied the long-term benefits of investing the same resources in its capital plant, in education, and in the other foundations on which society is built.

The direct costs inherent in high levels of defense expenditure are not the only drawbacks. Military programs and the fortunes and influence of the military-industrial complex, of which President Eisenhower spoke in his farewell address, are dependent on the maintenance of conflict or at least on a high level of international tension. It would be a mistake to claim that armaments are the sole, or even the primary, cause of such tensions. But it would also be wrong to deny that armaments cause tensions—witness the Cuban missile crisis. In a very real sense the arms race feeds on itself with adverse effects on international relations.

In this connection the impact of an expensive arms race on Soviet society should also be of concern. Some Johnson Administration witnesses have testified that they are not particularly unhappy about the prospect of Soviet expenditures on defenses. Therefore, they argue for AMSA on the grounds that it would divert to air defenses Soviet resources that would otherwise be available for improving Soviet offensive capabilities, which would cause more concern.[20] This argument is open to serious question. In the Soviet Union, probably to an even greater degree than in the United States, demands for new weapons systems, whether defensive or offensive, will almost certainly be met largely at the expense of the civil economy. And there is little basis for doubting the capacity of the Soviet economy to meet these demands.

It would be a mistake to believe that by spending enough on arms the U.S. can force the Soviet Union to accept second class status simply because of its smaller economic and industrial capacity. Long before that point is reached America's own growth will have been stunted and its society badly distorted by the military demands placed on it.

The effect of the arms race on Soviet decision-making must also be considered. A rapid growth rate and increased consumption and consumer influence in the Soviet Union are almost certainly in the long-term U.S. interest. Conversely, the greater the Soviet defense budget, the stronger will be the hand and the longer the tenure of those elements in Moscow most inimical to the United States.

Thus, increased allocation of Soviet resources to the arms race is triply disadvantageous: in increasing the threat to the United States; in requiring that the country devote its own resources to responding; and in delaying changes in Soviet society which are the long-term hope for a more stable, peaceful world.

III. OPTIONS FOR THE SEVENTIES

Looking to the future, the United States is confronted with two broad dilemmas: that of minimizing the likelihood of escalation while relying on it as a deterrent; and that of reconciling the desire to minimize damages to the U.S. in the event of war with the desire to escape the adverse consequences that may flow from developing damage-limiting capabilities.

The first seems the easier to deal with. Escalation to an all-out nuclear war is properly seen as such a disaster that extraordinary efforts seem justified in order to minimize this risk. Yet American interests have sometimes been served by the possibility of escalation, because it deterred the superpowers from involvement in political or military confrontations.

Relying on escalation is the cheap defense for Western Europe and particularly for Berlin. But unless damage that the Soviet Union can inflict on the United States can be limited to low levels—which seems unlikely—it is an extremely risky option. Relying on the threat of escalation may lack credibility, and if it is put to the test the United States loses either way, whether escalation results or whether it does not.

It is within the power of the United States to increase the likelihood of escalation and hence its credibility as a deterrent. This has happened as a result of American deployment of large numbers of tactical nuclear weapons and delivery systems in Europe. The original build-up of those capabilities was based, in part, on the expectation that they could be used in tactical combat to effect a favorable outcome for the West without necessarily leading to a strategic nuclear exchange between the superpowers. For the last decade, however, this possibility has been discounted. Today, one of the major effects of these tactical nuclear weapons is to create something approaching a continuum in the scale of violence between conventional combat on the one hand, and a full-scale thermonuclear exchange on the other. Thus, the transition from the one to the other is

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made more probable, and the credibility of the deterrent thereby enhanced. (The additional role they serve, or at least the rationale for their deployment, is to buttress the confidence of some of the Western allies in the American commitment to their defense.)

There are other possible mechanisms for making escalation more likely. British and French possession of nuclear capabilities may serve that purpose, as would further proliferation of nuclear weapons capabilities or relaxation of American control over U.S. nuclear weapons in Europe.

When one looks beyond Europe, it is occasionally argued that strategic forces may be of value in compelling non-nuclear or weaker nuclear powers to behave as the United States would like. At best, this concept is of limited utility. Against nuclear powers it would be useful only if the United States had something approaching a damage-denial capability against the country in question. Against nuclear and non-nuclear powers it would be useful only if the risks of uncontrollable escalation were practically non-existent. In fact, nuclear strength has repeatedly proven irrelevant to problems that have arisen on the periphery of Asia and Africa.

The hard reality is that the United States cannot minimize the probability of escalation while attempting to rely on it as a mechanism for deterring a broad range of conventional or limited nuclear attacks. Nor can the threat of limited use of strategic nuclear capabilities be relied on as an effective instrument for exerting American political power.

Despite the cost and the opposition from some Western allies, it seems wise to continue to move, as has been done since the days of John Foster Dulles' massive retaliation doctrine, further away from reliance on the likelihood of escalation, and toward increased reliance on conventional strength as a deterrent to conventional threats.

The second policy dilemma—the incompatability of a "damage-limiting" policy with other U.S. objectives—is more difficult to deal with. It has two facets. First, there is the possibility that certain actions taken by the superpowers to reduce damage, should deterrence fail, may lead to an increase in the probability that it will fail, particularly if the adversary should fail to modify his force posture in response to those actions. This point is illustrated in Table II, taken from former Secretary of Defense McNamara's posture statement for fiscal 1967. This shows that American fatalities (in 1975) would be only about one-third as great in the event of a U.S. first strike as in the case of a Soviet first strike, assuming a greatly expanded threat, extensive damage-limiting efforts by the United States, and failure of the Soviet Union to react to U.S. damage-limiting efforts by improving its retaliatory capabilities. Obviously, if war seemed imminent, with the strategic balance as hypothesized in the Table, there would be tremendous pressure on the United States to strike first. There would be corresponding pressure on the Soviet Union to do likewise if a Soviet first strike could result, not only in a much higher level of damage to the United States, but also in a diminution in damage to the U.S.S.R. And the incentives would be mutually reinforcing.

To minimize the chance of deterrence failure, it seems important for both sides to develop strategic postures such that preemptive attack would have as small an effect as possible on the anticipated outcome of a thermonuclear exchange.

In short, there is an inherent inconsonance in the objectives spelled out in our basic military policy, namely, "to deter aggression at any level and, should deterrence fail, to terminate hostilities in concert with our allies under conditions of relative advantage while limiting damage to the United States and allied interests."[21] Hard choices must be made between attempting to minimize the chance of escalation and attempting to minimize the consequences if it does occur.

Actually, the United States may have only limited freedom of action in trying to achieve the latter objective even if it tries to do so. For example, it is unlikely that the Soviets would passively watch the United States develop the damage-limiting postures hypothesized in Table II; rather they would probably react by modifying their force posture so that the advantage to the United States of attacking preemptively would be less than indicated in the Table.

This is the second facet of the dilemma: to what extent will any measure to limit damage to the United States in the event of a nuclear war stimulate a compensating or over-compensating reaction in the structuring of Soviet forces? This is especially troublesome, for while the United States generally reacts by anticipating possible Soviet moves, one cannot be sure of the extent to which the Soviets do likewise.

TABLE II.—DAMAGE TO THE UNITED STATES ASSUMING MAJOR DAMAGE-LIMITING EFFORTS

	Soviet damage potential in terms of millions of U.S. fatalities [1]	
	Soviet first strike	United States first strike
U.S.S.R. threat I: [2]		
U.S. DL posture A	80–95	25–40
U.S. DL posture B	50–80	20–30
U.S.S.R. threat II:		
U.S. DL posture C	105–110	35–55
U.S. DL posture D	75–100	25–40

[1] Rounded to the nearest 5,000,000.
[2] DL is damage-limiting. Both the Soviet threats and the U.S. damage-limiting postures are hypothetical.

Note: Threat I is basically an extrapolation of current Soviet forces reflecting some future growth in both offensive and defensive forces. Threat II is a major Soviet response to our deployment of a ballistic missile defense. 2 of the 4 U.S. damage-limiting programs, postures A and B, are tailored against threat I; and the other two, C and D, against threat II. Postures B and D include more antiballistic missile defense forces and SAM-D batteries than postures A and C. Postures C and D include more F-12 interceptors than postures A and B.

Source: Department of Defense, Secretary of Defense Robert S. McNamara, "Approach to the Fiscal Year 1967–71"; program and fiscal year 1966–67 budget, in U.S. House of Representatives (89th Cong., 2d sess.), Department of Defense Appropriations for 1967, hearings before a Subcommittee on Appropriations, pt. I (June 1966), pp. 46–47.

Recognizing this uncertainty, many responsible Americans, including senior military officers, assign high priority to capabilities to limit damage to the United States in the event of war. Whether they are right in advocating such capabilities depends upon the extent to which the action-reaction hypothesis applies to the Soviet decision-making process, as well as the impact of such actions on the probability of a failure of deterrence.

The decision taken in recent years with respect to new weapons development and deployment reflect a middle ground philosophy. The United States has generally avoided actions whose primary rationale was to limit damage which the Soviet Union might inflict upon it, and to which the Soviets would probably respond. Thus, the United States has not deployed an anti-Soviet ABM system, and has given air defense low priority.

On the other hand, where there were reasons other than a desire to improve American damage-limiting capability vis-à-vis the Soviet Union, the United States has proceeded with programs despite their probable escalatory effect on the arms race or their effect on first-strike incentives. This was true in the case of MIRV's and Sentinel.

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The United States will face more such decisions. For example, it may appear necessary to change the U.S. strategic offensive posture in order to make American forces less vulnerable to possible Soviet MIRV attack. The nature of these decisions will depend on the importance attached to the action-reaction phenomenon and to the effect of improved counter-force capabilities on the probability of war. Emphasis on these two factors implies discounting options that would increase U.S. counterforce capability against Soviet strategic forces, which in turn might provoke an expansion of Soviet offensive forces. Options requiring long lead-times would also be discounted, since decisions regarding them might have to be taken while there was still uncertainty about whether the Soviet Union was developing MIRV's.

Should more weight be given in the future to developing damage-limiting capabilities? Or should more weight be given to minimizing the probability of a thermonuclear exchange and curtailing the strategic arms race? Again, as in the case of the escalation phenomenon, it is hard to see how one can have it both ways.

Despite some changes in technology, there is little to indicate that the United States could get very far with damage-limiting efforts, considering the determination of the Soviets and the options available to them for denying the attainment of such U.S. capabilities.

The emergence of new nuclear powers, the rapid pace of technological advance, and the other important demands on American resources suggest that a clear first priority should be assigned to moderating the action-reaction cycle. Moving toward greater emphasis on "damage-limitation" would seem justified only if the United States can persuade itself that the Soviets will not react to American moves as the United States would to theirs, and if means can be chosen that will not increase the probability of war.

Negotiations to curtail the arms race

In considering negotiations with the Soviet Union on the strategic arms problem, the first factor to be borne in mind is the objectives to be sought. It would be a mistake to expect too much or to aspire to too little.

One obvious aim is to reduce strategic armaments in order to lessen significantly the damage that would be sustained by the United States (and the U.S.S.R.) in the event of a nuclear exchange. Regrettably, this goal is not likely to be realized in the near future. In the first place, any initial understandings will probably not involve reductions in strategic forces. Even if they did, these reductions would be limited. One cannot expect damage levels to be lowered by more than a few per cent, even with fairly substantial cuts in strategic forces, because the capabilities of the superpowers are already so great.

Other objectives have been considered: reducing the incentives to strike preemptively in time of crisis; reducing the probability of accident or miscalculation; and increasing the time available for decisionmaking in the hope that the increased opportunity for communication might prevent a nuclear exchange from running its full course. Last but not least, one might also hope to change the international political climate so as to lessen tension, to reduce the incentive for powers that presently do not have nuclear weapons to acquire them, and to increase the possibility for agreement by the superpower on other meaningful arms control measures.

It is reasonable to expect that successful negotiations might achieve all these objectives to some degree, except the first—reduction of potential damage. However, to focus on any one, or a combination of them, is to obscure the immediate problem. Despite the United States' restraint in its choices regarding strategic weapons development and deployment during the first two-thirds of this decade, it now appears that in the absence

of some understanding with the Soviet Union, the United States will be unable to break the action-reaction sequence which propels the arms race. Thus, the immediate objective of any negotiations must be to bring that sequence to a halt or to moderate its pace, so that there will be a better chance of ending the arms race than is offered by continuing the policies of the last two decades.

In retrospect, controlling or reversing the growth of strategic capabilities could have been accomplished more easily a few years ago, when the possibility of ABM deployment seemed to be the factor that would be likely to drive the United States to another round in the arms race. Now the ABM prospect is more troublesome because of technological advances. In addition, there are the two other stimuli already discussed: the possibility of effective counterforce capabilities as a result of the development of MIRV's; and the possibility that the Chinese nuclear capability may serve as a catalyst to the Soviet-American action-reaction phenomenon.

Obviously, short of destroying them by nuclear attack, there is little the United States can do about Chinese capabilities except to make sure that it does not give them more weight in its thinking than they deserve. This leaves the option of trying to break the ABM–MIRV chain by focusing on control of MIRV's or ABM defenses.

While one might hope to limit both, if a choice must be made, the focus should clearly be on the latter. Verification of compliance would be relatively simple and could probably be accomplished without intrusive inspection. Moreover, the incentive to acquire MIRV's for penetrating defenses would be eliminated—although the incentive to acquire them for counterforce purposes would remain.

The problems of vertifying compliance with an agreement to control MIRV's would be very difficult. Also if ABM deployment occurred, there would be great pressure to abrogate or violate any agreement prohibiting MIRV deployment because MIRV's offer high assurance for penetrating defenses. While reversing the MIRV decision would be difficult, doing so in the case of Sentinel would present less of a problem. In fact, there may well be sufficient reason for doing this, aside from the possible impact on Soviet-American negotiations on arms limitation.

To be attractive to the Soviet Union, any proposal to limit defenses would almost certainly have to be coupled with an agreement to limit, if not reduce, inventories of deployed strategic offensive forces. In principle, this should not be difficult, since it need not involve serious verification problems.

Complicating any attempt to reach understanding with the Soviet Union on the strategic balance is the fact that there are asymmetries in the American and Soviet positions. The United States has allies and bases around the periphery of the Soviet Union, whereas the latter has neither near the United States, unless one counts Cuba. It is clear that a Pandora's box of complications could be opened by any attempt in the context of negotiations on the strategic balance to deal with the threat to America's allies posed by short-range Soviet delivery systems, and with the potential threat to the U.S.S.R. of systems in Europe that could reach the Soviet Union, even though they are primarily tactical in nature. Hopefully initial understandings will not have to include specific agreements on such thorny issues as foreign bases and dual purpose systems.

Virtually all of the above is based on the premise that for the foreseeable future each side will probably insist on maintaining substantial deterrent capabilities. For some time to come there will be little basis for expecting negotiations with the U.S.S.R. to result in a strategic balance with each side relying on a few dozen weapons as a deterrent. The difficulties and importance of verification of compliance at such low levels, the problem of Communist China, the existence of large numbers of tactical nuclear weapons on both sides, and the general political climate all militate against this. At the other extreme, negotiations would almost necessarily be doomed to failure if either party based its negotiating position on the expectation that might achieve a significant damage-limiting capability vis-á-vis the other.

Thus, the range of possible agreement is quite narrow. There is a basis for hope (a) if both sides can accept the fact that for some time the most they can expect to achieve is a strategic balance at quite high, but less rapidly escalating, force levels; and (b) if both recognize that breaking the action-reaction cycle should be given first priority in any negotiations.

There will be risks in negotiating arms limitation. These must be weighed not against the risks that might characterize the peaceful world in which everyone would like to live, or even against the risks of the present. Rather, the risks implicit in any agreement must be weighed against the risks and costs which in the absence of agreement one will probably have to confront in the 1970's.

A final note

Whether the superpowers strive to curtail the strategic arms race through mutual agreement or through a combination of unilateral restraint and improved dialogue, they should not do so in the mistaken belief that the bases for the Soviet-American confrontation of the last two decades will soon be eliminated. Many of the sources of tension have their origins deep in the social structures and political institutions of the two countries. Resolution of those differences will not be accomplished overnight.

However, restraining the arms race may shorten the time required for resolution of the conflicts; may increase the chances of survival during that period; and, may enable the Soviet Union and the United States, despite political differences, to work more effectively, both individually and in concert, on the other great problems that confront the two societies.

APPENDIX: ANTI-BALLISTIC MISSILE DEFENSES

Kinds of ABM systems

Anti-ballistic missile defenses fall into two categories: one type employs exoatmospheric interception, in principle providing protection for large areas; the other is designed to intercept the incoming warhead late in its trajectory, so that a single interceptor site can defend only on a very limited area. The latter category may be subdivided into systems designed to defend cities, and so-called "hard-point defenses," designed to defend ICBM sites or other "hardened" key facilities. The problems of hardpoint defense and city defense are somewhat different. Hardpoint defense is technically easier, as missile sites or other hard points can be designed to withstand close-in nuclear bursts that would destroy cities; thus interception can be deferred until relatively late in the trajectory of the incoming missile. Also, a lower degree of effectiveness may be acceptable.

The implications of hard-point and urban defenses for the arms race are also very different. The former serve to enhance "assured destruction" capabilities and the latter, "damage-limiting" capabilities.

The effectiveness of ABM systems

ABM systems are often evaluated by comparing their cost with what the other side would have to spend on improving offensive capabilities to offset their effect. The comparison has generally proved favorable to the offense. This is particularly true if the objective of the defense is to reduce expected damage from a nuclear attack to very low levels—less so if the objective of the defense is limited to reducing damage only slightly.

To some, prospects for the defense appear somewhat better than they did a few years ago. While at that time it was generally thought that the offense would have perhaps a ten- to fifty-fold cost-effectiveness advantage over the defense (assuming intermediate levels of damage reduction), it is probably fair to say that now a more acceptable estimate would be about one to five. The reasons underlying this change in assessment are:

(1) the development of phased array radars and their associated computers enhances the possibility of discriminating between incoming warheads and decoys and other penetration aids;

(2) the development of interceptors capable of very high accelerations may permit a deferral of decision to intercept an incoming ICBM until fairly late in its trajectory.

(3) there is a realization that area-type defenses may be somewhat more attractive than was thought a few years ago—in part because of technological changes in interceptor warheads.

Sentinel

The ABM deployment (Sentinel) planned by the United States is to be of the area-defense type, although some terminal interceptors are planned for the defense of radars, and more may be added for "hard-point" defense of ICBM sites.

In announcing the Sentinel decision, former Secretary of Defense McNamara made it clear that he regarded the decision as marginal.[22] He also indicated that despite the possibility of some Chinese ICBM's leaking through it, Sentinel might save up to 14 million American lives in the event of a Chinese first strike with ICBM's during the 1970's.[23] Subsequently, other Johnson Administration spokesmen claimed the system could deny damage to the United States from a Chinese nuclear attack.[24] However, to have high confidence in the system one must allay doubts of three kinds. First, there is the question of whether such a complicated system will work at all when called upon to do so. It must be recognized that while component tests will be possible, it will never be feasible to test the full system against a satisfactory simulation of an operational environment. This fact, together with the history of initial failures of far less complicated systems, leads many experts to believe that the probability of a catastrophic failure of Sentinel, or any other ABM system, is high (and much higher than for strategic offensive systems which are, by comparison, simpler and more susceptible to adequate testing).

Second, there is the possibility that the Chinese may develop penetration aids that could defeat the system. This possibility is discussed at some length by Richard Garvin and Hans Bethe.[25] The author is not aware of any convincing rebuttal of their thesis. General A. W. Betts, Chief of Research and Development for the Army, in replying to the Garwin-Bethe argument, disputes the contention that development of effective penetration aids would be as easy as claimed. To make his point, he cites American difficulties in developing high confidence penetration aids.[26] There are, however, two considerations that make this experience largely irrelevant:

(1) Our programs aim at the development of penetration aids effective not only against exoatmospheric defenses but also against terminal interception. If one has to cope only with the former, which is all that is required in the case of Sentinel, the problem is much less complex.

(2) Although the Chinese would probably prefer to have a high confidence system as a deterrent against the United States, one with a moderate probability of penetrating the Sentinel defenses might be almost as useful to them.

Third, there is the fact, mentioned earlier,

that damage denial is a much more demanding task than simply reducing damage by small amounts. The extreme difficulties involved can be illustrated by a simple calculation. Let it be assumed that a given target is defended by 50 interceptors, that the Chinese have 25 ICBM's with a reliability of 80 per cent, and that each interceptor has an 80 per cent chance of destroying an ICBM. According to this scenario, there is no more than about a 50 per cent probability that Sentinel would succeed in preventing all 25 ICBM's from hitting their target. It must be borne in mind that the offense can choose any target on which to concentrate its attack; the defense must defend all. The range of the Spartan interceptor, which is used with the Sentinel system, implies that not 50 interceptors, but about 500 would have to be deployed throughout the United States if every important target were to be within the effective range of 50 Spartan missiles. Thus, even with a twenty to one superiority in numbers of interceptors over the number of Chinese missiles, the picture is far from comforting.

When one considers that a single one-megaton warhead detonated over one of the larger U.S. cities would produce about one million fatalities, it is clear that those who claim a damage-denial or near damage-denial capability for Sentinel are assuming an extraordinary high level of effectiveness.

As Chinese capabilities grow, the defense problem will become even more difficult. This is illustrated by an extension of the sample calculation: if the numbers of Chinese ICBM's and the United States interceptors are both doubled, the chance of at least one Chinese missile getting to its target rises to over 70 per cent, to over 90 per cent if the numbers of ICBM's and interceptors are both quadrupled, and so on. In the long run then (and it may not be too long a run), defense clearly becomes a losing game even against a relatively weak adversary. The costs of defense required to maintain any given level of protection will rise much more sharply than the costs of improving the offense.

FOOTNOTES

[1] See U.S. Department of State *Bulletin* (9 July 1962), pp. 64–69, and, for example, U.S. Senate (90th Cong., 2d Sess.), *Hearings before the Committee on Armed Services* (2 Feb. 1968), pp. 144, 150–153. See also, discussion between James T. Kendall and General Earle G. Wheeler in U.S. Senate (90th Cong., 2nd Sess.), *Preparedness Investigating Subcommittee of the Committee on Armed Services on Status of U.S. Strategic Power* (27 Sept. 1968), pp. 5–8. (Cited hereafter as *Senate Hearings on Status of U.S. Strategic Power.*)

[2] Department of Defense, Secretary of Defense Robert S. McNamara, "Approach to the Fiscal Year 1969–73," Program and Fiscal Year 1969 Budget, in U.S. House of Representatives (90th Cong., 2d Sess.), *Department of Defense Appropriations for 1969, Hearings before a Subcommittee on Appropriations, Part I* (14 Feb. 1968), p. 152.

[3] General J. P. McConnell, statement at *Senate Hearings on Status of U.S. Strategic Power, op. cit.* (30 Apr. 1968), p. 222.

[4] CONGRESSIONAL RECORD, vol. 114, pt. 22, p. 29172.

[5] Richard L. Garwin and Hans A. Bethe, "Anti-Ballistic Missile Systems," *Scientific American* (Mar. 1968), pp. 21–31.

[6] House of Representatives (90th Cong., 2d Sess.), *Department of Defense Appropriations for 1969, Hearings before a Subcommittee on Appropriations, Part II* (24 Apr. 1968), p. 455. Emphasis added. (Cited hereafter as *House Hearings on Defense Appropriations.*)

[7] Deputy Secretary of Defense Paul Nitze, *Statement for Subcommittee on Military Applications of the Joint Committee on Atomic Energy* (6 Nov. 1967), p. 2. Emphasis added.

[8] Department of Defense, Secretary of Defense McNamara, "Approach to the Fiscal Year 1968–72," Program on the Fiscal Year 1967–68 Budgets, p. 42. (Cited hereafter as *Posture Statement 1968–72.*)

[9] General McConnell, statement at *Senate Hearings on Status of U.S. Strategic Power, op. cit.*, p. 205.

[10] See Secretary of Defense McNamara, *Address before the United Press International Editors and Publishers*, San Francisco, 18 Sept. 1967, and Assistant Secretary of Defense Paul Warnke, *Address before the Advocates Club*, Detroit, 6 Oct. 1967.

[11] Assistant Secretary of Defense Warnke, *Address before the Advocates Club, op cit.*

[12] See *Posture Statement 1968–72* and *Posture Statement 1969–1973*, as well as Secretary of Defense McNamara, *Address before the United Press International Editors and Publishers, op. cit.*

[13] See letter by Secretary of Defense Clifford to Senator Richard Russell, CONGRESSIONAL RECORD, vol. 114, pt. 22, p. 29172.

[14] Assistant Secretary of Defense Warnke, *Address before the Advocates Club, op. cit.*

[15] R. B. Stolley, ed., "Defense Fantasy Now Come True," interview of former Secretary of Defense McNamara, *Life Magazine* (29 Sept. 1967), p. 28c.

[16] See *House Hearings on Defense Appropriations, Part I*, p. 266.

[17] See *Senate Hearings on Status of U.S. Strategic Power*, respectively, p. 11 and pp. 346, 366.

[18] CONGRESSIONAL RECORD, vol. 114, pt. 22, p. 29169; see also CONGRESSIONAL RECORD, respectively, 18, 19, 21 June, 29 July, 2 Oct., and 1 Nov. 1968.

[19] *Posture Statement 1969–73*, p. 152.

[20] See discussion between General Wheeler and Senator Henry M. Jackson, *Senate Hearings on Status of U.S. Strategic Power*, p. 19.

[21] General Wheeler, statement at *House Hearings on Defense Appropriations*, p. 2.

[22] Secretary of Defense McNamara, *Address before the United Press International Editors and Publishers, op. cit.*

[23] *Posture Statement 1969–73*, p. 152.

[24] See Dr. John Foster, statement at *House Hearings on Defense Appropriations*, p. 455; and Deputy Secretary of Defense Nitze, *Statement for Subcommittee on Military Applications of the Joint Committee on Defense Appropriations, op. cit.*

[25] Garwin and Bethe, "Anti-Ballistic Missile Systems," *op. cit.*

[26] General A. W. Betts, Letter to the Editor, *Scientific American* (May 1968), pp. 6–7.

Mr. PODELL. Mr. Speaker, the military industrial complex of this country is preparing its greatest coup, one that will make all previous robbery of the public purse seem like petty thievery. I refer, of course, to the ABM system. It will stop little, accomplish less for the people it is supposed to protect, and only serve to enrich those who are already perpetrating astronomical assaults upon national solvency in the name of national defense.

It is the most controversial weapons system ever suggested. Lacking anything close to unanimous backing from our military, it is, to begin with, a $6 to $9 billion "thin" defense system against a Red Chinese attack. Already we have been forewarned that it will merely serve as a foundation for a full ABM system against Russian attack that could cost $50 billion, or much more. We can probably double this figure, if we take into consideration past miscalculations.

Deployment of 15 to 20 batteries is contemplated, equipped with missiles costing from $1 to $2 million each. Each related radar unit would cost $100 million, and yearly operating costs would be $500 million.

There are two types of radar. One to detect incoming missiles at long range, and one for short range use. The Spartan missile is to destroy incoming warheads at long range. The Sprint missile is for short range destruction, primarily to protect radar sites. Once a "thick" system is built, which of course it would be, thousands of Sprints would be required.

ABM sites would each require 180 to 250 acres of land. A Spartan warhead is in the megaton range, 100 times the power of the Japan bomb. Sites are to be located near major cities if we are to protect against attack. The Pentagon states that the proposed system is primarily to defend against a Red Chinese attack. The notion that most major American urban areas will have, under this system, a proliferation of multimegaton warheads on a round-the-clock basis to defend against a Red Chinese attack is frightening to say the least. The better the Red Chinese get, weaponry-wise, and the greater the Soviet threat, the more missiles will have to be built, and located even closer to our metropolitan areas.

Mr. Speaker, this is incredible. We are passing into the world of Oz, of never-never land. I expect Dorothy and Toto to come tripping forward, following the yellow brick road leading to the Pentagon.

George Rathjens, MIT faculty member and former Deputy Director of the Defense Department's Advanced Research Projects Agency under President Kennedy stated that an accidental explosion of the warhead of a Spartan missile would cause nearly total destruction for a radius of 5 miles.

Further, location of such sites insures that any metropolitan area covered by them will have priority on any Russian target list. The missile, if used, would explode close to cities. And what about enemy use of decoys? One technological breakthrough makes such hardware obsolete. It becomes junk, an untested drug or an auto with a safety defect. It will not fulfill the function it was built for.

Yet our military states that the ABM is primarily aimed at saving civilian populations. The Seattle Association of American Scientists estimates that minimal shelter protection for urban Americans, which would have to be provided along with an ABM system, would cost 10 times the initial outlay for the ABM, which is now conservatively estimated at $6 billion. Yet the present Defense Department budget calls for a total civilian defense outlay of only 6 percent of the ABM allocation. Pentagon logic leaves much to be desired.

The Red Chinese have plenty of time to develop countermeasures to our system. Clever use of decoys could and would overwhelm and exhaust our ABM system. Many other options are open to any potential attacker. In short, it is impossible to develop and install a defense system against ICBM and MIRV attack, now or in any foreseeable future.

Further, deployment of this system would not only deepen the cold war

freeze, but begin another insufferable spiral to the arms race. Net losers; the American taxpayers and peace and security of all mankind.

Each year demands for weapons development funds from the Pentagon increase, until now they have reached $8 billion yearly. In 1959, the Army proposed deployment of the Nike-Zeus. Cost estimates were $13 to $14 billion. President Eisenhower said, "No," to his credit. Had it been built, we would already have been tearing it out and replacing it.

The Soviets already have a missile bombardment system operating from a satellite in orbit. Our ABM is helpless against it. MIRV is almost a reality. ABM is useless against it. Submarine missiles are rapidly appearing in the Soviet arsenal. ABM is unable to stop it.

Mr. Speaker, more than $2.4 billion has been already spent on research for ABM. This has created a constituency with a vested interest in its deployment within the military industrial complex; 15,000 companies stand to gain from it, including almost every major military contractor. What better argument is there that could be more effective against plaintive voices crying out for arms control?

A recent major study by a Budget Bureau examiner was highly revealing to me. Richard Stubbing is owed a debt of gratitude by every citizen of the United States for his work.

He studied a sample of 13 major Air Force-Navy aircraft and missile programs with sophisticated electronic systems initiated since 1955 at a cost of $40 billion. Enough to rebuild the worst ghettos in America, Mr. Speaker.

Of the 13, he found that only four, costing $4 billion, could be relied upon to perform at more than 75 percent of their specifications. Five others, costing $13 billion, were rated "poor," with an electronic reliability of less than 75 percent. Two more, costing $10 billion, were phased out because they were so much junk. The last two were canceled after we spent $2 billion.

Multibillion-dollar weapons systems are performing more poorly as time goes along, according to this excellent study. Yet the proposed ABM system is far more complicated. We know that the Russians, have expended billions in a vain effort to create a viable ABM. Warheads are increasingly improving and harder to destroy. Radars for detecting them are increasingly sensitive and easily jammed.

Former Vice President Humphrey, former President Eisenhower, Robert S. McNamara, and Jerome Weisner are among those who have added their voices to the opposition. As respected a man as Senator SYMINGTON, of Missouri, has added his weight to those opposing this vast boondoggle. The list is legion, Mr. Speaker, and growing daily.

What it boils down to is simple. A vast complex of defense oriented firms have made a fortune from supplying armaments to the U.S. Government. Their lobbyists swarm in this city as bees around a hive. A steady stream of high-ranking officers from all military services find employment in high places among these firms when they leave the service. Such gentlemen are used to aid these firms in their ever-accelerating greed for more taxpayer dollars to build more systems to make their empires larger and their profits fatter.

In return for this, and because of this insanity, our waters have grown more polluted; our air is becoming increasingly dangerous; our transportation network is grinding to a halt; our cities are cesspools of poor housing, crime, narcotics addiction, and filth; and we are on the verge of racial conflict which will assume the form of urban guerrilla warfare. This is violently imminent. All because our priorities have become reversed. Because this House has rammed through staggering sums for such hardware without debate, without queries, without mature consideration, without asking uncomfortable questions. Between the insanity in Vietnam and these incredible boondoggles for the benefit of a few, America is on the brink of internal chaos.

Let us not be misled by the sum requested. They do not dare ask for the full sum. First they seek to get the door open by asking for a "thin" ABM shield against an improbable Red Chinese attack. Our protection will consist of a thin defense, which may have to become a thick one to defend against a Russian attack.

Mr. Speaker, I submit that such a system would endanger hundreds of millions of Americans on a permanent, daily basis, without lessening their danger or aiding our defensive capability. Instead, it would increase the menaces to Americans and further escalate the arms race and deepen the cold war.

I am more than ready to vote for sums of money for the protection of this Republic. I am unalterably opposed to building a monstrosity that will not fulfill its task while irretrievably harming the Nation. Mr. Speaker, this ABM system is a most outrageous affront to the American people.

A time has come when America must heal its wounds and upgrade the quality of its life. It is time for us to uplift the fallen, not tread them further into the earth. It is time to spend of our substance upon those who have not, rather than to swell our armories, already bursting, with more horrors of mass murder. We are toying with elementary forces of nature, disregarding the exigencies of our immediate problems.

Mr. Speaker, I am but one Member of this august body, and a very junior member at that. Yet Mr. Lincoln once said that, "To sit in silence when we should protest makes cowards out of men."

I plead for defeat of the ABM. I pray for enlightenment and selflessness in the name of private survival, if for nothing else.

Mr. GREEN of Pennsylvania. Mr. Speaker, I want to thank my distinguished colleagues for reserving time to discuss this vital issue.

I think it is important for Members of Congress to raise questions about the need, the efficacy, the costs, and the potential effects of the development of an anti-ballistic-missile program.

I do not think the Congress has been given adequate information on the subject. Much of the information about the ultimate objectives of the system has been contradictory and confusing.

With the benefit of hindsight, I would hate to see the anti-ballistic-missile system become the Vietnam of the 1970's—so costly that we neglect other areas of defense and national well-being—and so potentially threatening that it escalates a more deadly arms race. This is not to say that we have no business in building defense systems. As a major power in a world threatened by many sources of conflict, we have a duty to protect our people and a right to protect our interests. But I question the wisdom of a decision that may well bring our people—as well as the rest of the people in the world to the brink of nuclear war. I question the wisdom of spending $50 billion on a system that will be obsolete before its completion—particularly at a time when the needs for revenue are already pressing the people of this country and the problems of the domestic front cannot go unanswered.

As with Vietnam it would be naive to assume that the interests of the United States do not go beyond our national frontiers. We are a world power with worldwide interests. We are in competition, strategically and economically.

But there is an object lesson provided by Vietnam that I hope we can learn. Once we make the decision to move along the path toward a buildup, there is no turning back. The very presence of a vast array of equipment seems to generate the need for an even greater expenditure of money on even more equipment. At that point, we are no longer in a position to question the wisdom of our intentions. We must live with the reality we have created. We must make decisions on the basis of that reality.

Again, as in the early stages of the Vietnam war, we hold a trump in threatening to use power as a means of negotiating peace. This was true when we threatened to bomb North Vietnam. It is true when we threaten to construct an anti-ballistic-missile system. Once we have used that power, however, we can no longer employ the threat of using it to negotiate peaceful pursuits. By constructing the ABM we are challenging our opponents to match us in skill and hardware. We are not challenging them to negotiate. I think we should begin with the negotiations to make the world safer from nuclear holocaust.

Mr. BOLAND. Mr. Speaker, I congratulate the gentleman from California for sparking this discussion. Many of us in this House are aware of the great deal of study, time, and effort he has put into this important problem. The issues that he has raised before and now raises again on the floor of Congress are, indeed, transcendent. I join him in this discussion and associate myself with his remarks.

The matter of deployment of the Sentinel ABM system deserves a great more thought and study. Serious questions must be answered—questions that have been raised for many months and to which no positive answers have been given.

A week ago, the distinguished assistant majority leader of the Senate and senior Senator from Massachusetts, EDWARD M. KENNEDY, called for more and adequate information on the Sentinel system. In line with this, he has asked two distinguished Americans to organize and prepare a report, not alone for Senator KENNEDY, but for the Congress as well. He has summoned to this task Dr. Jerome B. Meisner of the Massachusetts Institute of Technology, and Prof. Abram Chayes, of Harvard University. Both of these talented men have given outstanding service to this country. Both understand the nature of the many problems posed by the Sentinel system. Senator KENNEDY deserves the gratitude of all for asking for this in-depth study—a study that will give us the answers that are so difficult to arrive at by the inexperienced and untechnical mind.

Mr. Speaker, the question of whether or not to deploy an ABM system, be it thin or thick, is one of the most crucial and complex defense questions ever to confront this Nation. It involves our entire strategic posture, the balance of nuclear power, relations with our allies, disarmament negotiations, and vast expenditures of the national wealth. Yet this matter has received insufficient attention in the Congress. The Army, on the other hand, has initiated a high-geared public relations program designed to defuse opposition to Sentinel system deployment.

The Members of the Congress, as the duly elected representatives of the people, have the responsibility to see that the matter of deployment of an ABM system receives the most intensive scrutiny and debate in order to safeguard the national security and public interest. Rational discussion of this subject is imperative. Yet rationality has been singularly lacking in the explanations offered in defense of the Sentinel system. The primary official case made by the Defense Department to the public for its decision to deploy the Sentinel system has been to protect the Nation from a potential Red Chinese missile threat, expected to materialize in the early or mid-1970's. However, many advocates of the system state that the principal argument for the Sentinel program is that it will strengthen the hand of the United States in bargaining with the Soviet Union for the limitation of offensive and defensive missile systems. I find these arguments to be logically inconsistent.

Nevertheless, let us suppose for a moment that the Sentinel system is in fact designed to cope with a potential Communist Chinese threat. I am then prompted to ask the following questions: What possible gain could accrue to the Red Chinese in attacking the United States? Further, might not our anti-Chinese ABM system provoke them into believing that the United States has aggressive designs on the Chinese mainland? If so, this would seem a strange strategy on the part of the United States at a time when we are trying to open new lines of communication with the Peking regime.

In a January briefing of the House Appropriations Committee on the Sentinel system by Lieutenant General Starbird, Sentinel system manager, the question was asked if the Pentagon actually considered Communist China to be a greater menace to the United States than the Soviet Union. This question was left unanswered at the time.[1] However, I find it difficult to believe that the Pentagon places more credence in a possible Chinese threat than it does in the existing Soviet threat.

In this respect, I think that President Nixon has done a great service to the Nation in refusing to accept the rationale that the Sentinel ABM is directed against a Red Chinese nuclear threat. To many astute observers, it is becoming increasingly evident that the ABM system is aimed against potential attack from the Soviet Union.

If the latter is, in fact, the case, I think it is worthwhile to recall that former Secretary of Defense McNamara in announcing the decision to deploy a thin ABM system in September 1967, spent the greater portion of his remarks expounding on the futility of an anti-Soviet ABM system. He warned that a buildup of offensive or defensive weapons on the part of either the Soviet Union or the United States would "necessarily trigger reaction on the other side" and produce the "action-reaction phenomenon that fuels an arms race."

I think it virtually certain that the deployment of an ABM system by the United States will lead to an increase in numbers of offensive missiles by the Soviet Union in order to counter the U.S. defensive buildup. Should this occur, our military leaders would then feel compelled to increase our offensive missile capability in order to counter the Soviet increment. The result would be a mutual rise in the arms level, but neither side will have gained any more security.

The cost of deploying the Sentinel ABM system has officially been estimated to be $5 billion. Undoubtedly, this will prove to be a conservative figure. Our experience with Pentagon estimates of the costs of weapons systems shows that final expenditures almost invariably exceed the original figures. Many knowledgeable scientists and military experts think that an estimate in the neighborhood of $10 billion for a thin ABM system to be more realistic. Like many of my colleagues, I feel that a thin ABM system will prove to be the entering wedge for the eventual deployment of a thicker system that could eventually cost anywhere from $50 to $100 billion.

Assuming, however, that the Sentinel system to be deployed were to cost only $5 billion, the question remains: What would the Nation gain thereby? Again, I would like to quote the September 1967 statement of former Secretary McNamara:

> None of the ABM systems at the present or foreseeable state of the art would provide an impenetrable shield over the United States. There is clearly no point in spending $40 billion if it is not going to buy us any significant improvement in our security.

Certainly I would not quarrel with the expenditure of $5 billion or much greater multiples of that number if it were certain that we could purchase an invulnerable defense against nuclear attack on the United States. No dollar-and-cents value could be placed on such a defensive system. But today it is not available at any price.

Many nuclear physicists have pointed out that even a defensive system that is 90 percent effective would not provide meaningful protection because only one ICBM has to get through to insure the complete devastation of its target. Furthermore, while the ABM system may not provide any significant defense to the cities around which it is to be deployed, the mere presence of ABM missiles in themselves constitute a threat to the populace. In a book entitled "The Effects of Nuclear Weapons," both the Defense Department and the Atomic Energy Commission have warned that, despite thorough precautions, the accidental explosion of nuclear weapons can take place anywhere and anytime—during assembly and storage, when they are being loaded or transported on the ground or when emplaced in a delivery vehicle. In addition, the ABM sites near cities are a hazard because they invite attack from an enemy who would naturally try to knock out the defending country's ABM missiles first.

The futility of an ABM system to cope with atomic attack has been pointed out by a host of eminent scientists. By the addition of relatively inexpensive penetration aids and decoys, it is possible for an enemy to overwhelm the system. The radars can be taxed beyond their ability to track and discriminate among all incoming objects, and the supply of ABM missiles exhausted in attempting to intercept these objects.

Not only can an ABM system be overwhelmed, the effects of a nuclear attack might cause its malfunction. We do not know to any degree of certainty how well an ABM system would behave under fire. It is true that successful missile intercept tests have been conducted by the Army from Kwajalein Island. However, these tests are conducted under "ideal" or controlled conditions. Many scientists claim that no realistic test of the Sentinel system can be made except under conditions of an actual nuclear attack. To simulate these conditions in the absence of attack is impossible because the actual explosion of hydrogen bombs would necessarily be involved.

Moreover, the Sentinel ABM system is to consist of an enormously complex and intricate network of electronic components and weaponry. It includes the Spartan and Sprint missiles plus perimeter acquisition radars and missile site radars, all operated by computers. We are asked to have faith that all elements of this network will function flawlessly and in harmony under bombardment. We know from experience that most highly sophisticated weapons systems do not work effectively on first try. There are always "bugs" that show up in operation, even after successive trials and costly adjustments. The F-111 aircraft is a case in point. It was put through many flight tests and was finally authorized by the Air Force for use in Southeast Asia. However, structural flaws showed

[1] The committee felt that this question would more appropriately be addressed to the Secretary of Defense.

up when the plane flew in combat, and the Air Force was forced to ground the plane after the loss of several of these $7-million aircraft. This was after billions had been spent on research and development of this airplane.

We are all familiar with the elaborate hours-long countdowns that accompany each flight of our astronauts. In these countdowns, a systematic check is made of the essential components to see that they are in functioning order. On numerous occasions, the flights have been delayed or postponed for hours or days because defects in minute parts, upon which the success of the whole operation depended, have been detected.

Given the above considerations, I must conclude that the ABM system, as presently conceived, offers no credible deterrent to nuclear attack on the United States. The only adequate deterrent is the maintenance of offensive missile forces that can threaten the infliction of unacceptable levels of damage in retaliation upon an attacking nation. To heighten the credibility of this deterrent, the United States can continue to develop more sophisticated penetration aids and improve its offensive missiles and their guidance and control systems. Perhaps we can also convince the Soviet Union thereby of the futility of their efforts to build an effective ABM system. If we succeed in discouraging them in this endeavor we may be able to prevent the upward spiral in the arms race which they have as much reason as we to fear and avoid.

In conclusion, I wish to say that I wholeheartedly support continuing research and development on an ABM system. It is the responsibility of this Government to seek new technological breakthroughs that might be translated into a truly effective nuclear defense. However, I have not heard to date a convincing or acceptable argument for proceeding with the deployment of an ABM system at this time. To do so would amount to gross folly, would lull the American people into a false sense of security, and waste billions of taxpayers' dollars that are sorely needed in other sectors of the economy.

Mr. ANDERSON of California. Mr. Speaker, I rise today to join with my colleagues in expressing my views on the proposed anti-ballistic-missile system. It is my understanding that a site located in the city of Compton in the 17th Congressional District is under consideration as a Sentinel anti-ballistic-missile base.

If, indeed, this system is proved necessary to the defense of our country, a proposition which has not as yet been adequately demonstrated, then I would oppose the deployment of the ABM in this area for the following reasons:

First. Placement of the missile site would require condemnation of approximately 200 acres of prime industrial property. This would inhibit further commercial development of the area with serious economic consequences. Among these would be the potential loss of many new companies which would otherwise be attracted to the area through the currently scheduled development of a major industrial complex. In addition, thousands of potential new jobs would be lost in an area which is already considered by the Department of Labor to have a high rate of unemployment. Moreover, several millions of dollars in property taxes would be lost because of the tax-free status of a Federal reservation. This would especially hurt the tax base of surrounding municipalities which are already hard pressed to finance the growing demand for services to their residents.

Second. Deployment of the ABM in such a densely populated urban area would prove to be a very vulnerable enemy target. In addition, we must consider the possibility, no matter how remote, of a nuclear accident which could affect the half-million residents of the 17th District.

Third. There is no apparent sound reason why this missile base, if it is proved to be necessary, could not be located in a remote section of California away from any major metropolitan areas. There are plenty of open spaces and sparsely populated land all over the State, including southern California. In fact, there is such land within 50 miles of my district. Moreover, much of this land is owned by the Federal Government, which would save the taxpayers millions of dollars, since prime industrial property would not have to be condemned.

In summary, Mr. Speaker, I am opposed to the placement of an anti-ballistic-missile base in the 17th District because of the unfavorable economic impact, the possibility of a nuclear accident, and the fact that there are many better locations which would save the Government money.

Although I am not at the present time convinced of the need or the effectiveness of such a system in terms of its cost, I would hope that there would be much continued debate and discussion on this very important issue before the administration and the Congress reach a decision to proceed with its development.

Mr. MOORHEAD. Mr. Speaker, I rise in opposition to the deployment of the Sentinel anti-ballistic-missile system.

This highly controversial program, which should have never been started in the first place, has been a source of contention in this House ever since it was first suggested that the United States needed additional missile protection for its cities and weapons sites.

The Defense juggernaut, allied with those business interests who profit most from an anti-ballistic-missile network, have feverishly lobbied for their questionable program.

Construction began on the sites and proceeded under the shepherd-like gaze of top Defense Department officials. Recently, public and congressional concern has halted temporarily deployment of Sentinel and the program is currently being "reexamined."

Mr. Laird, the new Defense Secretary, publicly stated his support for the desirability of the antimissile system. Therefore, unless Congress acts, I think it is but a matter of time before the administration plunges ahead with this program.

The Secretary of Defense feels the Nation faces a threat from both the Red Chinese and the Russians, a threat which the Sentinel can largely blunt. Nonsense. Numerous academicians and scientists have questioned both the value and wisdom of Sentinel.

Would Congress not serve the interests of the people of this country better by putting the effort and money now ticketed for Sentinel into a sustained peace initiative—the object of which would make all the Sentinel programs of the future unnecessary?

Mr. Nixon, on his European visit, has pledged to explore talks with the Russians concerning mutual disarmament.

Further action on the antimissile deployment at this time could sabotage disarmament talks before they begin and lead the Russians to mirror our buildup and once again we will reheat the enormously expensive arms race.

In the greater interest of world peace, let the United States take the initiative and break the arms cycle. Congress should take a stand and demand that the Defense Department, and those corporate interests cheering from the sidelines, stop this maniacal arms buildup, whose entire existence has been surrounded by subterfuge, "propaganda campaigns," broken promises, debates of "thin and thick," and all the other accusations and counterclaims that have made the Sentinel program the most ominous of red herrings.

Mr. THOMPSON of New Jersey. Mr. Speaker, one of the most significant contributions President Eisenhower made during his long career of public service was his admonition to the Nation upon leaving the White House to beware of the industrial-military complex.

General Eisenhower's warning is particularly appropriate when we consider some of the aspects of the controversy concerning the proposed multi-billion-dollar anti-ballistic-missile system. It will be recalled that the ABM was first set forth as our answer to the Soviet missile threat. When the cost seemed prohibitive—even by Defense Department standards—the rationale for the ABM was changed and it was portrayed as a defense against some future Red Chinese missile strike. Whatever the merits of ABM—and I for one, have very grave reservations about its military merit—it is absolutely necessary that the issue be discussed in the open where the arguments of proponents and opponents may be subject to public scrutiny and evaluation.

Therefore, it came as a matter of great concern to me to read in a recent issue of the Washington Post a story telling of two memorandums sent last fall to former Secretary of Defense Clark Clifford. One of these documents authorized by Secretary of the Army Stanley R. Resor pointed out that "several highly placed and reputable U.S. scientists have spoken out in print against the Sentinel missile system." Mr. Resor then went on to detail how his office would be in contact with friendly scientists who might write articles for publication supporting the technical feasibility and operational effectiveness of the Sentinel system and would "extend to these scientists all possible assistance."

In addition to sponsoring such friendly articles, the military would initiate a highly coordinated public relations cam-

paign directed at Congressmen, Governors, mayors, community leaders, editors and publishers to sell them on the merits of the ABM. This public relations campaign would involve preparation of mobile displays, information kits, film clips, taped interviews, and other such public relations vehicles. In short, a public relations campaign worthy of the highest priced Madison Avenue firm was contemplated. This campaign was not designed to initiate debate on the merits of the ABM, it was rather designed to sell the product to the public officials and in much the same way detergents and automobiles are sold in commercial advertising.

Mr. Speaker, the military has a perfect right to press for defense requirements it determines to be in the national interest. We are told that the ABM system will save the lives of millions of city dwellers. In my judgment, these city dwellers ought to be consulted. They ought to have the right to determine whether they want decent housing and decent schools for their children, rather than more rockets and missiles.

With Defense Department expenditures now at the level of $80 billion a year and eating up 42 cents of each Federal tax dollar, it is a matter of increasing urgency that the military budget be carefully scrutinized and that the Department's performance be effectively monitored. I can think of no better way to start than by reexamining the rationale underlying the ABM system.

Mr. HALL. Mr. Speaker, a major policy decision will soon have to be made by the Nixon administration, and by the Congress, which could have profound implications toward national security and defense. The decision involves whether or not to proceed with development and early deployment of an anti-ballistic-missile system, popularly known as "Sentinel."

To say the issue is controversial is an understatement. It also is true that a lot of people who have taken sides are not very well informed about Sentinel, its mission, its capabilities and its limitations. Sentinel is not a sure fire defense against an all-out or even a sophisticated ballistic missile attack; and no one in the present state of the "art" thinks that a "thin"—or any other system—could provide full protection in the event of a massive first strike by the Soviet Union. What the experts say Sentinel would provide, is a selective shield that would assure our capability to strike back on a large enough scale that the cost to the Russians would be prohibitive. The Sentinel system also would offer protection in several other possible situations. It would provide a safeguard against the kind of nuclear attack which the Chinese Communists could launch by the mid to late 1970's. Put another way, the Chinese Communists will not even then be capable of mutual annihilation.

Deployment of a Sentinel system also would strengthen the U.S. hand in any future missile negotiations with the Soviet Union. We know that the Russians already have started work on a primitive ABM system of their own, and the Secretary of Defense advises that the Soviets are now testing a newer and more sophisticated ABM system. Now what are some of the arguments against Sentinel and how valid are they? For one thing there is the cost, at least $5 or $6 billion, and possibly as high as $10 billion. Congress already has invested about $4 billion in research and development, and the 1970 fiscal year defense budget is for $1.8 billion. Some of the opponents say we ought to be spending this kind of money instead of rebuilding our cities and financing social projects of various types. I suggest that this particular question is not relevant to the basic issue of national security. If we had dependable intelligence information, that gave reasonable assurance that neither Russia nor Red China had the ability—or the inclination—to launch a nuclear attack against us, then we could start talking about alternate ways to spend or save tax dollars. But we have no such assurance and the ruthless nature of the Communist attack on Czechoslovakia, the seizure of the *Pueblo*, and the continuing aggression in Vietnam, makes it impossible for those of us who bear the responsibility for national defense, to ignore the threat of nuclear attack.

So long as nuclear attack is a real possibility, I believe the key element in our ABM decision is whether the system we have in mind is sophisticated enough or not, to perform its mission. The task assigned to an ABM system is essentially like trying to stop one bullet with another. To perform such a task requires incredibly accurate radar, instant communications, dependable and strategically located missiles, both the long-range "Spartan" and the short-range "Sprint," and highly trained technicians on 24-hour, round-the-clock alert. If we have the scientific capability—and the Armed Services Committee on which I serve will look very closely at this—then I believe we must proceed with deployment of the system.

About 20 years ago, a similar debate took place in our country involving the hydrogen bomb, whether it was possible to build it, and whether it was desirable. There were voices in those days, too, that cried out against the H-bomb development, that said we should concentrate on works of peace, not war, and that said H-bombs were not technically feasible any way. But former President Truman made the decision to go ahead, a tremendously important decision in view of the fact that the Soviet Union tested a thermonuclear device only a short while after we tested ours. The ABM decision may be every bit as important as the one 20 years ago that has produced a nuclear stalemate between the world's two opposing power blocs. If we can save 20 to 60 million U.S. citizens, you can bet I will be for trying every way we can, including even the expensive Sentinel ABM system.

Mr. HELSTOSKI. Mr. Speaker, I am very pleased that my colleague from California (Mr. COHELAN) has requested time for a discussion of the controversial Sentinel antimissle system, an already antiquated system with built-in obsolescence that serves no end for protection as claimed.

I am of the firm belief that before the growing controversy over this system becomes inflamed in emotions, entangled in personalities and politics, it should have a thorough objective public discussion.

The proposed Sentinel antimissile system is a tremendously costly item envisioned by our Department of the Army, with far-reaching implications.

This Defense Department brainchild of a "thin" line defense has been estimated to cost about $5 or $6 billion and upward of $50 billion for a "thick" defense system. But knowing how these original Government estimates grow, we can expect any antimissile system to require more funds than the original estimates.

We must consider the two critical questions relating to the present dimensions of the program. First, can any ABM system, American, or Russian, or Chinese really work against incoming missiles saturating a defense or target point? And the diplomatic question, Would any ABM system facilitate or make more difficult, a halt to the spiraling arms race?

These questions and others of equal importance to residents of the local areas in which these ABM bases would be established have not been given the deserved public discussion and facts. The Sentinel missile project has, so far, been primarily a Pentagon endeavor. The American public has been given the "what do we care what the public thinks" attitude on what is involved.

I am very heartened by the fact that Senator ALBERT GORE plans to hold public hearings on the ABM before the Senate Disarmament Subcommittee next month. I feel confident that these hearings will turn up frank testimony from top science, diplomatic, and military experts, both from inside and outside of the U.S. Government.

It is my hope that the Senator's subcommittee hearings will provide us with some answers which presently escape us. The American public has the right to know just what the ABM system is and what we can expect in its capabilities to protect us. In addition, what the ultimate cost of the entire system from the "thinnest" to the "thickest" line of defense will be and where the Defense Department desires to deploy these sites and these missiles is important. There will be a negative impact when the Department of Defense commences construction on these missile bases and they will certainly set back our hopes for disarmament.

These hearings should also be extended to the House side of the Capitol so that they can be used to inform us and clear the air and confusion which exists in the minds of the American public today. The full facts are not known.

Secretary of Defense Laird has said that the continuing idea of building these missile bases would be a vital aspect of negotiating arms limitations with the Russians. Yet as he says this, Secretary of State Rogers says he "hopes" that arms control talks can begin before the ABM system is deployed. Now, I ask you, who is more accurate in his estimation of the necessity of the system, the

Secretary of Defense or the Secretary of State? There even seems to be some confusion on this level.

Mr. Speaker, whether the system will entail the cost of $6 or $50 billion, or any figure in between, this money could be put to better use in the advancement of some of the programs which we have instituted to help the poverty stricken, the aged, the weak and sick, the uneducated and the unemployed. We would be contributing to the economy and the greater strength of our Nation in this manner.

We who take the floor here today may be the targets of criticism that we do not wish to provide for the adequate defense of our country. The answer is quite the contrary.

What we desire to ascertain is justification whether the necessity of this missile system and its function as a defense weapon exists. We recall the "maginot line" of World War II. That system of concrete defenses was to have been so built as to make it impenetrable. Yet, when tanks in great numbers came in, the line was penetrated and the fortifications behind it were as useful to the defenders as last year's calendars. Is this our maginot line?

Mr. Speaker, the discussion of this controversial ABM system should be brought forth to the American public to show just what a costly and unproven defense system this really is. I am taking this time to voice my objection and opposition to the continuation of any further action on this idea.

There is no justification for placing bombs in the backyards of our urban populace under the guise of protection, for the fallout resulting from the release of these nuclear warheads against incoming missiles by this system is as detrimental as an attack on one of our cities itself. This is certainly the paradox in this type of "protection."

Mr. HALPERN. Mr. Speaker, among the considerations that currently are entering into national debate over the development and deployment of an ABM system are: First, the purpose of such a system—is it to be a "thin" system protecting us against Red Chinese nuclear aggression and possible nuclear accidents, or a "thick" system protecting us against Soviet nuclear aggression; second, the technological feasibility of antimissile defenses; third, the cost of this kind of defense; fourth, the cost of an ABM system in relation to our ability to meet domestic goals and problems; fifth, the risk of really turning the United States into a "garrison state" complete with a full-blown and ingrown military-industrial complex of the type to which former President Eisenhower referred some 10 years ago; sixth, the legitimate fears of our citizenry in those localities where ABM sites might be constructed; the political and moral responsibilities undertaken by the United States in negotiating the Nonproliferation Treaty; and seventh, perhaps above all, the universally recognized necessity of not feeding the fires from which a superheated arms race could be forged.

Mr. Speaker, although these are vital and perplexing issues, and although I do not claim to be a military expert, I do submit to you and to this legislative body that there exists but one fundamental criterion by which the United States must determine its policy toward ABM defenses. This criterion, unfortunately, seems so far to have been inundated by the tidal waves of claims and counterclaims that the ABM controversy has set in motion.

The criterion to which I am referring simply is that in the nuclear age there can be no strategic victory attained through military means. This being the case, the only realizable strategic goal toward which the United States can work with respect to other nuclear powers—at least until some brighter day when truly substantial and widespread arms control measures are feasible—is one or more nuclear balances that can be called nuclear standoff.

I recognize, Mr. Speaker, that this criterion is unpopular, if not anathema, in many quarters. But it is the central issue about which national debate over ABM defenses must proceed.

I accept this criterion and on the basis of it completely oppose the development and deployment of an ABM system. Until the brighter day to which I referred earlier, such a system—and possible countermeasures to it that are already being discussed—would do nothing to preserve the Soviet-American nuclear standoff that apparently now exists, but only ignite the fires from which a superheated arms race most assuredly would be forged.

Mr. BRADEMAS. Mr. Speaker, the current debate over the deployment of the Sentinel anti-ballistic-missile system raises many issues concerning not only military strategy and defense policy but, indeed, our entire scheme of national priorities.

Mr. Speaker, for too long Congress and the public have tended to accord defense programs an inviolability which is scarcely justified. While domestic programs to meet the Nation's crying needs in education, welfare, housing, and urban redevelopment continue at minimum funding levels, defense outlays swallow up nearly 10 percent of the Nation's resources.

Mr. Speaker, many informed observers contend that considerable cuts can be made in defense spending without reducing our national security.

One defense analyst, Mr. Robert S. Benson, has written a highly informative article entitled, "How the Pentagon Can Save $9,000,000,000," which appears in the current issue of the Washington Monthly. Mr. Benson, formerly of the office of the Assistant Secretary of Defense, Comptroller, and now on the national staff of the Urban Coalition, suggests some of the areas where responsible reductions could be effected in the defense budget.

Mr. Speaker, without presuming here to judge each of the reductions proposed by Mr. Benson, I do agree that it is surely time that we in Congress give much closer scrutiny to the huge sums of tax dollars that are appropriated each year for this Nation's defense system. I commend Mr. Benson's article to the attention of all Members.

The text of the article follows:

HOW THE PENTAGON CAN SAVE $9 BILLION

(By Robert S. Benson)

I have a modest proposal.

I should like to demonstrate, in as brief and as simple a way as the complexities permit, how $9 billion can be cut from the Pentagon budget without reducing our national security or touching those funds earmarked for the war in Vietnam.

Let me emphasize at the outset that this is truly a modest proposal, offered from an earnest belief in its practicality and with the conviction that savings from its adoption could be applied to our fiscally undernourished concerns for human opportunity.

The process by which the Pentagon budget—as well as the rest of the federal budget—is shaped and reviewed is a strange and not always wonderful thing. Any new program is usually given thorough scrutiny in Congress: debate rages over the program's purposes and over the level of funding required. Once it is accepted, however, only the funding level is certain to receive continuing Congressional attention. A nation's needs change, but rarely is a program's reason for existence ever challenged again, either in the executive branch or on Capitol Hill. On the contrary, its administering agency and its Congressional advocates, cheered on by its beneficiaries, strive to perpetuate or expand it, seldom pausing to ponder whether it is still worthwhile or whether something else is needed more.

The process can be insidious. Man, the social animal, takes comfort from acting in accord with the wishes of friends and associates. But over years of advocacy he loses some ability to discriminate, to relate the particular to the whole. In the case of Pentagon outlays, the built-in protection inherent in established programs often achieves invulnerability.

Because a mystique of secrecy and complexity surrounds the Pentagon, most Americans feel uncomfortable, or even vaguely unpatriotic, if they question any part of the military budget. But the fact is that the federal budget's provisions for defense far exceed our national security requirements. Although not many Americans realize it, a great deal of information about the threats to our security (and the forces we procure to meet them) can be gleaned from unclassified papers; budget statements of the President every January, annual posture statements by the Secretary of Defense, transcripts of Congressional hearings, and articles in the newspapers. Any serious student will soon discover that items in the defense budget, as in any other, range from fundamental to marginal. The difference is that in the Pentagon budget (a) vastly larger sums are involved, and (b) far less Congressional scrutiny is applied to them.

I

Using the sources above, my two years of experience in the Comptroller's office of the Department of Defense, and my own judgment of the issues, I hope first to outline how the budget can be trimmed by $9 billion and then proceed to a discussion of the weaknesses in the system which allowed this fat to survive even in the cost-conscious regime of Robert S. McNamara.

In our budget-cutting exercise these ground rules will apply:

None of the cuts is related to the war in Vietnam.

None of the cuts would impair our national security requirements.

All of the cuts are in what the Pentagon calls ongoing core programs.

All of the cuts could be effected within the next 24 months, which would allow the savings to be applied rather quickly to unfilled domestic needs.

The focus is on areas where forces or weapons systems are either duplicated or outmoded, where an enemy threat is no longer credible in today's political and technological

environment, or where money is being lost through grossly inefficient performance.

Perhaps the best place to begin is with the Manned Orbiting Laboratory, which receives half a billion dollars a year and ought to rank dead last on any rational scale of national priorities. The MOL, a carbon copy of the National Aeronautics and Space Administration's spacecraft operation, is in the budget because the Air Force wants a piece of the extraterrestrial action, with its glamor and glory, and Congress has been only too happy to oblige.

Although there have been valiant attempts to make the MOL seem different, Pentagon space research is alarmingly similar to that of NASA. Listen as Dr. Alexander H. Flax, Assistant Secretary of the Air Force for Research and Development, tries to draw the distinction for members of the House Appropriations Committee:

"If you view the objectives of these programs as being simply to get data on humans exposed for some period of time, I think you have to conclude that there is a great deal of duplication, but I tried to make the point that our objective is primarily to test equipment, not humans. The humans interact with the equipment, of course."

True, there are potential military uses for space vehicles. But little thought appears to have been given to whether a separate program was required or whether the same results could have been achieved through slight adjustments in the parallel NASA activities. The MOL program is duplicative and wasteful. Of the $600 million requested for it last year. Congress approved all but $85 million. This year's budget calls for $576 million. I would strike all of it.

As for grossly inefficient Pentagon performance, the most obvious example is manpower management and utilization. Manpower is the single largest commodity the Defense Department buys; this year, the Pentagon will directly purchase the services of nearly five million Americans. Assuming an average of $7,000 each in pay, allowances, and supplementary benefits, the department payroll is about $34 billion, of which about $22 billion goes to military personnel and $12 billion to civilians.

The Pentagon has little direct control over the costs of its civilian personnel, who are recruited mainly through a government-wide civil-service pool. But its control over military personnel is complete, covering not only the $22 billion payroll but also about $7 billion annually in training costs and nearly $2 billion in moving expenses for men changing assignments.

Most men enter the armed forces either because they are drafted or because they enlist in preference to being drafted. All enlisted men entering the service receive basic training, which in the Army takes eight weeks and costs about $1,000 per head. After advanced training in a specialty, these short-term new servicemen generally spend the rest of their hitches on assignments requiring that specialty.

A more flexible training policy would not employ such a lockstep approach. Some basic training is needed for everyone, and combat infantrymen certainly need the full eight weeks. But not all of the Army's 535,000 new soldiers this year will serve in combat, and four weeks would suffice for the others. The Navy and Air Force have already abbreviated their basic training; for the Army to do so would yield, in direct training savings alone, $50 million.

Although the pattern of training and assignments for officers is far different, even greater economies are possible—and with a clear gain in individual job performance. After initial training, which is more diverse than it is for enlisted men, almost every officer is shuttled around through an amazing variety of assignments and further training designed to give him enough breadth of experience to become Chief of Staff some day, often at the sacrifice of obtaining no deep experience in any one field. The expectation is that every seasoned officer can lead an infantry battalion through a swamp on one assignment, promulgate personnel promotion policies behind a Pentagon desk on the next, and discuss black separatism with Ethiopians as a military attache in Addis Ababa a year later.

In this age of specialization, such a philosophy is anachronistic and expensive. No efficient business would move its men around in so illogical a pattern. By perpetuating the illusion that every officer can aspire to the top organizational position, rather than screening the candidates earlier in their careers, the services suffer from having an excessive number of men struggling to learn totally unfamiliar jobs. Moreover, today's technological and analytical complexities demand the development of specialists whose entire experience is focused on performing one particular function well. By attempting to fill the growing number of specialist slots with generalists, job performance diminishes for all.

If we were to reduce by a modest one-fourth the present number of assignment changes (whereby servicemen move almost once a year), the annual saving in transportation and moving costs alone would be slightly over $500 million, to say nothing of the improvement in work effectiveness.

A further saving can be accomplished by changing the way the military calculates individual manpower requirements. Unlike business, which requires work units to absorb the impact of absences, the Pentagon includes a cushion to compensate for men absent on leave, in the hospital, in school, and en route to new assignments. And the military's 30 days of annual leave—which all servicemen get—is far more than the norm for civilian work forces of comparable age and experience, even acknowledging that the 30 days includes weekends. The military argues that this amount of leave time is compensation for being on duty 24 hours a day, seven days a week—but this is a myth long in need of explosion. Except for those at sea and in Vietnam, most military men work evenings or weekends no more and no less than civilians do. Cutting leave time to 20 days a year—with the exception of men on hardship duty overseas—would reduce the total armed forces manpower requirements enough to save $450 million annually.

Thanks to Beetle Bailey, *Catch 22*, and the fact that so many Americans are veterans, the supernumerary theory of military staffing has had great visibility. But an area of far greater inefficiency—supplier performance on large weapons system contracts—draws almost no attention at all. This is especially serious because the same contractor who can be extremely efficient under the conditions imposed by the private competitive marketplace can waste millions when working under a government contract. Few Americans are aware that about 90 per cent of the major weapons systems that the Defense Department procures end up costing at least twice as much as was originally estimated. Some of this cost growth comes from Pentagon-ordered changes in design or configuration, but much of it results from inefficient contractor practices or from his knowledge that the government will underwrite his excessive overhead.

It is up to the government, therefore, to impose on a non-competitive defense contractor the same cost discipline that the contractor would be forced to impose on himself in a competitive situation. Instead, the present procurement system is geared almost exclusively to securing timely delivery and good technical performance. Cost comes last.

The engine contract for the controversial F-111 fighter-bomber offers a classic illustration of what happens to costs after a decision is reached to proceed with procurement.

An aircraft of this kind has three major components: airframe (wings and fuselage), avionics (electronic navigation and weapons-guiding gear), and engines. For a technologically advanced fighter-bomber, the airframe will account for about 55 per cent of total cost, avionics 25 per cent, and engines 20 per cent. The initial F-111 contract for 2,053 engines was awarded to Pratt & Whitney on the basis of an estimated cost of $270,000 per engine. Today the engines are expected to cost more than $700,000 each.

In the F-111 case, and in general, four major factors account for such cost escalation:

1. The Buy-In: Our procurement system encourages contractors to play the game called "buy-in." The rules are simple. Contracts are awarded to the company which offers the lowest bid with a straight face. Later cost overruns may bring a mild reproach or a stern reprimand, but they will not prevent the contractor from getting enough money to cover all his costs and pocket a profit. A contractor rarely takes these reprimands seriously; he knows that his competitors have similar experiences. Besides, the procurement officials have told him to worry about performance and prompt delivery, not about cost. So the buy-in game produces initial cost estimates that everyone knows are unrealistically low.

2. Design Changes: From the time bids are requested on a new weapons system until final delivery, a great many changes in design specification develop. These changes are often initiated by the Defense Department, although some reflect contractor production problems. In either case, the costs change—usually justifiably, but almost always upward.

3. Volume: Changes in volume are even farther beyond the contractor's control. In large contracts, economies of scale are often achievable; if a weapons system is found highly useful, as was the F-4 fighter, and more units are ordered than were initially planned, the later unit costs are lower. In the case of Air Force F-111, however, cancellation of British orders and the Congressional decision to kill the Navy version reduced the number of aircraft to be purchased, thereby raising the unit cost.

4. Sheer Inefficiency: These costs arise because a contractor has slipshod purchasing procedures, poor scheduling of men and machines, ineffective work standards, or other managerial deficiencies. Such extra costs would be a threat to a company's survival in the competitive private marketplace; they should not be tolerated in defense procurement.

In calculating how much of the F-111 engine's cost growth was due to this intolerable fourth factor, we need to begin by figuring how much the first three factors cost.

We know that the original $270,000 estimate was artificially low. Allowing for buy-in fibbing and for some early required changes in design, an initial figure of $450,000 would have been more realistic. Later design changes may have raised the allowable price to $500,000. But the contractor's final estimate of $700,000-plus, made after the British action but before the Congressional cutback, probably should not be adjusted for volume changes, because the British buy was to have been proportionately very small and there are good indications that this actually enabled Pratt & Whitney to disengage itself from some expensive subcontracts. So unjustifiable contractor inefficiency amounted to around $200,000 per engine.

It could have been worse. Past practice in such cases, where the government is dealing with a single supplier rather than with several competitors, has been to accept whatever price is commensurate with the costs

the supplier has incurred, regardless of how efficient or inefficient he is. But, in an unprecedented action, the Defense Department ordered an investigation of Pratt & Whitney operation to determine how much such an engine ought to cost if produced under efficient manufacturing procedures. After that, the Navy—which had contract responsibility for all F-111 engines—took the further unprecedented step of unilaterally setting the price it intended to pay. Indications are that the Navy compromised its position somewhat after some hard bargaining, but the final contract did reduce by about 15 percent the price proposed by the company, which customary procedure would have accepted outright. This saved the government roughly $200 million.

Two other good examples of spiraling costs were described in recent hearings before the Congressional Joint Economic Committee. A. E. Fitzgerald of the Defense Department reported that the C-5A transport may cost $2 billion more than the original contract ceiling of $3 billion; yet when Defense negotiated the contract with Lockheed, then-Secretary of Defense Robert S. McNamara described it as "a model method of doing Defense business . . . a damn good contract." In another case, retired Air Force Colonel Albert W. Buesking, a former financial officer for the Minuteman intercontinental ballistic missile, said the Minuteman contractors received a 43 per cent pre-tax profit based on net worth, or about twice the normal industrial return; he estimated that defense contract costs are 30–50 per cent "in excess of what they might have been under conditions of competitive-type commercial environment."

Conservatively assuming that aerospace and shipbuilding contractors harbor an inefficiency of 15 per cent, and figuring that the average annual amount provided for research and procurement of such systems over the past three years is about $17.9 billion, then wiping out the inefficiency would annually save the government $2.7 billion.

This is no pipedream. It requires no dramatic breakthrough in management techniques. Such savings could be achieved quickly if the Secretary of Defense and the Secretaries of the individual services resolved to focus the energies of their top financial and engineering men on procurement of these major weapons systems. What is needed is some truly independent cost-sleuthing into contractors' operations, with firm backing from top Defense management for appropriate follow-up efforts.

The most fruitful way of all for saving defense dollars is to eliminate forces which no longer pack a credible punch or which were designed to meet a threat that is no longer credible.

The Navy's Polaris/Poseidon fleet ballistic missile program is vital to our national security. But the Navy's three primary and independent conventional warfare missions—tactical air, amphibious operations, and shipping protection—are overequipped, as are their associated support units. Current force levels cannot be justified by any potential threats. In my view, President Nixon was misguided when he decried America's loss of sea power during the campaign last fall. He made the mistake of applying the same argument the admirals use when they attempt to eternalize and expand their favorite programs: that the United States must have superiority in numbers, ship-type by ship-type, over the Soviet Navy. This is a legacy of late 1940's thinking, when it was assumed that we must always be ready to fight and win an extended war at sea. In the nuclear age, such thinking is highly unrealistic.

Fifteen aircraft carriers are presently assigned to the Navy's tactical air mission. Since the wallop they pack is purely the firepower of their aircraft, they should be compared with the alternative means of delivering that firepower—Air Force tactical aircraft. Carriers can deploy quickly to areas where we have no airfields, and they are safe from insurgent attacks (though they now appear to be vulnerable to Russian Styx missiles). But this flexibility comes at a high price. Independent studies place the cost of carrier-based tactical missions at three to four times that of similar missions flown from ground fields. Because of the many air bases we have built all over the world, we can rapidly deploy land-based aircraft to most areas. Carriers still play a necessary role in providing the potential to fight in a handful of otherwise inaccessible places and in meeting initial "surge" requirements for a non-nuclear war. But there is no justifiable reason to use them on extended deployments in major wars as we do now in Vietnam. Although the Defense Department will never admit it, the only reason we continue to employ carrier-based air strikes there is that the jealous Navy doesn't want to be shut out of some role in the war.

Tactical aircraft carriers could be cut from 15 to 10 without risk to the country's security. The average annual peacetime operating and modernization/replacement cost per carrier appears to be about $120 million. Assuming that the costs of expanding Air Force tactical missions to take up the slack were one-third as much, the net annual saving from the elimination of five carriers would be $400 million.

Marine Corps amphibious assault tactics have been used in minor contingencies such as Lebanon and the Dominican Republic, but against a major power they would be highly vulnerable to a tactical nuclear weapon. Nor are Marine forces now structured logistically for sustained combat, the type of war that Vietnam would suggest is most probable. Without eliminating any Marine troops, we could—by restricting their amphibious training and equipment phasing out a proportionate share of assault ships—save $100 million annually.

A classic example of continued spending for protection against a no longer important threat is the third major area of Navy tactical forces—protection for shipping. The structuring of our anti-submarine and supporting anti-aircraft and fleet escort forces harks back to the post-World War II prospect of a sea war with Russia. If we ever do begin destroying each other's ships, there seems little prospect of avoiding escalation to nuclear war, which would make shipping protection irrelevant. Further, as various jumbo aircraft near production, the cost gap between a ton-mile of plane transportation and a ton-mile of ship transportation is narrowing. Yet instead of scaling down our protective forces, we are keeping them up and even expanding them, through last year's implausible decision to begin procuring VSX anti-submarine aircraft. Killing this program and reducing overall shipping defenses to a sensible level—four anti-submarine carriers and three air groups rather than the present eight carriers—would save an annual $600 million.

Another major area in which our involvement is unreasonably large is our troop commitment in Europe. We have about 310,000 soldiers there now, accompanied by more than 200,000 dependents. Such a staggering share of the NATO burden was appropriate while our World War II allies struggled to get back on their feet, but they can now afford a larger load. Part of the thesis behind U.S. deployments is to make certain that any substantial attack by Warsaw Pact forces would engage American forces, thereby creating potential consequences that the Soviet Union would find untenable. But this could be assured with far fewer than 310,000 U.S. troops. Says Senator Stuart Symington (D-Mo.), a former Air Force Secretary recently assigned as chairman of a Foreign Relations subcommittee that will investigate the involvement of U.S. forces abroad: "Surely 50,000 American troops would be sufficient to make sure that no Soviet probe could succeed in Berlin or elsewhere in Europe without a direct confrontation with the United States."

In the event of a truly major Soviet attack, not even 310,000 U.S. troops plus the NATO allies' forces would be sufficient to thwart it. But both sides recognize that an assault of such proportions is likely to evoke a nuclear response.

Psychological reasons prevented us from making a major cut in our European forces close on the heels of the Russian takeover in Czechoslovakia last year. But that should not deter us from effecting the cut this year. If anything, our non-response to the Czech invasion simply reinforces the reality learned in Hungary in 1965—that the United States is not about to send troops into Eastern Europe no matter what the Soviet provocation.

Realistically, we could cut back to a total of 125,000 troops in Europe plus 50,000 at home earmarked for NATO contingencies, and cut by one-fourth the air power assigned to the European theater (a McNamara comparison shows that NATO air forces can deliver a payload more than three times greater than that of their Warsaw Pact counterparts). Altogether, these reductions would annually save about $1.5 billion.

The final two programs of questionable value—the SAGE-Air Defense Command system and the Sentinel anti-ballistic missile system-share some common characteristics. Both are defensive, in an age when the balance of terror rests on offensive missile strength. Both encompass a detection function and an intercept guidance function. And numerous technical experts express serious doubts about the potential operational effectiveness of either.

SAGE represents yesteryear's attempt to defend against the Soviet version of our Strategic Air Command. It is widely conceded that the Soviets have grounded their bomber development efforts and no longer pose their primary strategic threat in this area. Nonetheless we persist in trying to further refine our bomber defenses, when in fact we have already achieved a satisfactory capability in the detection sphere. Moreover, SAGE's role as a guide to interceptor pilots is rather superfluous, given its imperfections and our primary reliance on a strong offensive deterrent. Some reductions have already been effected in the Air Defense Command, but conversion from a full defensive system to purely a warning system ought to save $600 million annually.

If SAGE is intended to sustain a mostly futile yesteryear system, the Sentinel ABM represents a misguided attempt to provide protection tomorrow. Against the destructive power of the missile, our best defense is a good offense. Particularly tragic is the staggering cost of a full-blown "thin" Sentinel system. Because it is so expensive, and the work is therefore parceled out to many Congressional districts, many politicians have favored it. It therefore may be difficult to stop before we have spent $40 billion. However, the Sentinel program faces increasingly fervent opposition in the Senate this year—partly because residents in four cities where ABM sites are being developed have objected so loudly.

Sentinel would make some sense if it truly promised blanket protection against strategic offensive missiles. But it doesn't. As Secretary McNamara said in a speech in San Francisco 18 months ago: ". . . any such system can rather obviously be defeated by an enemy simply sending more offensive warheads, or dummy warheads, than there are defensive missiles capable of disposing of them."

Secretary McNamara opposed the Sentinel, but President Johnson overruled him and decided to proceed with the program. Today we are on the road toward building a $5

billion ABM system, ostensibly for protection against Chinese missiles—as yet undeveloped—should Peking miscalculate our potential response and attack us.

It seems unrealistic not to expect the Soviets to perceive the $5 billion "thin" Sentinel as a first stage in a $40 billion "thick" defense against themselves. Senator Richard B. Russell (D-Ga.) said as much last year when he was chairman of the Senate Armed Services Committee: ". . . there is no doubt that this is a first step in a defense system against an atomic attack from the Soviet Union." Yet all seven of the men who have served over the past decade in the jobs of Science Adviser to the President or Director of Research and Engineering in the Defense Department have recommended against deployment of a "thick" ABM system designed to protect our population against a Soviet attack.

By halting the Sentinel now, before it acquires irreversible momentum, we could save $1.8 billion this year, not to mention vastly larger sums during the next decade.

The items above do not exhaust the list of things to cut—there are other savings to be made in such areas as mapping operations, the reserve forces, logistics—but the total here will serve as a start. It amounts to: Total savings, $9,276,000,000.

II

If all these Pentagon budget cuts are so obvious, why didn't the cost-conscious McNamara regime push them through? Did the Whiz Kids fail? Were they really trying? I think a fair assessment would have to conclude that they were trying hard but were only partly successful, for five basic reasons.

First. McNamara's Band was greatly outnumbered by experienced adversaries bound together by a shared goal—more and bigger military programs. All the elements in this military-industrial-Congressional complex are served by an enlarged defense budget, though their motivations are different. Industry wants greater sales and profits. The military wants expanded power, plus the assurance that they will be on the forefront of technology. Congressmen respond to pressure from contractrs and military employees in their districts, and those on the military committees yearn for the prestige and power that comes from presiding over a bigger slice of the federal pie. The combination made life difficult even for a man as strong and courageous as Robert McNamara.

Second, in selecting systems to analyze for effectiveness, the Whiz Kids chose to concentrate on the relatively uncluttered strategic programs instead of digging into such fat and messy activities as we have catalogued here. Within their selected framework, they generally performed technically sound, objective initial analyses. Once they arrived at a position, however, they too often "overdefended" their conclusions; that is, they were unwilling to reassess them against subsequent cost experience, technological advances, or a changing international political environment. For example, the current structuring of our programmed airlift/sealift needs emanates from a carefully developed linear programming model. This model attaches a high value to rapid deployment, stemming from an early 1960's Europe-oriented study which showed high benefits in terms of political bargaining power and casualty minimization. This analysis still makes good sense in Europe, but now appears grossly mis-applied in Asia. Yet nothing has been done to revise the high value placed on rapid deployment. Such a change would point to a different desired mix of airlift and sealift.

Third, the Defense Department's budget review process concedes too much at the beginning. Last year's budgeted amounts are generally taken by everyone as this year's starting points. This practice ignores the possibility that fat crept into preceding budgets or that some of last year's activities are now outmoded. Consider, for example, the subject of training, in which the armed services have been pioneering for years by applying new technology to education. This area should be a prime candidate for frequent review from the ground up (what the managers call "zero-base" budgeting). Rather, the Defense Department budgeting process virtually concedes last year's amount and focuses on whatever incremental changes have been requested. The result, of course, is higher budgets, with past errors compounded year after year.

A fourth limitation also derives from the planning and budgeting system. Discussions about the desirable level of various forces are conducted in terms of numbers of things—missiles, carriers, fighter wings. This flows naturally out of intelligence estimates of enemy forces and subsequent analyses of how much counterforce the United States needs to nullify them. Approval is then given to the Air Force to buy 40 more fighters or the Navy to buy four more submarines, each with specified capabilities. But carrying out such purchases is not like walking into an automobile showroom and asking for a yellow Plymouth Belvedere sedan with power steering. As a submarine is built, many unanticipated choices present themselves; they involve different levels of effectiveness or convenience for different levels of dollars. Inevitably the generals and admirals want to buy as much capability as possible; it is almost always more than is required to meet the threat. For want of adequate follow-up by top procurement officials, the generals often have their way.

Finally, the President and the Budget Bureau have shied from making public any meaningful comparisons between military and domestic programs. Systems analysis, the technique that aims to measure the relative national worth of results obtained from alternative programs, cannot precisely compare the benefits to be gained from highly diverse activities. Yet inexact as such comparisons may be, the Budget Bureau does make them and present them to the President from time to time. If the President, for his part, were to discuss national priorities more frequently and candidly with the public, then Congressmen might be less likely to base their judgments on the only other available view—that the present balance of activities is about right.

The present balance of activities is anything but right. Unmet national concerns for human opportunity and the quality of life require an investment even larger than the amount that would be freed if all of the Pentagon reforms outlined in this report were carried out.

Perhaps the clearest, most thorough delineation of these high-priority social needs is found in the report of the National Advisory Commission on Civil Disorders. To redress root causes of despair and frustration, the Commission recommended a long series of measures which, if enacted in full, would cost between $13 billion and $18 billion a year over their first several years.

The only way to begin addressing these unfilled needs is to take money away from Pentagon programs that must rank lower on any rational national-priority scale. Examples provide compelling support for this argument. We have such choices as:

Funding the Manned Orbiting Laboratory—or providing Upward Bound summer courses for the 600,000 additional ghetto students who have the potential to go to college;

Spending this year's Sentinel funds—or training 510,000 more hard-core unemployed;

Continuing to operate one of the marginal tactical aircraft carriers—or training and supporting 20,000 more Teacher Corps members;

Maintaining our full troop complement in Europe—or diverting an additional $10 million to each of 150 Model Cities.

Permitting excessive contractor costs to flourish unchecked—or providing Head Start education for 2,250,000 more children, plus enough school lunches to feed 20 million children for a whole year.

These alternatives are real and immediate. They do not represent wishful dreaming. The choices are up to Mr. Nixon, to the Congress, and ultimately to ourselves.

Mr. REID of New York. Mr. Speaker, I welcome the opportunity to state again my conviction that the ABM-Sentinel system should be deferred pending early talks with the Soviets on slowing down the nuclear arms race and obtaining verifiable agreement not to build a new generation of defensive and offensive missiles.

Indications are that the Soviets are interested, indeed, quite interested, in having these talks now, before major decisions are set in train in either country. I am hopeful that the administration will undertake the necessary diplomatic footwork now and following the President's trip to Europe to encourage these vital talks while there is yet time.

The Department of Defense originally intended the Sentinel to be a defense against the sophisticated Chinese missiles of the 1980's. However, as Jerome Weisner, provost of the Massachusetts Institute of Technology and former science adviser to President Kennedy, said:

A careful analysis of the Sentinel system . . . does not show that Sentinel would provide protection against Chinese nuclear weapons for very long unless we make some unbelievably naive assumptions about the Chinese—that they do not have access to our journals and newspapers, for example, or that they are simply not thinking people.

Now, the purpose of Sentinel is even less clear since its deployment is being suggested as a lever to be used in bargaining with the Soviets.

In fact, however, these rationalizations are both meaningless and the latter counter-producing because moving forward on a thin missile system now may well encourage the military in Moscow to stimulate expansion of its offensive arsenal, thereby beginning a progression of escalation that neither Government will be able to stop. If either or both countries start a major new generation of missiles it could confirm the hardliners in the Presidium, rigidify the diplomatic atmosphere, and reduce diplomatic options generally.

The cost, of course, could devastate any plans for appropriations to meet the needs of the cities here at home and implementation of the year-old and largely unheeded recommendations of the Riot Commission report. The initial price of the expanded ABM system is now estimated at well over $10 billion and could lead to an eventual expenditure in excess of $100 billion.

Many voices will be raised in support of the ABM by the military-industrial complex but I strongly believe that this is the time to move the world away from the risks of nuclear confrontation. Further, article VI of the Nuclear Nonproliferation Treaty soon to be taken up

by the Senate states that the nuclear powers will undertake "to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament." As Senator GORE pointed out, for the United States to assent to the treaty and at the same time to build a defensive missile system would be an act of inconsistency evidencing very little good faith. This is the time to move instead toward negotiations and to give a much higher priority to the Nation's most pressing needs—education, jobs, decent housing, adequate health care, and the rebuilding of our cities.

Concern over national security must not create an obsession with hardware and the trappings of destruction in the backyards of our citizens. I would strongly urge that the Defense Department's current review of the ABM program give searching consideration to its necessity, instead of simply its location, and that any decision be deferred pending talks with the Soviets which I very much hope will lead to agreement.

Mr. WOLFF. Mr. Speaker, the issue of whether or not the United States should deploy an anti-ballistic-missile system is one that understandably should concern all Americans. The course followed by the United States on this crucial question could well determine the future course of world events. And in this awesome nuclear age our decision could determine whether or not the human race is to survive.

I might also note I have an interest in this issue that comes closer to home. Sands Points, Long Island, N.Y., which is in the Third Congressional District is under consideration as a possible ABM site and thus the decision on deployment will immediately and directly affect my constituency.

Recognizing the great moment attached to a decision on the ABM, I am pleased to participate in this discussion which I trust will be the first of many such discussions in the Congress on deployment of the ABM system.

To date the Department of Defense has failed to provide substantial evidence that deployment of an ABM will provide security necessary to our national interests. The ultimate criterion of a decision on the ABM must be our national security and scientific data disproves the so-called effect of the ABM.

The simple and disturbing fact is that an ABM system will not defend the people of this Nation against sophisticated weapons already possessed by the Soviet Union and within the grasp of Communist China.

The ABM is a boondoggle that will create unjustified confidence among the American people. This could, in turn, bring about support for a more aggressive foreign policy in the false belief that the United States enjoys some kind of immunity from nuclear attack.

The ABM will not provide that immunity and appears to be a convenient device of the military-industrial complex to absorb the reduction in defense spending that will accompany a decrease in hostilities in Vietnam. General Eisenhower, in his eloquent farewell as President, made a strong plea that the United States be wary of the military-industrial complex. That plea should be remembered time and again as we discuss proposals for an ABM.

There are other reasons to oppose deployment of an ABM system at this time:

Deployment of the ABM by the United States could involve us in an escalating arms race and prevent needed negotiations with the Soviet Union on arms limitations.

The high cost of the ABM, a minimum of $10 billion for a thin line and as much as $100 billion for a thick line, would not provide any meaningful improvement in our defensive posture.

I believe the information available thus far makes a compelling argument against deployment of an ABM system by the United States.

Mr. UDALL. Mr. Speaker, as we sit in this Chamber today it is awful to realize that we could be playing out one of the final acts in our Nation's history—indeed, in the history of what we know as modern civilization. I hope and pray this is not the case. I trust it is not the case. But I base my confidence, in part, on the assumption that President Nixon will not accede to pressures from the Defense Department and segments of the defense industry to resume work on the Sentinel anti-ballistic-missile system.

These are strong words, to be sure, but they merely indicate the depth of my convictions in this matter. I firmly believe that a decision by this administration to resume construction of the Sentinel system could lead to a new and uncontrollable spiral in the nuclear arms race. I firmly believe that the end result of that process could be nuclear war, not between China and the United States, but between the Soviet Union and the United States. And I believe such a war would bring about the total destruction of our society, that of the Soviet Union, and that of many of the nations with which these superpowers are allied. In short, it would be the end of most, if not all, of modern civilization. It would be a calamity of such proportions that, just possibly, there might never be a history book to record it.

I have chosen to speak in such sweeping terms, Mr. Speaker, not to frighten anyone but to drive home a point that seems to be missed by many people today. That is simply this: War has changed, not just a little, but completely. It is nonsense to use the old terms of bravery and courage and national pride and apply them to nuclear war. It is suicidal to talk about defense against enemy attack and have your people assume that any meaningful defense is possible.

Many people still talk glibly about the "next war," as though this would be just another war like all past wars—painful and costly, perhaps, but something to be endured and beyond which life could still continue.

Even President Nixon, for one brief moment on inauguration night, caught himself thinking in the old terms. He recalled dancing to the music of Guy Lombardo at the end of World War II and said he hoped to be able to do so after the "next war." I do not criticize him for it—anyone could make such a slip—but it served to dramatize the kind of mental adjustment we all must achieve if we are to deal realistically with the world of the 1970's. If we value human society, if we attach importance to 5,000 years of history and to the future of the human race, we cannot talk about the "next war." It is as simple as that.

For this reason I was greatly relieved when the administration on February 6 announced it was ordering a temporary halt in construction work on the Sentinel system pending a review of the program. However, I was not heartened a few days later when Secretary Laird indicated he expected construction to resume. I believe resumption of work on this missile would be a disaster. And I look to President Nixon to see that this does not occur.

Mr. Speaker, in such matters as this the point is made, all too often, that ordinary citizens, and even Members of Congress, cannot have all the facts. Therefore, the military must be trusted to do the right thing. Surely, this argument must raise a few eyebrows in view of the succession of mistakes, miscalculations, and blunders associated with our war in Vietnam, all on the best military advice. Choices between Springfield rifles and carbines may be the proper business of the military experts, but choices between war and peace, life and death, existence and annihilation, are choices that can only be made by the American people as a whole. It is time that issues of this nature, affecting the lives and futures of all of us, are dealt with openly and honestly and fully.

In his book, "Thirteen Days," the late Robert Kennedy told of the advice of the Chief of Staff of the Air Force to President Kennedy during the Cuban missile crisis. That advice was to launch a military attack on Cuba, even though that would mean the loss of many Russian lives and threaten nuclear war with the Soviet Union.

On another occasion, Senator Kennedy wrote, a member of the Joint Chiefs of Staff told him he believed the United States should make a preventive attack against the Soviet Union. These are further evidences, if more are needed, that decisions like these cannot be left solely to our so-called military experts.

At this moment in time some of our military experts are telling us that a Sentinel anti-ballistic-missile system could protect this country totally from the threat of Chinese intercontinental ballistic missiles. This is nonsense. Anyone remotely acquainted with the nature of the problem faced by the attacker, as opposed to the problem faced by the defender, will know that this claim cannot be supported.

Prof. George Rathjens, of Massachusetts Institute of Technology, in a paper published by the Carnegie Endowment for International Peace, makes this observation:

It must be borne in mind that the offense can choose any target on which to concentrate its attack; the defense must defend all.

Obviously a thin ABM system will not do the job. And even a complete ABM system, covering all areas fully, could not eliminate the possibility of a Chinese missile reaching its target. Thus, there is no way, in his judgment, that the United States could deny to China some of the bargaining power its nuclear missile threat poses.

In view of this situation, combined with the fact that the Sentinel system could never be tested once in place, I believe it would be the highest folly to proceed to build such a system and, in the process, trigger a new and exceedingly costly arms race.

Since the first rush to build intercontinental missiles in the late 1950's and early 1960's the world has enjoyed a period of relative stability in nuclear arms. While the United States had considerably more nuclear strength than the Soviet Union, each nation knew it had the "assured destruction capability" needed to stay any aggressive act by the other. No matter what happened, we knew we had weapons we could rain on the Soviet Union if it attacked us, and the Soviet Union enjoyed the same certainty.

Now, however, this stability is challenged, and curiously enough the initiative for a new spiral in the arms race is coming, not from the Soviet Union but from the United States. We have based our decisions on the most questionable suppositions concerning the military plans of the Russians and the Chinese. We have started building a new generation of missiles, with multiple, targetable warheads, to counter what we thought was to be an anti-ballistic-missile system, only to discover that it is apparently an antiaircraft system. And we have started an ABM system of our own to counter a Chinese capability of the most minuscule size, apparently expecting the Russians to ignore its existence—even though such a system could alter significantly the effective strength of the Soviet Union.

Mr. Speaker, if there is one lesson that past wars can tell us, it is that contending nations never ignore the military preparations of their adversaries. Invariably, every action has its equal and opposite reaction. To assume that the Soviet Union will stand still and do nothing when we make a significant change in the balance of power now prevailing is naive in the extreme.

I wonder, Mr. Speaker, whether the American people have any idea of what costs are at stake in this controversy. I refer, not just to the ultimate costs of nuclear war, but to the funding of nuclear arms procurement.

Hopefully, this Nation will see an end to the Vietnam war in the next year. When that occurs, the $30 billion cost of that military venture will begin to taper off, and conceivably our country will have some additional funds to spend on the long-delayed problems plaguing our domestic scene. This will not be so, however, if the advocates of the Sentinel system and other new nuclear arms have their way. The figures assigned thus far to the Sentinel system are only a drop in the bucket. Billions more will follow, not only to complete that system but to build all the other systems necessary to respond to the steps taken by the Soviet Union in response to our initiatives. Quite literally, these costs could go off the chart completely. The point could be reached where, for sheer self-preservation, we would have to devote the major portion of our entire Federal budget to nuclear procurement.

Looking at that dismal prospect, one has to wonder how anyone in his right mind could advocate construction of a defense system to counter a threat of such minor significance as that of Communist China in the 1970's.

To those who say, "Ah, but the Chinese are irrational; we cannot trust them even to act in accordance with their own self-interest," I would say read your history. Those whom men and nations conceived as potential enemies have always been accorded subhuman, beastly and irrational traits. Consider the "yellow peril" feared so long by Kaiser Wilhelm. That very same notion cropped up only last year in the words of our own Secretary of State. To base a nation's foreign policy on such a bogeyman psychology is hardly to exercise the rationality we claim to possess.

Mr. Speaker, I believe I speak for most of my constituents when I say that the Sentinel system must not be constructed—at least not until every conceivable effort has been made to slow down or halt the arms race. I commend President Nixon for halting its construction, and I pray that he will have the wisdom and courage to make that decision permanent.

Mr. DONOHUE. Mr. Speaker, I am happy to have this opportunity to further record my views on the proposed construction of an anti-ballistic-missile system, whether thin or thick, around the country.

I have already made public pronouncement, through the news media, of my very great fears, on the information so far presented by the administration and Defense Department, that this proposal is not in the best interests of this country and the people throughout the world.

In summary, my fears are based upon three primary factors about which there are grave questions that, thus far, remain to be convincingly answered.

The factors and questions are interrelated, but perhaps the first one should be—has the system been demonstrated to be technically workable and militarily effective? The immediate and obvious answer is that many eminent and knowledgeable scientists do not believe it is technically sound nor that it could be militarily effective in its objective. It has not been tested and it does not appear practically possible to fully test the system on these counts.

The second question that calls for answer in this matter is whether or not its construction would aid the administration in arriving at arms reduction and control agreements with Soviet Russia, and others, or whether it would rather accelerate a further and more tragically reckless arms production race. Perhaps no one but the Russian leaders themselves could answer this question, but it is rather openly admitted on our part, that this is an area in which no certainty at all can be developed. At best, it appears to be a gamble that would be very hard to justify.

Another question is whether this proposal is financially prudent and feasible. The various estimated costs of this system seem to range anywhere from $5 billion to $50 or $80 billion. During this critical financial period of our history, when we are calling for valiant efforts and great sacrifices to balance the budget and get back on a sound financial course, an expenditure commitment of such vague range and indefinite limit cannot, by any standard, be classified as economically prudent or practically feasible. The final but not the least important question to be answered is whether the system is absolutely safe from an accidental explosion of catastrophic proportion. While we all know that responsible officials would exhaustively exert every technical resource to prevent accidents, we, nevertheless, must reflect that whenever and wherever human techniques and energies are involved, there is hardly ever such a thing as perfect safety.

Mr. Speaker, there is no more challenging problem, other than the peaceful ending of the Vietnam war, before the country today than this proposed construction of the anti-ballistic-missile system. It must, therefore, be given the most searching and thorough examination with full and open discussion, for rejection or resumption, by every responsible segment of our Government and our national society. I am pleased that the Defense Secretary and the administration are reviewing the problem now and that appropriate committees of the Congress will conduct their separate and complete inquiries as to the necessity for and feasibility of this tremendous military project.

We shall all be waiting for the additional information and recommendations that will come from the reviews and inquiries by these separate sources, but I am impelled to state that until and unless all the very grave doubts and uncertainties that currently surround this vitally important proposal are satisfactorily resolved, I shall be constrained to retain my present conviction that the construction of this system, as proposed, is not essential or prudent, nor would it be militarily effective or accident free.

Mr. ROBISON. Mr. Speaker, I should like to express my appreciation to the gentleman from Illinois (Mr. YATES), and to those others who have sought to give us this further opportunity to discuss the highly complicated and complex issues involved in any consideration of an anti-ballistic-missile system.

I regret that other commitments, this afternoon, have prevented me from being here to listen to and to participate in such debate as has heretofore gone on, and I offer these remarks with knowledge that they may, therefore, in some way be repetitive of what has already been said.

However, Mr. Speaker, I do wish to express for the RECORD once again my very deep concern about the wisdom of going ahead, now, with the deployment of any form of an ABM system. In doing so, I recognize full well the fact that neither I—nor any of us—can speak to these issues with any certainty, and this is precisely because, as the Washington Post said editorially on yesterday, so many of these issues "fall in the realm of the unknowable at present," involving as they do ultimate decisions that cannot "be established by argumentation or by flat assertion or by the yes-it-will versus no-it-won't approach."

Then, as others may already perhaps have noted, the Post went on to decry what it called "the recurrence of the disturbing custom of stating as certainty what is at best prediction and speculation at this point—that the limited system would or would not work, that it will or will not inspire a new round of weapons development in the Soviet Union, that it is or is not necessary by way of keeping current with new technology that may be required to meet a new Soviet threat, and that it will prove useful or the exact opposite to the chance of reaching a missile limitation agreement with the Soviet Union."

In such an absence of certainty, Mr. Speaker, one must proceed largely on instinct, tempered by as objective an analysis of our present situation—vis-a-vis both Russia and Red China—as one can muster.

Proceeding along that line as best I could, I first expressed my reservations about the wisdom of proceeding with the actual deployment of an ABM system by my "no" vote—one of only 26 so cast—against the military construction appropriation bill of 1968, as it passed this House on a rollcall vote on October 24, 1967, and I have subsequently supported such moves as were made in this body to remove deployment funds from follow-on authorization or appropriation bills dealing with this subject.

Briefly stated, my position has been and remains one of believing we must proceed with such additional and advanced research and development work on such a system as those who are experts in this field, and on whose judgment we must so heavily rely, advise us may be necessary.

But I have been and remain unconvinced that our actual need for whatever additional protection such a system—in its present uncertain state of development—may provide us is such that we must go ahead with deployment now.

I believe it to be important for us to attempt to keep this distinction between research and development programs and the actual beginnings of deployment of whatever "thin" or "thinner" system we are technologically able to put together now foremost in our minds.

Keeping that distinction in perspective, it seems to me, would be helpful to President Nixon in his announced ambition—which is one I have applauded—to make the coming era one of "negotiation" rather than "confrontation."

For we are clearly moving under our new President toward some form of discussions with the Soviet Union in which, as Secretary of State Rogers admitted before the Senate Foreign Relations Committee the other day, the question of deploying an ABM system will be a "big issue," and in his own words "an item of very great importance."

Of course, it will be, Mr. Speaker—it could not be otherwise—and I believe it is urgent, if we are to grasp this new and possibly last chance at slowing the pace of the senseless arms race, that we give our President the support and encouragement he may need to approach those pending discussions under the best possible terms for success.

Quite frankly, I do not see how our going forward with deployment of a very limited ABM system now adds one iota to our negotiating strength. I fully appreciate the sincerity of those who have come to an opposite judgment on this question, but I think they are wrong because our negotiating strength rests, as it will more and more in this age of complicated and highly advanced weapons systems, on our vast and oft-demonstrated technological superiority.

The leaders of the Soviet Union most surely respect that facet of our overall strength.

On the other hand, our at least temporary restraint in refraining from putting into being an ABM system of doubtful value that could have the appearance—though probably not the substance—of tipping the present nuclear balance between ourselves and the Soviet Union, ought to demonstrate to Russia's leaders, as to the world, that we are prepared to negotiate in earnest.

Mr. Speaker, I cannot say—nor can anyone say—what the Russian response to this might be, but if we are to have a chance to earn the title of peacemaker, which is something Mr. Nixon in his splendid inaugural address said is "the greatest honor history can bestow," then I think it behooves us to run the risks incidental, whatever they may be, to our attempting to find out.

Mr. CULVER. Mr. Speaker, I believe it is imperative that a genuine top-level review of the proposed Sentinel anti-ballistic-missile system be undertaken. In my judgment, the very serious questions raised by the proposed deployment of this new weapons system require that we in the Congress give our careful consideration to the technical, the political, the military and the economic issues posed by this new undertaking. I believe that at the present time adequate answers are not available, and therefore, I think it would be unwise, imprudent and potentially dangerous to proceed toward another spiral in the arms race at this particular time.

It is in no way to cast doubt on the achievement, or the ingenuity, or the technical capacity of the American scientific community to suggest that the technical limitations involved in designing and testing a missile that can find and destroy another missile are great indeed. In fact, a substantial body of opinion in the scientific community holds that such a missile is technically unfeasible.

In my view, the strategic importance of the Sentinel system has a dimension that has not been adequately explored. And like the technical limitations, this too, cautions further investigation and deliberation before a deployment decision is made.

The security of our Nation surely depends as much on the degree to which we can understand, live with, and work toward a mutual reduction in tensions with our adversaries, as it does on maintaining our military strength at a level where no adversary would be willing to pay the cost in destruction of human life and society that would surely follow a nuclear attack on this country. These are, I suggest, the two sides of a balance involved in our security.

In addition to very possibly encouraging another round in the arms race, deployment at this particular time may well cost us our security in yet another respect—that of lost opportunities for meaningful disarmament discussion. In my judgment, this can best be fostered by withholding a final decision on Sentinel deployment until we can at least make some test of the Russians' good faith in arms negotiations.

Finally, in times when the problems of our Nation demand an ever-increasing share of the tax dollar, legislators have, I believe, a special responsibility to be certain we are buying real security with defense dollars, not false security or even worse, less security. The sums we are talking about are truly astronomical. For the "thin" system, costs have been estimated in excess of $6 billion. For the "thick" system which several—including Secretary of Defense McNamara—have advised against, costs would be well over $50 billion.

For these reasons, Mr. Speaker, I believe that Congress should turn its attention to the Sentinel system. And I believe that our attention should be marked by careful, calm and conscientious deliberation so that our most crucial national interest—that of self-preservation—can be most effectively served.

Mr. ROSENTHAL. Mr. Speaker, arguments for the Sentinel antiballistic missile resemble a piece of clay—squeezed first into one shape or another—sold to the American public first as a defense against a potential Chinese nuclear attack; then as protection against an accidental missile fired from any country; and more recently, as a defense against a Soviet nuclear attack.

Since its proponents can not provide data to indicate its effectiveness, they instead describe an impressive list of negotiatory wedges with the Soviet Union open to us if the ABM system is pursued. The fact that proof or even substantial likelihood of the effectiveness of the system is overlooked in the process does not bother them.

Even if one were satisfied with its effectiveness, the Soviet Union could overwhelm such a defense simply by building up its own offensive strength. As Prof. Jerome Weisner has pointed out:

> Some weapons systems are obsolete in their conception and I think this is probably true for the anti-ballistic missile system.

No missile defense system can be really effective because any enemy can buy of-

fensive missile strength much cheaper than defense measures can be taken against them. Indulging ourselves in the illusion of missile defense fools no one, protects no one and helps no one but those with vested interests in an inflated military budget.

We should, instead, devote our energies in this field to achieving a mutual reduction, with the Soviet Union, and ultimately with China, of overall offensive weapons systems. Devotion to disarmament should replace our fervor for new and better weapons.

Ironically, we have witnessed millions of public dollars spent by the military on conditioning the public to support the system—millions spent on the system before it goes beyond the design state. Exploitation of the national feeling of insecurity is the purpose of this promotion campaign. Defense projects are endowed with that familiar and special label: "This is holy, do not disturb." But the deployment of this system would actually increase the threat of nuclear war by adding fuel to the arms race.

The real doubts as to the military value of this project, coupled with the projected monetary cost—probably as much as 10 times the early estimates—are serious considerations. But far more important than the fallibility of the proposed system and the monetary cost are the dangers of an ever-escalating arms race. Where will it end? The Soviet Union will increase offensive capability and we will be faced with the need to add to both our defensive and offensive systems. One move cancels out the other and the stakes increase by leaps and bounds. We must put a halt to this spiral now—by understanding and accepting the judgment that the real defense against the Soviet Union missile system is our overwhelming capacity to deter the possible use of that system and not the development of new and more fantastic defense systems which ultimately cannot defend.

The bases planned in the most thickly populated centers of the Nation pose a grave menace to city residents. Innocent civilians could be the victims of an accidental explosion and their cities the victims of a further increase of the already bloated military presence around us.

Many important issues are also associated with that of the Sentinel system—such as the distribution of Federal funds between military and domestic programs. The money slotted for the Sentinel system should be channeled into rebuilding our cities—providing Americans with a quality education, medical care, and a decent job and place to live.

The insatiability of the military establishment for new projects, cloaked in the guise of protecting our national security, is disturbing. We must maintain a clear perspective of the domestic, military, and diplomatic implications of the Sentinel system—and, in my judgment, the Sentinel system should be rejected on all counts.

Mr. McCARTHY. Mr. Speaker, one of the sources of tension in our society today is the awareness that we constantly live on the brink of thermonuclear war. This awareness is heightened in international crises, such as the Berlin wall, the Arab-Israel wars, the approach to the Chinese border during the Korean war, the Cuban missile deployment, and the *Pueblo* incident. At these times sober Americans reflect on the Armageddon that a false step or a miscalculation might bring.

We live our daily lives with this awareness submerged below the immediate concerns. We have learned, as Americans did on the frontier, to live with the danger of the thermonuclear age. But if there is any doubt that the awareness and concern is there, one has only to watch a central telephone switchboard light up when there is a loud explosion in one of our towns or cities. People want to know if it was the bomb. So far, the answer has been "No."

There was a brief period following the Second World War when we did not face this threat. We emerged from that conflict as one of the most powerful nations on earth. We had a nuclear monopoly. We were confident that we could resist any aggression that an enemy might launch against us. This was a brief, and in some sense, misleading interlude.

Our nuclear monopoly was misleading because it still gives rise to the belief that we can achieve some perfect defense in today's complex world. Americans are led by what was a very unique period to search for an ironclad assurance that our country will be safe. Unfortunately, this assurance is not within the realm of possibility. We must live with the awareness that there is no perfect defense—there is no totally secure way of life.

This coexistence with danger is not new. Our forefathers lived with the constant threat of Indian raids on the frontier. We were unable to defend our Capital, Washington, against the British in 1812. Our border States suffered grievously during the Civil War for neither Federal nor Confederate armies could guarantee safety. In World War I our shipping was attacked on the high seas. And Pearl Harbor illustrated the fallibilities of our defenses. We understood, however, that we could live with this danger if we took the necessary precautions to see that we had a reasonable level of security.

The nuclear era is different in kind, perhaps, because of the numbers of casualities that would accompany a conflict. Military strategists debate defense systems that would involve 120 million versus 30 or 40 million dead Americans. But the underlying truth is that most Americans cannot imagine 1 million dead—much less 40 or 120 million. Destruction on this scale is beyond our comprehension.

The vast scope of a nuclear conflict should not obscure the fact that the lack of perfect security is similar to that of earlier periods in our history. We are still forced to live with the possibility that there might be a conflict—that the goal of total security is illusory. With this in mind, we can consider our military posture in a realistic manner.

Our strategic defenses today are based on the concept of assured nuclear deterrence. This concept involves maintaining nuclear intercontinental ballistic missiles in sufficient quantity and security so that even if we are attacked with the missiles of another country, we will have enough missiles left after the attack to destroy the aggressor. We maintain this assured deterrent capability with a combination of weapons; Minutemen intercontinental ballistic missiles, Polaris missiles, and the B-52 bomber fleet in a high state of readiness. It is generally acknowledged that this force gives us the capability to destroy any nuclear power that might attack us several times over.

Both the Soviet Union and the United States have maintained an assured nuclear deterrence in the post World War II years. Although there have been periods when our nuclear capability has given us a greater edge than during others, there has been no period when we, or for that matter, the Russians could launch a nuclear strike without fear of effective retaliation. American and Russian nuclear strength today can be described as being roughly in balance. We have a greater number of nuclear warheads than the Russians but the edge would be obscured in the massive destruction that would accompany use of any sizable part of these arms.

This rough equality of forces should be emphasized, for I think that it is unlikely that in the near future, we will achieve this equality again. This rough equality is a necessary condition for meaningful strategic arms limitation talks with the Soviets. Without this equality, neither side is likely to sit down to talk for long.

A major shift in our defense posture has been recommended by some of our strategic planners. It has been recommended that we build a thin antiballistic missile—ABM—defense system to protect our country against a number of threats. Such a step would represent a significant change in the approach that we have taken in the strategic field. Simply, this approach attempts to reduce the number of civilian casualties and physical destruction that would be inflicted on our country in a nuclear conflict. It presumes that we can destroy enough of the incoming nuclear missiles to significantly lower the casualties that we would otherwise suffer.

Until this point, we have not spent any significant sums on defensive systems against intercontinental missiles. Our experts conceded that the weapon systems that were proposed to do this job, the Nike X and its following versions, would not do the job. Our one major experiment in defense against nuclear weapons, in that case, weapons carried by enemy bombers, proved to be a failure. The Nike-Ajax and the Nike-Hercules were acknowledged to be deficient in the ability to stop the Russian bomber fleet. Yet we poured millions of dollars into the deployment of that system.

A number of developments in Russia during the last several years have been the moving force behind the suggestion to build the ABM system. The Russians began building intercontinental missiles at a more rapid rate than we had expected. They also began building what appeared to be an anti-ballistic-missile system around a number of their cities.

And they started to build a different ABM system around Moscow.

Our military planners decided to take certain steps to maintain our assured nuclear deterrent. We decided to build the Poseidon missile for our Polaris submarines. This missile would carry several warheads that could be individually directed toward separate targets. We decided to build the Minuteman III intercontinental missile, a land-based missile that would carry a similar cluster-type warhead. And we decided to build this sophisticated warhead, called MIRV for multiple individually targetable reentry vehicle. These steps in total will increase the number of warheads that we will be able to deliver to about three or four times the current number. This has been our response to actions, as we interpreted them, taken by the Russians.

We find now, however, that the ABM system that was being built around a number of different Russian cities is really not an ABM system but is rather an antiaircraft system. This Tallinn system was probably built against the B–70 bomber threat, a threat that did not materialize since we decided not to build the bombers. We also find that the ABM system being built around Moscow slowly in the Moscow area, perhaps in recognition of the difficulties in making any such system effective. Our response to their moves as we interpreted them, will cost us more than $5 billion, even though it turns out that we apparently misjudged their intentions.

When our military planners made the decision to go ahead with an ABM system, known as Sentinel, it was primarily justified as a defense against a Chinese threat. They acknowledged that it was probably impossible to defend against a determined Russian missile attack. They did feel that we could provide a defense against 25 or so Chinese intercontinental missiles with a so-called thin Sentinel system that would cost $6 to $10 billion. This defense would be effective, so we were told, during the 1970's and would prevent us from being blackmailed by the Chinese.

What was also acknowledged, but with far less fanfare, was that the radar system that would be used with the Sentinel system would be the basis for a larger system that supposedly would defend us against a Russian threat. By expanding the radars used with the thin Sentinel system, by producing more long and short range ABM's on the production lines that would have been set up, we would have the capability to build a heavy Sentinel system. The point I am making is that although we would presumably be building an ABM system for defense against the Chinese, in the eyes of the Russian military strategists we would be building a capability to resist their missiles. And if we gained this capability, their country would be in danger.

A decision to build an ABM system, even a so-called thin system, upsets the balance in Russian-United States arms capability. If taken, it will force the Russians to respond. They will either have to build their own ABM system or vastly multiply their missile force. And once again both countries will be pursuing the highly expensive and never ending task of maintaining assured nuclear deterrence.

A new race for nuclear parity involving ABM construction would be particularly harmful at this time because for the first time we appear to have an opportunity to sit down with the Russians to discuss the limitation of strategic arms. First at Glassboro, then in subsequent contacts, we have gradually moved toward discussions on strategic arms limitations. No topic is of more importance to Americans. It has meaning in terms of reducing the constant tension that I spoke of earlier and it has meaning in terms of making resources now used for arms available for peaceful uses.

I am of the opinion that we are at a crossroads in the search for reduction of international conflict. I do not think that we will soon find both the Soviet Union and the United States in the position of rough nuclear parity that permits both to sit down at the table to discuss strategic arms limitations. If we pass up this opportunity—throw it away by making decisions that preclude the possibilities of talks, we will commit a blunder that will haunt future generations of Americans.

I believe that we can defer a decision on the construction of an ABM system for at least 6 months to a year while we begin discussions with the Russians. We can maintain our research capability in the ABM field in the meantime without prejudicing our ability to construct a system should it prove necessary. We can reserve the right to act at any time we wish to—even though we are engaged in discussions at the time.

Such a course demands courage. It involves the uncertainties of negotiations with the Russians. But there are just as many uncertainties in diplomatic negotiations of this type as there are in the deployment of an ABM system. There is just as much chance that Sentinel will prove ineffective as there is a chance that the arms discussions may fail, perhaps more. But we have an obligation to attempt to slow down the arms race. And we should not jeopardize that attempt by committing ourselves to a Sentinel system unless we absolutely have to.

I urge that we defer the decision on the Sentinel system at this time. I believe that Americans have the courage to live with the uncertainties of arms limitation negotiations. More than that, I believe that informed Americans will insist that we pursue these negotiations. And I believe that they are willing to accent the lack of absolute safety that accompanies any meaningful search for peace.

Mr. FRASER. Mr. Speaker, there are three reasons the anti-ballistic-missile system should not be built.

First, it would be ineffective.

Second, it would be too dangerous.

Third, it would be too expensive.

The first thing that is clear about an anti-ballistic-missile system is that it would not protect the United States from a massive attack by the Soviet Union. It is supposed to be a defense system, but it would not defend us. The reason is that the U.S.S.R. could and would improve its offensive power to overcome our ABM defense. This can be done by modifying the Soviet offensive weapons to carry multiple warheads and to use more sophisticated methods of decoys and avoidance.

Second, the ABM would be too dangerous because it would inevitably lead to a heightened arms race between the United States and the U.S.S.R. If the Soviets perceive that we are building a system to cut down the effectiveness of their missile attack threat, they will certainly adopt multiple warheads, and a number of other modifications to assure their ability to overcome our defense. We in turn will respond by expanding and improving our ABM system to reach again for the goal we sought—to cancel the effectiveness of the Soviet nuclear strike threat.

As Secretary McNamara stated to the Congress 2 years ago:

> It is the virtual certainty that the Soviets will act to maintain their deterrent which casts such grave doubts on the advisability of our deploying the NIKE–X system for the protection of our cities against the kind of heavy, sophisticated missile attack they could launch in the 1970s. In all probability, all we would accomplish would be to increase greatly both their defense expenditures and ours without any gain in real security to either side.

Third, the exorbitant cost of an ABM system should make us wake up and refuse to go along with this unwise proposal.

Fifty billion dollars over 10 years is just one of many estimates of the enormous costs of an ABM system. Even larger amounts can be expected as refinements and improvements are added even as the system is being built. The annual cost of operation is thought to be in the neighborhood of a billion dollars.

All of that money being spent on a system that is certain to be ineffective and dangerous.

All of that money being drained from our national budget when we are woefully short of funds needed for housing and transportation and education and programs to aid our own people.

Mr. PELLY. Mr. Speaker, I would like to commend the gentleman from California (Mr. COHELAN) and others for affording this opportunity to write a record for the American people so that they might be fully advised as to the pros and cons of the Sentinel anti-ballistic-missile system.

My position in the matter has been fully outlined in this body and my remarks can be found on page 3408 in the CONGRESSIONAL RECORD of February 17, 1969 and on page 4197 on February 24, 1969.

I testified before the Committee on Appropriations January 15, 1969, and at that time I did not oppose the defense system but rather opposed its location on Bainbridge Island in my congressional district. I still oppose this location, but after a careful review of this entire project, I now strongly believe the program should be delayed indefinitely. At the outset I felt this was a means of having a bargaining item to discuss the possibility of nuclear disarmament with the

Russians, but while I still firmly support nuclear disarmament, I think our intentions to defend ourselves are fully known and that we would suffer no risk by deferring this Sentinel system.

I would like to further commend the gentleman from California for his statement in the RECORD this past Monday in which he well outlined the arguments against the establishment of the Sentinel system at this time.

But, I do not intend to reiterate these same arguments. Rather, with permission, I place a letter I sent President Richard M. Nixon on February 17, 1969, in the RECORD for the information of my colleagues:

FEBRUARY 17, 1969.

The PRESIDENT,
The White House,
Washington, D.C.

DEAR MR. PRESIDENT: The purpose of this letter is to strongly urge you to defer all further implementation of the Sentinel Missile Program indefinitely, or until after any disarmament negotiations with the Soviet Union.

Because one of the proposed missile sites is scheduled for my Congressional District I have had occasion to carefully consider the pros and cons of this anti-Ballistic missile defense system. In this connection, I fully agree with your recent statement when you said you did not buy the assumption that the "thin shield" system is to protect us from Red Chinese missile attack. After all the former Secretary of Defense, Robert S. McNamara, stated on September 18, 1967, that the United States has the power not only to destroy completely China's entire nuclear offensive forces, but to devastate her society as well. Surely this capability is sufficient to deter any Communist Chinese missile attack. As Secretary McNamara said then, it would be insane and suicide for her to launch such an attack.

Thus, I conclude, the present sentinel is actually a first step forward the so-called heavy ABM system although at best it has little promise of producing an adequate shield. However, surely if we did develop such an anti-Soviet shield, such a program would certainly induce the Soviets to increase their offensive capability to overcome any defense moves of ours. It seems to me any decision to proceed needs a careful second look.

I voted last year for the funds to initiate the sentinel system. Until recently I felt the same way in support of that program. I did not want, nor do I now want the Soviets to outdistance us in offense or defense.

But, now I feel it advisable to pause in this costly program. I realize you, as President, do not want to take any risks. But, would a deferment in the sentinel program constitute a risk? I don't feel it would.

So, Mr. President, I urge that you halt the sentinel missile program at least until the need for any anti-ballistic protection is clearer. Surely the decisions of the past are sufficient to indicate to the Communists our intention to build a strong defense if need be—but let us talk nuclear disarmament and common sense with the Russians before we proceed with this weapons system which to say the least has dubious value.

Respectfully,

THOMAS M. PELLY,
Member of Congress.

Mr. OTTINGER. Mr. Speaker, I want to express my warmest thanks to the gentleman from California for affording this opportunity to the Members to express their views on the vital decisions whether to proceed with deployment of the Sentinel anti-ballistic-missile system.

I consider this decision on ABM deployment one of the most crucial questions that confronts the new administration and Congress. It will affect not only the security of the United States, but as well the future ability of this country to meet all our foreign and domestic responsibilities.

There should no longer be any doubt that the ABM system upon which we have embarked is a "thick" system designed to protect against the possibility of Russian attack, not the "thin" system directed against Chinese attack for which it was originally announced. This was made explicit in the testimony last year of Gen. Harold K. Johnson, Army Chief of Staff, before the Senate Appropriations Committee. It is confirmed by the expressed interest of the new Secretary of Defense in using the "thin," supposedly China-oriented system as a bargaining point in arms limitation talks with the Russians.

Estimates of the cost of the "thick" system range as high as $100 billion—and our past experience indicates that Defense Department estimates are invariably a fraction of actual cost.

The cost does not begin to stop there, however. The system contemplates Sprint missiles with nuclear warheads that will intercept enemy missiles that get by the long-range Sentinels, creating nuclear explosions directly over our major population centers. To be at all effective, a multibillion-dollar shelter system would have to be constructed. You can be sure that if we institute this kind of a system, the Russians will have to either overcome it with more sophisticated offensive weapons that will require multibillion-dollar ABM improvements or will duplicate our defensive system requiring us to invest in such multibillion-dollar offensive weapons ourselves. The true expense is sure to involve multiple hundreds of billions.

Now, if the end result were a substantial increase in the security of the United States against nuclear attack, then it is arguable that we should make the investment regardless of cost. There is no such evidence, however. Quite the contrary, it would appear that deployment of the ABM will merely touch off an offensive-defensive cycle of arms escalation, resulting in vastly greater destructive power on all sides, without any increase in security. As Secretary McNamara said on September 18, 1967, after a thorough Defense Department review and consultation with the leading technical experts:

> It is futile for each of us to spend $4 billion, $40 billion or $400 billion—and at the end of all the spending, and at the end of all the deployment, and at the end of all the effort, to be relatively at the same point of balance on the security scale that we are now.

As Carl Kaysen, writing in Brookings Institution's Agenda for the Nation put it:

> The expected result of the process can be no more than a new balance at higher force levels, larger expenditures, and most likely, unthinkably higher levels of destruction in the event that the forces were ever used.

It seems quite clear that in the nuclear confrontation game, as in many sports games, the best defense is a good offense. The scientific community seems to have reached an overwhelming consensus that there is no defense we could devise that could not be overcome relatively easily and cheaply by more sophisticated offensive weaponry.

To my mind, this is the crux of the objection to ABM deployment—that at enormous cost, it would not add to the security of the United States. On the contrary, it would force an escalation that would increase the jeopardy of our people, expose them—in the process of defending them—to nuclear defense explosions over our cities, and increase the balance of terror in the world.

The only security I can see enhanced by ABM deployment is the security of the military-industrial complex.

It is important to note that if the proposed ABM system is ineffective because of the necessity of the Russians to match or overcome it, then the objection applies equally to "thin" or "thick" deployment and to deployment for the alleged purpose of increasing our bargaining position with the Russians in disarmament talks. The Russians will have to match or overcome the system at whatever level we choose—and you can be sure they will not be satisfied to bargain from weakness any more than we. Any of the "thin" rationales are but a way to get a foot in the door to start the inexorable cycle of defensive and offensive escalation. No matter how modest the beginning, the cycle will have been set off.

Beyond ineffectiveness attributable to Russian response and the ease of overcoming the defense, there is substantial evidence that the Sentinel system simply would not work. Senate testimony indicates the possibility of a nuclear cloud created by a Sentinel explosion that would render our radar-controlled system ineffective. There is further testimony that various kinds of decoys and artificially created metallic clouds could readily overcome the system—and that at any rate, enough offensive weapons would get through even a "thick" system to destroy tens of millions of our inhabitants.

There is a strong likelihood that, after spending billions upon billions of dollars on the Sentinel system, shelters, and the more sophisticated offensive systems that would be required to overcome Russian accelerated defenses, the Sentinel would never be deployed.

This would hardly be the first time that the military had caused us to embark upon a multibillion-dollar defense missile boondoggle. Senator YOUNG, of Ohio, said in a speech in the other body on February 7, 1969:

> The fact is that the United States has spent almost $19 billion since World War II on missile systems that either were never finished or were out of service when completed because of obsolescence.

In 1959, the Army proposed deployment of the Nike-Zeus system, father of the Nike X system from which the Sentinel was developed. The cost was estimated at about $14 billion. President Eisenhower, explicitly wary of the mili-

tary-industrial complex, turned it down. Secretary McNamara said last year that had we gone ahead and produced the Nike Zeus system, most of it would have had to be replaced before it became operational because of obsolescence. This was a near miss, but there have been many other accomplished billion-dollar Pentagon fiascos.

The B–70 bomber was proposed and approved in 1959 as a follow-on to the B–52 at an estimated cost of $1.3 billion for the first three prototypes. Only two were actually built, at a total cost of $2 billion. One crashed in 1966 and the other, after completion of unsuccessful test flights last month, was retired to the Air Force Museum. The project was abandoned.

The Skybolt air-to-surface missile was another boondoggle. In 1960, the Pentagon estimated R. & D. costs at $214 million and production at $679 million. By December 1961, the estimates were $492 million and $1.4 billion respectively. In 1962, the ante was raised to a total of $2.3 billion. The program was formally canceled in January 1963, after total expenditures of some $2 billion.

What these examples are intended to show is simply that the military is not infallible. There is an unfortunate tendency in Congress to regard military proposals as sacrosanct. Anyone who challenges them is accused of being soft and fuzzy headed in the face of the great military dangers we confront. We must end this tendency. Just because the Joint Chiefs propose doesn't mean we have to dispose. Military proposals, particularly those that involve basic policy decisions and billions in spending, deserve the most careful and skeptical scrutiny from both Houses of Congress.

The Sentinel system proposal is the biggest and most far-reaching military proposal yet. It is so big that its implications affect our ability to meet the entire spectrum of foreign and domestic needs of the country. It certainly deserves particularly close and skeptical scrutiny.

It is long past time that we faced up to the fact that we are a country of limited resources. This truth has been dramatized by the Vietnam war, a so-called limited engagement in a peanut-sized country. That "small" war, costing in the neighborhood of $27 billion per year, has brought us to the brink of financial crisis, creating a serious inflationary threat, forming the excuse for underfunding vital domestic programs, provoking a serious imbalance in our international payments and undermining the dollar as the staple of international exchange.

The hundreds of billions of dollars that the Sentinel system could absorb and require for new offensive systems would certainly preclude expansion of programs vitally needed to overcome pressing domestic problems of education, hunger and malnutrition, health, housing, job training and placement, and restoration of our water and air. It would undermine further our ability to help the underdeveloped nations of the world achieve self-sufficiency both economically and in their own defense. Indeed, it would limit our own defense capability to meet likely nonnuclear confrontations. A program involving such serious consequences must certainly bear a heavy burden of proof as to its soundness and imperative necessity. The Sentinel system sorely fails this test.

It is my strong conviction that the administration should abandon deployment of the system and concentrate on the deterrent of our second strike offensive capability to assure us against nuclear attack. This second strike capability is apparently the only effective deterrent, at any rate.

At the present time, our experts tell us that our second strike capability is sufficient to destroy Russia and China several times over. We clearly must maintain such sufficiency. But we should do all within our power to prevent a costly and fruitless arms race. In the words of Winston Churchill on sufficiency: "Why make the rubble bounce?"

Mr. RYAN. Mr. Speaker, the participation in today's special order by many of our colleagues and the serious questions of public policy raised in this discussion should make it clear to the Nixon administration that, unlike last year when only a few of us voted against the authorization and appropriations for the Sentinel anti-ballistic-missile system deployment, there is strong and organized opposition in the House. The same is true in the Senate.

Therefore, it behooves the administration to weigh very seriously the arguments advanced today on the floor of the House and I should like to commend the gentleman from California (Mr. COHELAN) for his efforts.

The plans of the Department of Defense to locate missile sites in or near large population centers has provoked such widespread apprehension and protest from the general public that the Department of Defense has been forced to reconsider its plans to locate the missiles in heavily populated urban centers. But the mere relocation of missile sites would not be a sufficient response to the basic questions. A Sentinel system located in sparsely populated areas would still pose the question of whether or not an anti-ballistic-missile system in any form—"thin" or "thick"—and in any location is in the public interest.

Mr. Speaker, this is an appropriate time, as the new administration takes office, to reassess our national priorities and examine the stark disparity between the allocation of our resources to meet our domestic needs and the insatiable demands of the military-industrial complex.

At a time when military spending has forced cutbacks in programs designed to meet urgent domestic problems, the enormous cost of an ABM system will only increase the military budget. The $5 billion that a "thin" ABM system is said to cost is only the beginning. Once the "thin" system is established there will be immense pressure to expand the program—both to increase its geographic coverage and to attempt to provide protection from a possible Soviet attack. Given the influence of the military-industrial complex, it is hard to estimate where the expansion will end. Secretary of Defense McNamara, in a Defense appropriation hearing on January 25, 1967, said:

> I believe that once started, an ABM system deployed with the objective of protecting the U.S. against the Soviet Union would require an expenditure of $40 billion over a 10-year period.

Another point is that the ABM system may be obsolete or ineffective before it is completed. An example of this is the Nike-Zeus system proposed by the Army in 1959. In spite of its strong backing from the Army, President Kennedy decided against producing and deploying the program. We now know that his choice was correct—it would have cost $13 to $14 billion and most of it would have had to be torn out and replaced, almost before it became operational, by new missiles and radar. Presently experts agree that none of the existing systems and none of those in the foreseeable future will provide an impenetrable shield over the United States. An important technological fact about the ABM system is that weapons can be developed to overcome any currently possible defense. Offensive weapons with penetration aids—using decoys and multiple warheads—can frustrate any known defensive system. Other methods of attack—that is, using low-altitude missiles launched from submarines—can also be used against ABM systems. Many feel that these offensive improvements would be far less costly than the defensive programs that stimulate them.

To proceed with the ABM system will escalate the arms race and seriously lessen the possibility of an agreement on arms control. In his September 18, 1967, speech before UPI editors and publishers in San Francisco, Secretary of Defense McNamara commented:

> If we in turn opt for heavy ABM deployment—at whatever price—we can be certain that the Soviets will react to offset the advantage we would hope to gain.

The end result will be larger stockpiles of nuclear weapons and increased tensions with no change in the balance of nuclear power. It was because they understood this fact that the science advisers of the last three Presidents and directors of research and engineering to the last three Secretaries of Defense unanimously recommended against deployment of an ABM system designed to protect against a Soviet attack.

Deploying the ABM system also has serious implications as far as the nuclear nonproliferation treaty is concerned. Under the treaty the nuclear powers are to "pursue negotiations in good faith on effective measures relating to the cessation of the nuclear arms race at an early date and to nuclear disarmament." A "good faith" interest in disarmament would be evidenced by deferment of the deployment of the ABM system and entering into negotiations with the U.S.S.R. on limiting offensive and defensive weapons systems.

Justice William O. Douglas made a pertinent statement which I would like to call to the attention of my colleagues:

> My lay judgment is that the manufacture of the missile defense systems will make the military-industrial complex rich, will result in the production of huge piles of junk and

will be meaningless in terms of survival. Indeed, our preoccupation with problems of this kind reveals the growing political bankruptcy of this nation. The salvation of the world lies in the pursuit of law not in the anti-ballistic missile.

Mr. ROYBAL. Mr. Speaker, I am happy to have this opportunity to join with my colleagues in discussing the question of deployment of an anti-ballistic-missile defense system in the United States, and the many difficult problems this proposal raises for each of us here in the Congress as well as for all American citizens throughout the country.

Indeed, I believe that the issues are so important to the very survival of our Nation that every means should be used to assure that the American public becomes thoroughly acquainted with the full facts of this critical situation—with the pros and cons of ABM deployment with its attendant consequences for our national security and for the peace of the world.

Only in this fashion, will we be in a position to make an intelligent and considered decision in the best interests of all our people.

First of all, I would like to make it clear that there is no difference between the proponents and opponents of immediate construction and deployment of the suggested Sentinel ABM system—with regard to the vital necessity of an American national defense effort second to none.

We all agree that whatever must be done to protect our country and preserve our freedoms—can and will be done; and whatever price must be paid—will gladly be paid; in the traditional American way of bearing the burdens and sharing the sacrifices necessary to guarantee that our Nation's priceless heritage will be enjoyed by future generations of American citizens—as we and our ancestors have also enjoyed them.

Second, it is apparent from the extensive discussions of the ABM concept over the last several years that the experts in all the related fields—military, technological, scientific, political, international relations—differ widely in their opinons and in their judgment and evaluation of the ABM system as an effective defense or deterrent in the nuclear/space age.

In view of this kind of divergence of expert opinion from men of worldwide stature over all aspects of the subject, it is evident that honest men can, in good conscience, differ among themselves as to the value, and the advantages and disadvantages of the Sentinel ABM system.

For this reason, it is all the more important that this question be given the widest possible publicity—so that interested and concerned citizens can have an active voice in resolving the question in the best interest of all.

I have always hoped that a workable and carefully monitored system of arms control could be negotiated that would make it unnecessary to proceed now with a vast, multibillion-dollar anti-ballistic-missile defense program—which might have the ironic effect of accelerating the arms race and actually resulting in less real national military protection than we have at the present time.

With the progress we have made recently in securing broader acceptance of the Nuclear Nonproliferation Treaty, and the excellent prospects for the beginning of United States-Soviet talks on the overall subject of arms limitation, I would think that perhaps the best, most prudent course for us at this time would be to proceed actively toward discussing a halt to the arms race, while holding the Sentinel system, at least temporarily, in abeyance—until it can be determined the degree of success we can expect for these vital negotiations.

In this way, we do not preclude picking up any of our national defense options at any time in the future, should we so decide, and at the same time, we provide the best possible atmosphere in which to encourage a mutually advantageous agreement on arms control and limitation that in this thermonuclear age could literally spell the difference between human survival and extinction.

Mr. Speaker, the recent publication, "ABM: Yes or No?" issued by California's Center for the Study of Democratic Institutions, contains a fine pro and con discussion of the ABM controversy by some of America's leading authorities on this subject.

I believe it would be helpful to include in the CONGRESSIONAL RECORD at this point the preface to this publication, written by Mr. Donald McDonald, as well as the foreword, entitled "The State of the Question: An Introduction" by former Vice President Hubert Humphrey.

These articles together offer a good background description of the entire ABM question, plus a penetrating discussion of the major points at issue.

The articles follow:

ABM: YES OR NO?

PREFACE

(By Donald McDonald)

Since the end of World War II, the nuclear arms relationship between the United States and Soviet Russia has been marked by calculation and miscalculation, many alarms, occasional accommodations, slow-downs, speed-ups, relative stabilization, frequent unease, and constant uncertainty, with the whole periodically subjected especially during presidential election campaigns to misleading rhetoric about bomber gaps, missile gaps, and security gaps.

For more than a decade the two great powers, and perforce the rest of the world, have predicated their strategy upon a power balance based on what is popularly called "deterrence," and is more precisely identified by scientists and military planners as "mutual assured destruction." That is, both the United States and Russia possess "second-strike capability": if either is attacked, it can retaliate with sufficient force to inflict "unacceptable damage" on the other.

Until very recently this second-strike capability has been presumed to be an adequate safeguard against either power's initiating or provoking a nuclear attack. Both have acted on the premise that their offensive strength also provided a basis for defense strategy: rational men would not attack in the face of certain knowledge that a nuclear exchange would be suicidal.

However, the era of deterrence has been marked by curious anomalies, usually arising from a nervous misreading of the other side's activities and intentions. Both great powers have amassed enough thermonuclear warheads to devastate most of the habitable world several times over, and in the process the United States has built up a four-to-one numerical superiority over Russia in the number of deliverable thermonuclear missiles. This ratio probably will increase dramatically when the United States' MIRV (multiple independently targetable reentry vehicles) and Poseidon (multiple warheads fitted to Polaris submarine-launched missiles) are fully deployed and operational. MIRV and Poseidon make it possible for one missile to carry from three to ten thermonuclear warheads which can be detached in trajectory and aimed at as many separate targets.

Still, the offensive balance continues to hold. Although the United States has a numerical superiority over Russia, this is not the same as nuclear superiority. Nuclear superiority is the power of one nation to inflict a first strike on another of such force that the other is not able to retaliate and inflict unacceptable damage on the attacker. Neither the United States nor Russia possesses such power. And William Foster, the Johnson Administration's director of the Arms Control and Disarmament Agency, said last fall that the "most authoritative experts have assured us" that neither side "can hope to attain (nuclear superiority) in the foreseeable future."

Although Russia and the United States have continued to pin their primary strategy on the deterrent power of their massive, second strike/nuclear capability, this has not precluded sporadic efforts on both sides to explore the possibilities of an active missile defense system. The immediate objective, to reduce casualties, is enormously attractive in its own right. The larger consideration is strategic: an ABM system that could nullify a substantial portion of the enemy's striking power could serve to tilt the balance of offensive power in reverse.

The record of such explorations has not been brilliant. In the nineteen-fifties the United States spent thirty billion dollars on bomber defenses which later were found to have been full of holes. In the nineteen-sixties the United States spent another twenty billion dollars on anti-ballistic-missile research and development, but in every instance abandoned emerging defensive systems when it became obvious that, years before they could be deployed, the hardware and controls would have been rendered obsolescent by Russian offensive missile advances.

Despite these failures pro-ABM pressure has continued to mount in the face of contrary official policy. Scientific advisers for three successive Presidents have opposed anti-missile expenditures, as did former Defense Secretary Robert McNamara, who served both Presidents Kennedy and Johnson. Then, a little more than a year ago, Secretary McNamara yielded. The background of this historic modification of ABM policy has been summarized by Jeremy Stone in an *Adelphi* report published by the British Institute for Strategic Studies:

"On 18 September 1967, Mr. Robert S. McNamara, then US Secretary of Defense, announced plans to deploy a limited ballistic missile defence system (called *Sentinel*) against the possibility of an attack by Chinese ballistic missiles. He acted under considerable political pressure, and called the case for the weapon system 'marginal'. This political pressure was generated very largely by the belief—now thought to be mistaken—that the Soviet Union was deploying ballistic missile defences around far more than Moscow.

"The Soviet Government had expressed willingness in principle to discuss limits on the arms race, but had delayed in setting a date for talks to begin. Many drew the conclusion that the Russians were 'stealing a march' on the United States. Because this pressure combined with the problem of missile defence against China, and because

China became the rationale for the decision taken, it is a decision almost impossible to reverse on the grounds of faulty American estimates of Soviet intentions. Indeed, the new US Secretary of Defense, Mr. Clark Clifford, has advised the Senate Armed Services Committee that he is for maintaining a 'clear-cut nuclear supremacy' over the Soviet Union; this approach, distinctly more favourable to missile defence procurement than that of Mr. McNamara, suggests an increase in the likelihood that the United States will press on to build a larger system. . . .

"For eight years preceding the September 1967 decision to deploy a 'thin' ballistic missile defence, United States Administration considered and rejected suggestions that ongoing development programs for missile defence be followed by procurement of one system or another. At first it was a primitive Nike-Zeus missile—considered successful if it could make an 'intercept' of a single incoming warhead. Such a system could have been built by 1963–64 but would, according to estimates made by the Defense Department in 1962, have been obsolete by the time it became operational. A more advanced system, Nike-X, could have been ordered in 1963 and built by 1968, but—relative to projected Soviet improvements—would have been obsolete by 1966.

"These systems depended upon tracking incoming objects despite clouds of 'chaff,' then distinguishing between decoys and weapons, and then launching anti-missiles at located warheads. Since observations of atmospheric drag on incoming objects were critical to distinguishing them, the defence was required to wait until the attacking warhead had entered well into the atmosphere and to intercept perhaps 5,000 to 100,000 feet off the ground; hence it had to rely upon interceptors that could climb thousands of feet in a few seconds. For this reason also, it had to anticipate low-level detonation of adversary warheads, and hence it had to complement the system with fallout shelters. Finally, the defence was local in character, covering ranges of only 15 to 25 miles, and all but the largest 25 or 50 urban areas would have been undefended.

"Although the systems under development were quite obviously improving throughout the 1959-65 period, they seemed, paradoxically, ever less likely to be built. The problem of civil defence, the partial coverage provided by the defence, the rising cost of building an ever more complicated system, a growing willingness to rely upon the balance of terror, the prospect of suitable Soviet penetration devices, a wide-spread desire not to stir up the arms race, and Mr. McNamara's emphasis on cost-effectiveness—all combined to limit the prospects for missile defence procurement.

"In 1964, Communist China exploded her first bomb, and American strategists saw a threat that might be neutralized with greater confidence than could that of the Soviet Union. Not long thereafter, the range of the American interceptor missiles was greatly expanded. At the same time, new techniques were developed to permit the destruction of incoming missiles with X-rays while they were still outside the atmosphere. (Earlier systems had relied on blast effects in the atmosphere, and hence such systems were ineffective at airless altitudes.) The increased range of the interceptor, in conjunction with the new X-ray method of 'kill', enormously improved paper-and-pencil calculations of effectiveness. Incoming missiles could be attacked several hundred miles up. Each interceptor battery could cover a ground radius of about 400 miles. When these results were considered with respect to the new (and weaker) prospective Chinese threat, some began to talk of the possibility of preventing any Chinese missiles from penetrating until the 1980s—even of discouraging China from building long-range missiles at all.

"In this supersaturated situation, in 1966, some evidence was uncovered that the Soviet Union had begun to build a ballistic missile defence. Earlier sporadic Soviet efforts to build a single battery around Leningrad in 1962 had created only a stir. Now it seemed certain that defensive system had been installed around Moscow. Elsewhere, unquestionably, something was being built rapidly. This more comprehensive installation (called the 'Tallinn' system, after the Estonian city that housed part of it) was thought by some to be a defence against missiles. General Earle G. Wheeler testified that it would violate 'military logic' if it were not. But despite an earlier news conference in which Mr. McNamara announced 'considerable evidence' that the Soviet Union was deploying an anti-missile system, he testified in 1967 that existing evidence could be explained by the hypothesis of an extensive new air defence system. Presumably such a system would have been started in anticipation of a high-flying B–70, or it might have reflected compulsive vested interests in air defence. By 1968, a 'majority' of Department of Defense analysts subscribed to Mr. McNamara's 'air defence' view, and the situation was seen as follows in [testimony supporting] the fiscal 1969 defence budget:

" 'Now, I can tell you that the majority of our intelligence community no longer believes that this so-called Tallinn system (which is being deployed across the northwestern approaches to the Soviet Union and in several other places) has any significant ABM capability. This system is apparently designed for use within the atmosphere, most likely against an aerodynamic rather than a ballistic missile threat.'

"Although construction of the Galosh ABM system around Moscow is proceeding at a moderate pace, no effort has been made during the last year to expand that system or extend it to other cities. It is the consensus of the intelligence community that this system could provide a limited defence of the Moscow area but that it could be seriously degraded by sophisticated penetration aids.

"Notwithstanding this new appraisal of Soviet plans, the Defense Department has not changed its own plans, asserting: 'Nevertheless, knowing what we do about past Soviet predilections for defensive systems, we must, for the time being, plan our forces on the assumption that they will have deployed some sort of an ABM system around their major cities by the early 1970's.' The phrase 'for the time being' presumably refers to the possibility of American-Soviet discussions and may suggest American willingness to compromise in the presence of talks."

This shift in Defense Department policy, followed by congressional authorization of the five-billion-dollar "thin" screen, has opened the way for ABM proponents to raise the ante and argue openly for the "thick" or "heavy" system, of which Sentinel would be simply the building-block. The initial cost of ABM as now visualized is generally conceded to be in the range of forty to fifty billion dollars and its scope has been escalated to provide protection for twenty-five to fifty American cities and for our missile-launching installations.

The debate between pro and anti ABM partisans has waxed throughout the months since Mr. McNamara's Sentinel announcement, a curious and prophetic speech in which he warned of the pressures that would follow:

"There is a kind of mad momentum intrinsic to the development of all new nuclear weaponry. If a weapon system works—and works well—there is strong pressure from many directions to produce and deploy the weapon out of all proportion to the prudent level required.

"The danger in deploying this relatively light and reliable Chinese-oriented ABM system is going to be that pressures will develop to expand it into a heavy Soviet-oriented ABM system.

"We must resist that temptation firmly—not because we can for a moment afford to relax our vigilance against a possible Soviet first strike—but precisely because our greatest deterrent against such a strike is not a massive, costly, but highly penetrable ABM shield, but rather a fully credible, offensive-assured destruction capability.

"The so-called heavy ABM shield—at the present state of technology—would in effect be no adequate shield at all against a Soviet attack, but rather a strong inducement for the Soviets to vastly increase their own offensive forces. That, as I have pointed out, would make it necessary for us to respond in turn—and so the arms race would rush hopelessly on to no sensible purpose on either side."

The ABM debate has been only incidentally over Sentinel as such. That decision has been taken, Congress has appropriated the construction funds, and presumably Sentinel will be deployed unless President Nixon presses for a reversal of prevailing Defense Department policy. But the debate over the basics of anti-ballistic-missile defense is by no means over. The current round turns on whether a heavy ABM system can be justified; the Sentinel decision did not settle that argument, it only inflamed it. Mr. McNamara's pronouncements before leaving office, and Secretary Clifford's since assuming it, have done nothing to resolve the technical, military, economic, and political differences which lie at the heart of the ABM controversy.

Yet, despite the high status of the adversaries and the fateful character of the issue, the ABM question has been debated in rather restricted circles to date: in the scientific community; before a few congressional committees and, on one occasion, before a secret session of the Senate as a whole; and in some journals of opinion. In fragmented fashion the running controversy occasionally breaks through in the mass media, and this has produced a prevailing editorial uneasiness among the more serious newspapers, periodicals, and television commentators. And the ABM issue turns up as a priority item on the agenda of all of those concerned with the current state of international relations, for it is well on the way to becoming the most immediate and dangerous symptom of the Cold War.

To examine the current state of the ABM issue, and appraise its possible consequences, the Center for the Study of Democratic Institutions brought together experts representing opposing scientific, military, and political views. Gathered in New York in late November of 1968, with the confusions and alarms of the Presidential election behind them, protagonists and antagonists of ABM met in two lengthy sessions, the second of which broadened the discussion to include associates of the Center and others qualified to introduce subsidiary but essential political, economic, and social questions that flow from the central strategic issue. This publication is a distillation of those discussions, and of the position papers prepared for them.

It is introduced by Hubert H. Humphrey, former Vice-President of the United States. A leader in arms control debates during his long service in the Senate, Mr. Humphrey during the past four years has been directly involved, as a member of the National Security Council, in the decisions that led to deployment of the Sentinel system and to the apparent reversal of long-standing policy against anti-missile defense. Mr. Humphrey here renews his plea for a full public airing of the larger strategic issues that lie behind ABM.

THE STATE OF THE QUESTION: AN INTRODUCTION

(By Hubert H. Humphrey)

America's determination to find ways of stabilizing the nuclear arms race will be severely tested in the coming days. President Nixon will be faced with a series of decisions that will irrevocably affect the security of this nation and the peace of the world. The U.S. Congress will review these decisions and a spirited exchange of opinion on Capitol Hill is guaranteed. We are, in short, on the verge of a great debate on nuclear arms control, a debate whose outcome could well determine the survival of this country, not to mention the life and death of millions of other persons around the globe.

Yet the American people are shamefully ill-informed on these matters. Decisions of far-reaching significance can be accomplished with only the slightest involvement of the informed and politically aware public. In a representative democracy this is unhealthy under any circumstances. When the survival of the planet may be involved, the situation becomes intolerable. That is why this paper is so important. It seeks to bring to the American people the facts on the most critical issue of nuclear arms control; should the United States build an anti-ballistic-missile defense system?

As President Nixon takes office he will find that the basic decisions on the strategic issues posed by ABM, far from being settled by the congressional authorization for a "thin" screen that lies on his desk, are yet to be made. He will receive, as we did in the Johnson Administration, directly conflicting testimony from his scientific advisers as to the capability of the proposed anti-missile defenses; and he will receive conflicting intelligence estimates as to the Russians' capability to penetrate our defenses, or shield themselves against our nuclear missiles. He stands now at the point where he must modify or reverse the recommendation of his military advisers; rest with the admittedly inadequate "thin" ABM system for which the Army is already selecting sites; or make a commitment to a "heavy" system that will, by common agreement, usher in another fateful stage in the nuclear arms race with the Soviet Union.

Throughout the Presidential campaign, I emphasized that the most important question facing the new President would be that of negotiating an agreement with the Soviet Union to limit the strategic arms competition. Despite the brutal invasion of Czechoslovakia by the Soviet Union and its dire consequences for East-West relations, both the United States and the Soviet Union continue to have a mutual interest in reaching such an agreement. The discussion over the ABM should be reviewed in relation to this broader issue, but the ABM issue is, however, the most immediate and potentially dangerous issue on the arms control agenda. Although the ABM issue was not discussed in detail in the Presidential campaign, I have always been skeptical in my own mind about the security value of deploying an ABM system. I share the reservations stated by Secretary McNamara when he announced the ABM deployment in 1967. At the same time, I understood the reasons why the President felt that preparations for a limited deployment might quicken the interest of the Soviet Union in meaningful negotiations on the strategic arms race, provided we place top priority on the urgent necessity of reaching an agreement on the ABM issue.

The ABM issue is not an easy one for the public to follow. It may be, as suggested by Dr. David R. Inglis, of Argonne National Laboratory, "the world's nuclear problems are too subtle for the average unconcerned citizen; the part most visible to him is the economic manna descending from the defense-industry heaven." The trouble with that complacent view is that there is no longer any such thing as an unconcerned citizen, whether he knows it or not.

There are a good many reasons why the ABM controversy, which has raged within the government for almost a decade now, has been hard to follow. Official secrecy has had something to do with it, but not much. Although sometimes delayed and distorted by security regulations, the essential facts on such large strategic questions always come to light and find their way into general circulation. The description of the development of American ABM policy quoted from a paper published by the British Institute of Strategic Studies in the preface to this paper is an example of the manner in which the information and estimates of the "intelligence community" are regularly publicized. Although a few details may be incorrect, or missing, the principal elements upon which the official policy-makers based their decisions are neatly laid out for all to see.

The record of the debate on *ABM: Yes or No?* which follows provides a valuable demonstration of how this kind of decision-making actually goes forward. As the reader will see, the participating scientists provide a hard core of factual analysis, usually reduced to numerical calculations suitable for a computer, and upon this base the strategists erect their structures of speculation and conjecture. It is, on the surface at least, comforting to come back to this solid collection of presumably measurable facts after a chilling exercise in what, in the nuclear era, has come to be called "thinking the unthinkable."

The very vocabulary of nuclear gamesmanship is uncomfortable for all but the most hardened practitioners. Neil Jacoby has noted that with economists ordinarily "cost-benefit" analysis is changed to "cost-effectiveness" analysis in Pentagon parlance, "probably because it puts language under serious strain to refer to the death of a hundred million Russians or the destruction of a hundred billion dollars of Soviet capital as a benefit."

But one begins to suspect that this resort to the "facts" is not, as it appears, a return to reality but a retreat from it. Changing the vocabulary does not disguise the fact that the counters in the game are human lives, and the stake the fate of nations. Jerome Wiesner, who played it for years, calls it "the numbers game" and insists that it runs out of substance at the point at which it requires human judgment—as it always does.

Trying to explain to President Kennedy why scientists, who are supposed to be the most rational of people, could differ so on a technical issue, Wiesner pointed out that it is nature that is rational, not the scientists who try to explain natural processes. "Different people make different assumptions about all these elements. That is what is involved in the argument about anti-ballistic-missile systems. One man's assumptions give one set of conclusions; another man's assumptions give a different set. Some of the assumptions are essentially undefinable. We are talking about things we do not and cannot know anything about no matter how we try. And so you can take whichever set of assumptions you choose."

Yet much of our most critical defense policy is being made on the basis of these numbers. And even so experienced a Washington hand as Dr. Jacoby, turning a skeptical economist's eye on the decision to put five billion dollars in the thin Sentinel ABM system, has looked at the cost-analysis considerations involved and accepted the result because "presumably the Pentagon has plugged figures into the equations, run the calculations, and reached an affirmative conclusion."

We are living in an environment significantly affected by what President Eisenhower called the military-industrial complex and its principal off-spring, the mammoth research and development budgets which sustain the defense establishment in the nuclear and missile age. R & D is a catalyst; by its nature it leads to far greater investment in production of the goods and systems it makes possible. Thus every dollar spent on R & D has produced an expenditure of at least five dollars in military procurement alone. This diversion of funds into the military-industrial complex is widely recognized. What often escapes notice is the massive diversion of brainpower away from the civilian economy into the defense establishment. There inevitably arises among many of these talented individuals a disposition to justify defense expenditures, rather than to think in terms of national limitations on the production and dissemination of arms.

The principal points at issue in the ABM controversy are ably set forth in the following discussion. Here, as in the inner circles in Washington, they are advanced by men of great intellectual capacity and high moral purpose. In summary they are:

Challenge: The "heavy" ABM system will be the most complex technological system ever built by man, and there is no way to test it except under actual enemy attack. The odds are for at least a partial failure, and in this contest even a low percentage of missile penetration can be fatal.

Response: The military-industrial complex can meet the challenge and produce a system with a tolerable margin for error.

Challenge: Today's offensive missiles, with their improved penetration aids, probably could overcome the ABM system as now visualized, and the offensive improvement that its deployment is bound to stimulate certainly will render the system obsolete before it can be made operational.

Response: Any projected margin of failure for the defense system is not necessarily any greater than that for the offene.

Challenge: The cost is disproportionate to the protection ABM can afford.

Response: Potential deaths in an undefended United States are a hundred and twenty million; ABM could reduce that casualty list to forty million; the saving of eighty million lives is not only a compelling humane consideration but involves our survival as a nation.

Challenge: ABM will intensify rather than restrain the arms race, worsening instead of improving U.S.-Soviet relationships.

Response: This does not necessarily follow. If the United States deploys an effective ABM system the Russians might also shift their emphasis to defense, thus permitting a mutual deëscalation of the offensive missile race.

There is not, as Dr. Wiesner points out, any final proof here, only untested assumptions—and a man may come down in good conscience on either side, depending upon which set of assumptions he chooses. In closely following the development of missile policy over the years, I have myself found the most persuasive scientific argument on the side of restraint. I did not change that view when Secretary McNamara reluctantly compromised in favor of the "thin" ABM; it seemed to me that even in announcing it he made a better case against the new system than he did for it.

There is a grave omission in all this. The missile game is played almost entirely within the limits of scientific and military concepts; political considerations are largely dismissed as imponderables, relegated in the computer computations to a place along with such diversionary factors as the possibility of human error. The result is to predetermine the character of the game's results; the policy it produces is bound to be shaped within the limits of the military factors upon which it is predicated. We may have more missiles, or fewer, or missiles of a different type, but this is no more than addition and

subtraction of the hardware of deterrence—and experience on both sides has indicated that the exercise leads inexorably to multiplication.

The tendency is to dismiss the political alternative to the balance of terror as entirely too risky—or at best to give it lip service. Well, politics is a risky business. But I would ask in all seriousness if it is any more difficult for the skilled and dedicated men who practice diplomacy to compute the odds on possible failure of a U.S.-Soviet disarmament treaty than it is for the scientists and strategists to determine the malfunctioning potential of ABM. I do not believe it is, and if the question is to be decided by the simple assessment of risk, it ought to be pointed out that a diplomatic debacle would not necessarily be terminal, while an ABM failure certainly would be.

The truth is that we have been demanding more certain guarantees of success of those who have urged the positive course of negotiated disarmament than we have of those who insist that prudence requires us to rely on the negative protection of nuclear deterrence. The only proof of effectiveness that can be offered in defense of the missile standoff is that we have survived twenty years of international tensions without precipitating World War III.

ABM is described by its proponents as defensive, but if it does achieve an effective missile screen it could become offensive, since it would release strategic policy-makers from the restraints imposed by enemy second-strike capacity. The Russians will certainly recognize such an offensive potential, as we did when a rudimentary missile defense system was deployed around Moscow several years ago.

It is contended that we can build up our defensive screen and our deterrent forces at the same time we actively pursue the goal of arms control and ultimate disarmament; indeed, it is argued that this is the only practical way we can proceed, since our adversaries will not respond to anything less than the clear threat of being outdistanced in the arms race. The history of the last decade seems to me to provide a monument to the fallacy of this theory.

So it is in the larger arena where we coexist uneasily with the Soviet Union, while sharing with the Russians the overt hostility of the People's Republic of China. I would be the first to agree with the dictum that the United States must negotiate with the communist world from a position of strength. But there is reason to doubt that we can any longer equate strength with military power alone. Secretary Clark Clifford, in his final report to the Congress, echoes the thoughts of his predecessor in the Defense Department by stressing that true national security is a compound of more than nuclear warheads and missiles. Another round in the nuclear arms race could only increase our insecurity compared to achieving verifiable agreement with the Soviet Union to limit strategic offensive and defensive forces.

For a while, when the leaders of all the nations accepted the balance of terror as an inescapable fact of strategic life, we began to see our differences more clearly, and to consider means by which they might be resolved without the use of the military force now denied the great powers, at least on a global scale. We did not resolve our ideological differences, nor reduce all our conflicts of interest, but, as Justice Douglas notes in the concluding essay in this paper, we did achieve a substantial number of agreements and arrangements under which a great deal of useful international business has been conducted. We can draw at least a minimal lesson from that experience: we are not strangers any longer, and it is not ordained that we must again become enemies.

Robert McNamara, who has been as close to these matters as any man alive, ended his long tour in the Defense Department convinced that the most dangerous thing in the world is a state of mind—the belief among powerful men on both sides, in the face of all the horrendous evidence to the contrary, that somehow the scientists will yet find a way to employ nuclear weapons so that military men may again win a war. This is the real issue in the ABM controversy; when nations begin to accept the thesis that they may be able to devise adequate protection against nuclear attack they also raise the possibility that they may yet be able to use decisively offensive missile force; and on the basis of a mixture of unfounded hopes and challenged assumptions they may turn away from serious negotiation and the effort to find a way to base international relations on liberating reason rather than paralyzing fear.

I say the time has come when we should take some risks in the name of peace, rather than continue the great nuclear gamble in the name of security. In this light ABM might yet provide a great service in advancing the strategic arms negotiations, if, having taken the system to this stage of development, we set it aside as a symbol of our determination to halt the arms race where it is, and turn it back if we can. Let us couple this with passage of the nuclear nonproliferation treaty now pending in the Senate, and go back to the negotiating table with the Russians. The application of as much energy, imagination, and determination in an honest effort to find a formula for arms control as we have invested in the effort to ring our cities with ABM will, I am confident, bring far greater rewards with less risk.

Many wise and experienced men in Washington who agree that this is what we should do insist that it cannot be done—that it is a political impossibility to reverse the policies that have produced, and are now shaped by, the military-industrial complex. It will be difficult, yes, but it is not impossible. For we cannot forget that our only chance of obtaining the huge volume of funds and talent required to rebuild American society at home lies in placing some limitation on the arms spiral. If we fail to do this, urgent domestic needs will go unmet. What is needed now is a great expansion of the dialogue set forth in this paper: let us get the issues out in the open, and get them clear. The fundamentals of the missile controversy are not beyond the comprehension of the American people, and certainly no decision of the magnitude of ABM should be taken on their behalf without greater evidence of their informed consent than can be said to exist presently.

Mr. GILBERT. Mr. Speaker, the purpose of this discussion in the House is to provide a better understanding of the enormous magnitude of the anti-ballistic-missile system decision. This is as it should be. We in this Chamber are charged with the responsibility of making decisions that affect the lives of every American, and this is one such decision. We must carefully weigh the risks involved and try to determine the degree of security the system will offer our Nation. And the American people should be informed of the facts and findings.

We are, I believe, at the crossroads—if we elect to go the way of the Sentinel ABM system, it is possible there will be no turning back. My own conclusion is that it is not in the national interest for the United States to deploy the ABM system. The testimony from scientists, defense experts, and others knowledgeable on the subject, is overwhelmingly against it.

Last year I voted against the appropriation for the Sentinel ABM system and I stand firm in my opposition to the deployment of any such system. The cost is exorbitant and the risks of accidental explosion near our urban centers is frightening. I do not think any of us can feel comfortable with megaton nuclear warheads in our backyards. The sites thus far considered are all near large urban centers. This creates the possibility that enemy fire might be directed toward a large city which otherwise might not be a target. And it also creates the chance that if one of the H-bomb warheads in the ABM system should accidentally explode, the consequent loss of life could be catastrophic. Can millions of Americans get used to the idea of living on a powder keg?

If we had the assurance the system could make our country bombproof—that it would assure the safety of all of us in the future—then this could be an accomplishment we would all welcome. But this is not the case. Even former Secretary of Defense McNamara, when he announced the decision to go ahead with the Sentinel system, said the ABM could not possibly defend us against the Soviet Union's large striking capabilities and would be effective only against smaller Chinese attack. Even then, there is the question of just how useful it would be. Experts see severe technological limitations in the ABM, making it vulnerable to certain types of weapons and ineffective as a missile defense. Since the Sentinel is useful only against high altitude missiles, those fired from submarines or surface vessels coming in at low altitude, could get through. In addition, ABM operates on radar, and missiles encased in paint that absorbs rather than reflects radar beams, the experts tell us, could probably penetrate the ABM defense system. Then there is the obvious observation that any such system can be defeated by an enemy by simply sending more effective warheads—or even dummy warheads—than there are defense missiles capable of destroying them. It has been pointed out that it is relatively simple to devise decoys and penetration aids to foil the radar and divert intercepting missiles.

Mr. Speaker, my conclusion that we should not deploy the ABM system is not based solely on the risk and possible ineffectiveness of it, though these are certainly major factors. I believe it will escalate the arms race and weaken our bargaining position with the Soviet Union. The Soviets are not likely to stand by and remain static as we proceed in the deployment of the ABM system. They will no doubt respond as we did when we got evidence the Soviet Union was deploying a limited defense around Moscow. We began developing penetration aids and more powerful warheads to enable us to penetrate that system. They could react the same way and nullify our system possibly in less time and with less outlay than was required for us to install it.

If our goal is peace, Mr. Speaker, we must set an example for the rest of the world. We must not diminish our capacity to conduct intelligent and rational foreign policy. The ABM system is inconsistent with our efforts for the

ratification of the nuclear nonproliferation treaty and the establishment of a Department of Peace. Under the terms of the treaty the nuclear powers are to undertake "to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament." If there is "good faith" intent in nuclear disarmament, then deployment of the ABM system is inimical to a nonproliferation treaty.

Mr. Speaker, the financial drain for the ABM system—billions of dollars—must come from our Federal budget. It will be at the expense of the poor and underprivileged, our already overtaxed low- and middle-income Americans. I prefer to direct my efforts in Congress, as I have in the past, to trying to eliminate the social ills that plague America: poverty, unemployment, improper housing, polluted air and water, and unequal opportunity. The billions the ABM system will cost can better be used to cope with the social and economic needs of our country, and for the promotion of better relations between and among nations. I believe the security of our Nation depends more on our ability to work and live with other countries and on our efforts toward mutual reduction of tensions, rather than on a costly anti-ballistic-missile system that undoubtedly will escalate the arms race and yet offers no guarantee that it will save American lives in the event of nuclear attack.

Mr. JACOBS. Mr. Speaker, at this point in the CONGRESSIONAL RECORD, I would like to bring to the attention of my colleagues one more example of the widespread disapproval for the proposed ABM system:

[From Forbes, Mar. 1, 1969]

SHOOT IT DOWN

Sentinel, a half-baked $6- to $10-billion antimissile program, I think will be shot down by a combination of worried constituents and sensible congressmen.

When Defense Secretary Laird first said he was going ahead with this "thin" facade, I felt most glum about him.

The prime justification put forward for this vastly expensive boondoggle was that it would help us to bargain with the Russians. The logic of this totally escaped me, since the Reds presumably could read in our papers that the "system" couldn't interfere with the kind of nuclear assault the Russians could launch, and was intended primarily as a negotiating ploy.

My hopes for Mr. Laird rebounded when he responded to Congressional doubters and postponed the Sentinel "for further study." Now he talks of it as a defense against Chinese missiles and/or as a project to give us "experience" in constructing a missile defense, etc.

If Mr. Laird doesn't have the sense to sentence Sentinel to be shot down, there's high hope that Congress will do it for him.

Mr. RYAN. Mr. Speaker, during the 90th Congress I was anxious to receive the assistance of scientists familiar with the military and strategic implications of an anti-ballistic-missile system. Accordingly, in November 1967, I wrote letters to several distinguished scientists asking them to comment on the wisdom of deploying an antiballistic system. My colleague from Minnesota (Mr. FRASER) also joined in these requests.

The answers received were most informative and useful. Since this issue has again come before the House during this session of Congress, I would like to insert these letters, along with the articles to which several of the letters referred. I commend the views expressed in these letters to my colleagues and urge them to heed the advice of these experts as they consider this crucial issue.

I include at this point in the RECORD letters from Prof. Jerome B. Wiesner, former science adviser to President Kennedy and President Johnson, Prof. Victor F. Weisskopf, Department of Physics, Massachusetts Institute of Technology; Dr. Wolfgang K. H. Panofsky, director, Stanford University Linear Accelerator Center; Dr. Leonard S. Rodberg, Institute for Policy Studies, Washington, D.C.; and Prof. Betty Goetz Lall, New York State School of Industrial and Labor Relations, Cornell University:

MASSACHUSETTS INSTITUTE OF TECHNOLOGY,
Cambridge, Mass., November 28, 1967.

Hon. WILLIAM F. RYAN,
Hon. DONALD M. FRASER,
Members of Congress,
House of Representatives,
Washington, D.C.

DEAR SIRS: I am writing in response to your recent letter asking for my thoughts about the antiballistic missile system deployment. I have just recently published a statement in Look magazine which sets forth my strong feelings about the matter. I believe that we are embarking on a course of action which will lead to a new cycle in the arms race, one which will ultimately result in a new level of deterrents and which would potentially be more destructive than the situation with which we are now living. I am enclosing two copies of that piece for your use. I wonder whether you have seen the collection of papers on the antiballistic missile problem that were recently published by the Bulletin of Atomic Scientists. If not, I would suggest that you look at them for these were interesting papers relating to the ABM problem.

A number of persons in the United States would, I'm sure, be willing to help you understand the ABM issue. Professor Herbert York, who is at the La Jolla campus of the University of California, has spent a good deal of time on these matters, and would, I'm sure, be pleased to have an opportunity to talk to you. The same would apply to Professor Jack Ruina on the M.I.T. faculty, Professor George Kistiakowsky at Harvard University, Professor Paul Doty at Harvard, Professor Leonard Rodberg, Physics Department, the University of Maryland, and Professor Frank Long at Cornell University. I'm sure a short note from you would solicit their views, and I'm also certain that any one of them would be willing to participate in more formal discussions with you.

Sincerely yours,

JEROME B. WIESNER.

THE CASE AGAINST AN ANTI-BALLISTIC-MISSILE SYSTEM

(By Dr. Jerome B. Wiesner)

When China exploded a hydrogen bomb, waves of concern spread around the world. Renewed calls were raised in the United States for a defense that would protect us from Chinese nuclear ballistic missiles. These calls have now been heeded by President Johnson. Scientists agree that neither the United States nor the Soviet Union can protect itself completely from a nuclear attack by the other. But as long as Communist China's primitive missile force is very small, some protection *can* be achieved—and this is what the President has decided to buy. Because he couldn't persuade the Russians to consider limitations on missile defenses, the President has now ordered the building of a "thin" defensive system to protect us from the Chinese. The logic of the President's decision seems mighty tortured.

The word in Washington is that President Johnson was forced to bend under the pressure of the military, congressional and industrial sponsors of the antiballistic-missile system. Enormous pressure certainly existed, but such pressure on a President to build a missile-defense system is not new. Both President Eisenhower and President Kennedy were exposed to it. One of the most difficult decisions President Kennedy had to make concerned the Nike-Zeus missile-defense system. The pressures on him were tremendous, but after long, careful study, he decided, on technical grounds, not to build the Nike-Zeus. Today, we know that to have built that system would have wasted between $20 and $30 billion. It would have been already obsolete. I am certain that the system we are now planning will be regarded as ineffective before it is installed.

Secretary of Defense McNamara estimates that the United States could build an ABM system (for between $3 and $6 billion) that would provide a reasonably effective defense against Chinese ballistic missiles—for 10 to 15 years. But he concedes that such a system would do us little good against an attack by the Russians. Even if the thin ABM system is as effective as the Secretary of Defense says—and I strongly question this—should we take the portentous step of deploying an ABM system for protection against Red China? I think we should not.

In his long statement announcing the President's decision to build an anti-Chinese ABM system, Secretary McNamara concludes that the arguments marginally support its construction. This is obviously a matter of judgment. I think the arguments are overwhelmingly against building it. In fact, I believe that this decision could be as wrong and have as serious domestic and international consequences as the disastrous conclusion six years ago that a few military advisers and some weapons would lead to an early victory for South Vietnam's forces.

In the late 1950's, the United States first began to examine the problem of defense against ballistic missiles. At that time, the only useful concept involved low-altitude interceptor missiles armed with nuclear weapons. The idea was that radars would track an incoming enemy missile and guide our "antimissile missile" near enough so that the nuclear warhead, exploded at the right time, would destroy the enemy missile. One defensive rocket would be fired against each incoming object. But an enemy could easily confuse the radars—by including along with the real nuclear warheads high-altitude "decoys," such as lightweight metallic balloons. Since decoys break up or slow down when they hit the earth's atmosphere, we hoped that by waiting, we could pick out the real warheads and launch a defensive attack. The antimissile missiles would have to be placed near each city to be defended, and the tremendous heat and blast caused by the explosion of the defensive warheads, low over the cities, could inflict terrible civilian casualties. It was possible that such a defensive system would do as much damage as enemy warheads. The Nike-Zeus plans, therefore, included a major fallout-shelter program.

During the past two years, it has appeared feasible to build high-altitude defensive missiles for use against small-scale attacks. The nuclear warheads on the high-altitude missiles would be exploded far out in space—in an attempt to destroy both the decoys and the real enemy warheads. In this way, some defense of a much wider region, farther from each antimissile site, would be possible. The

proposal is that, with enough sites, the entire United States can be protected. But this will not work if an attacker staggers his decoys and warheads in time and spreads them over a large area, or precedes them by a nuclear explosion of his own to "black out" our defending radars. High-altitude defense represents an improved approach to the problem of defense against ballistic missiles, but it is by no means a solution.

The basic technical fact about an ABM defense is that a sophisticated opponent can overcome any defense currently possible. Offense has all of the advantages; any defense system can be overpowered.

Today, the nuclear powers rely on the deterrent effect of their offensive missiles to keep the peace. A powerful incentive, therefore, exists for either side to increase its offensive-missile forces the moment the other starts to build an ABM system.

The Russians appear to be building a simple ABM defense around Moscow, and possibly other areas, though it is yet unclear that they have decided on a full-scale, antimissile defense system. In response, the United States has taken steps to add decoys and multiple warheads to its own offensive-missile force. These actions on our part are still quite limited, but the steps we have already taken, especially the introduction of multiple warheads on each missile to overwhelm possible Soviet defenses, will greatly increase the number of missile warheads in our inventory. The Russians appear to have been taking similar steps in anticipation of a U.S. decision to build an ABM system. An ABM system in the U.S. will stimulate the Soviets to increase the number of their offensive warheads.

The United States is earnestly seeking some agreement with the Soviet Union to limit the deployment of ABM systems and missiles, in order to forestall a new spiral in the arms race. Unofficial conversations have been held with individual Russians, but we have not succeeeded in getting discussions started at an official government level. In Glassboro, President Johnson repeated to Mr. Kosygin our willingness to explore the problem. The Soviet Union does not seem ready to discuss such questions—yet. But there is no need for us to rush into an ABM deployment.

There is little relation between a Russian decision to deploy an ABM system (if, indeed, they have made a decision for more than an experimental system) and such a decision here. Our security would be seriously endangered if the Russians installed an effective ABM defense that could prevent our missile force from reaching their territory and if they simultaneously developed an effective defense against our Strategic Air Force bombers—something they have not been able to do so far. Since it is obvious folly for us to build a defense against missiles while we also are so vulnerable to a bomber attack, the Pentagon has quietly decided to spend four billion more dollars improving our air-defense system.

I do not believe that a really effective antimissile system is remotely possible for either the U.S. or the Russians. And even if the Russians could develop one, and a truly effective defense against our SAC bombers as well, our installing an ABM system would not restore our powers of deterrence. Only improvements in our own offensive-missile force, including "penetration aids" such as decoys and electronic jammers to ensure that our missiles could get through the Russian defense, could achieve this. This is our Defense Department's basic strategy.

The United States has embarked on a large, expensive program of outfitting ballistic missiles with multiple warheads and other devices to penetrate Russian defenses. We have also started a $2 billion program to replace our submarine-based Polaris missiles with the larger Poseidon missiles, which can carry more and better penetration aids. As long as we continue to improve our missile forces and maintain our B-52 bomber force, our deterrent power will remain effective. An ABM system is not required to preserve the power and the effectiveness of our deterrents.

We should build an ABM system only if it gives us greater security. And in deciding this, we must assume that the Russians will respond to our ABM system by upgrading and enlarging their missile force—just as we are doing in response to their ABM activities. If the Russians were to do this, an American ABM system would leave us with less security and more vulnerable to destruction.

Secretary McNamara and many proponents of an ABM system concede that an anti-Soviet ABM defense would not be worth the huge expense, because the Russians could nullify its effectiveness at considerably lower cost to themselves. So the proponents now argue: We can at least provide ourselves with protection against Red China at a more modest cost and without starting a new Russian-American arms spiral. Is this so? Again, I think not.

An ABM system would grant us some protection against China's missiles during the early years of its missile buildup; but this protection would not be complete, and it would be short-lived, certainly, much shorter than 15 years. Once the Chinese can build intercontinental missiles, the cost to them of producing additional missiles would be relatively small (perhaps $5 to $10 million per missile). Within a short time, they would have enough missiles (say, 50 to 100) to penetrate our "anti-Chinese" ABM system.

The Chinese would certainly build penetration aids into their missile force. The techniques of designing such aids are neither highly complex nor exceedingly costly (one can learn all about them in American aerospace journals). I do not believe, therefore, that an ABM system will give us either complete or lasting protection against Chinese missiles. I am convinced we must rely instead on the offensive deterrent, as we must with the Russians; that is, we must rely on our known ability to retaliate devastatingly in case of a nuclear attack. Ten percent of our SAC bomber force could kill 200 million Chinese.

I am very skeptical that any ABM system based on the present approach will ever work at its calculated effectiveness. No one has even succeeded in developing an antiaircraft defense that is as much as ten percent effective (three percent is a more common actual effectiveness). An ABM system that was only this effective would be almost worthless. Even if an ABM system were as much as 90 percent effective, it could still not prevent an opponent from inflicting millions of fatalities on us.

Besides, whenever an ABM system might be installed, how could a realistic test be made? We could not fire missiles at it (it would be located within the continental United States), and from hard experience during World War II, we know that far simpler devices (such as submarine torpedoes) fail to work the first time. I realize that a model system is being tested on Kwajalein, but these tests are under laboratory conditions and cannot simulate a nationwide installation manned by GI's and technicians. Even if we were willing to fire missiles at the system, the test would not be completely realistic, for we would be testing against our missiles, not enemy warheads. Few competent people expect the extremely complex ABM system to work the first time; yet it must to have any effect!

There will always remain a big chance that even if the system is working as designed, it will not intercept all of the enemy missiles. They will obviously know how our ABM system works; we will know little about their offensive weapons. Imagine the advantage a football team would have if it knew precisely its opponents' defense on every play. Remember that if a single enemy nuclear weapon leaks through the defense to a city, the city will be destroyed.

Besides, the Chinese could bypass our ABM system completely—either with low-altitude missiles launched from submarines or with aircraft, which, surprisingly enough, are more difficult to intercept than intercontinental ballistic missiles because they come in at relatively low altitude and do not follow predictable projectories the way a missile does. We simply cannot rely upon an ABM system to give us a sure defense against a Chinese attack.

Many people also fear that the deterrent power on which we rely against the Soviet Union will not be effective against China. The exceptional anxiety expressed each time the Chinese carry out a nuclear test seems related not to their military potential but to our view of them as irrational or unstable. This anxiety rises more from Chinese rhetoric than Chinese actions. Although the words of China's leaders have been inflammatory in the extreme, in action, they have been exceedingly cautious.

China's actual military capacity is, most likely for decades to come, hardly comparable to that of either the United States or the Soviet Union. The Chinese have an extremely limited industrial capacity (until now, they have produced no aircraft of their own!). They also lack the broad base of technically trained manpower that is absolutely necessary for a modern military establishment. Nonetheless, they have made remarkable progress in developing nuclear weaponry. They took less time than any of the other nuclear powers to carry out a thermonuclear explosion. In this, they received considerable help from the Soviet Union, in the late 1950's, as well as a good deal of technological information from open sources and their own intelligence network. And they do appear to be making progress on missiles capable of carrying nuclear weapons. Apparently, they launched one of their nuclear weapons on a short-range missile. Though we have no evidence of a Chinese long-range ballistic missile, we know that their resources are adequate to develop one and, I believe, produce it in moderate numbers (100-200) in less than a decade.

During the late 1950's, many statements by Chinese leaders minimized the importance of nuclear weapons, arguing that they did not really change the relative power balance. We heard boasts that China alone among the great powers would be able to survive a nuclear war. All this has changed. The Chinese now renounce any intention of being the first to use their nuclear weapons, and they show every sign of a growing sophistication in nuclear matters, which is to be expected as they acquire knowledge of the terrible effects of nuclear explosions.

It is China's neighbors, not we, who would be most directly threatened by any Chinese missile force, and an ABM system in the U.S. would be of little help to them. We could not deploy an ABM system in India and Japan; they are to close to China to permit the system to work effectively. What, then, must the leaders and people of Japan and India think as we make plans to hide under an ABM umbrella while they have no way to defend themselves? If the United States is so fearful of China that it must create an ABM defense, should not Japan and India conclude that it is time for them to make their peace with the Chinese? There is no easier way for us to build up China in Asian eyes. No Asian can afford to believe that we are prepared to lose New York to counter a Chinese nuclear attack against them. Some Indian officials are already asking for a missile-defense system.

Can we build a limited ABM system to protect us against China without stimulating

the Soviet Union to respond with an offensive-force buildup of its own? I think not. Just as we are enlarging our missile forces because we cannot wait to see whether the Soviet Union is building a limited or an extensive ABM system, so the Russians could not wait to see whether our system would be a limited one before embarking on an offensive-missile buildup. Even if, as the President proposes, we build a thin ABM system, it would be unlikely to remain small; pressures from the military and industrial establishment to improve—and expand—it would be irresistible. Most military planners expect the system to expand rapidly, and in fact do not consider the initial system to be of much use. This is the reality of the President's decision. I am convinced that once we decide to take the ABM route, we cannot avoid an enlarged arms race.

Three other consequences of the President's decision are not generally appreciated. First, an expanded ABM system will be needed eventually to cope with decoys and multiple warheads. It will almost certainly raise the issue of fallout shelters to protect the population both from Russian nuclear weapons and our own protective system.

Secondly, no one has bothered to mention the several hundred million dollars a year that it will cost to maintain and operate even this thin system or the billions of dollars it would take to run the final one.

Finally, our only substantial arms limitation accomplishment, the limited test ban treaty, is likely to be a victim of this step-up in the arms race. The developers of the ABM system will soon be telling us that they cannot assure its effectiveness without nuclear tests in the atmosphere. The pressure on the President to renounce the treaty in the interest of national security and protecting our multi-billion-dollar investment will be overwhelming.

The United States and Russia are learning to work together to create a more rational world order. Gone are those deep fears of a surprise attack that dominated the 1950's. The best hope for the future lies in joint efforts by the Soviet Union and the United States to eliminate the arms race. Such efforts will be impossible if each side is forced to offset the defensive and offensive buildup of the other.

Under the present circumstances, we are going to have to accept and live with a "deterrent balance." We have done it with the Russians. We will have to with the Chinese. There just is no way to avoid this; there is no magical or technical escape from the dilemmas of the nuclear age through defense. A sensible course would be to reduce greatly the offensive-missile forces on both sides, achieving the deterrence with much less danger to all of us.

Like most other scientists who have studied its problems, I am convinced that much mutually coordinated disarmament is technically achievable with considerably less risk, effort and cost than is involved in our current deterrent position. The blocks to disarmament are political and psychological, not technical. Unfortunately, disarmament has no effective political support, no vested interests backing it, and no power base in the Government bureaucracy or in the Congress. Some of the same senators who have been pressing the President to spend tens of billions of dollars on defense against a missile attack have consistently tried to cut the tiny budget of the Arms Control and Disarmament Agency. Substantial balanced disarmament is sensible, safe and technically achievable, and even partial disarmament would release many tens of billions of dollars for constructive uses. But it is not coming very fast. Until statesmen take disarmament efforts seriously and fashion international security arrangements more appropriate to the nuclear age we all live in, the best we can hope for is an increasingly nightmarish peace insured by only a balance of terror.

A real defense against nuclear-armed missiles is a mirage. Our only real security lies in peace itself. Nuclear weapons are just too potent for effective defense. The best defense is to prevent a nuclear war.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY,
Cambridge, Mass., November 29, 1967.

Congressman WILLIAM RYAN,
Cannon Building,
Washington, D.C.

DEAR MR. RYAN: I was very pleased to receive your letter in respect to the plans of the Administration to deploy an anti-ballistic missile system. I am very strongly against this measure, being both useless and dangerous. My ideas are perhaps best expressed in an article which my friend and collaborator, Provost Jerome Wiesner, has written in Look Magazine a few weeks ago. I am sure that you are in possession of this valuable document. I also was deeply impressed and convinced by the speech that Mr. McNamara has given in respect to the anti-ballistic deployment. In the first three-fourths of his speech he is most cogently against such a measure, but at the end he was forced by the circumstances to subscribe to the Administration's policy to begin with such unnecessary and useless expenses. I feel that the anti-ballistic issue is a most dangerous one, and it is high time that the public is informed of the dangers involved. The fate of the United States and the whole world are at stake, and I am greatly heartened by the fact that congressmen like yourself and Mr. Donald Fraser are taking up this important issue. Please let me know whenever I can be of help to you in this matter. There is quite a number of members of the M.I.T. and Harvard community who would be only too glad to help you in your efforts.

Very sincerely yours,
VICTOR F. WEISSKOPF.

STANFORD UNIVERSITY,
Stanford, Calif., November 28, 1967.

Hon. WILLIAM F. RYAN,
Hon. DONALD M. FRASER,
House of Representatives,
Washington, D.C.

MY DEAR MESSRS. RYAN AND FRASER: I have your letter of November 17, 1967, asking for my opinion of the recent decision on the part of the Administration to proceed with the development and deployment of a "thin" anti-ballistic missile system. I am extremely glad that you and other members of the Congress are taking an interest in this vital issue since it clearly represents a decision which could have far-reaching consequences.

I should like to emphasize that I am responding to your request as an individual and not as a member of some of the military and disarmament advisory groups in which I am continuing to play a part.

It is clear that one can respond in reacting to the deployment decision in two ways: namely, one can take the decision at its face value—that it represents "thin" deployment to meet specified objectives, or one can assume that it represents a "foot in the door" to lead to a full deployment decision costing many tens of billions of dollars, which is aimed at a hopefully effective anti-ballistic missile defense against the Soviet missile force. In my reply to your letter I will not deal with the merit or lack of merit of such a full deployment; I continue to be opposed to such a move since it clearly would signal the initiation of another round of strategic escalation with the Soviet Union without a gain in security for either side. I believe that Secretary McNamara's San Francisco speech well documents the arguments against such full deployment and I heartily concur with these arguments. Whether it is politically feasible to resist the pressure for such deployment as a result of the "thin" deployment decision is a matter on which you and other members of Congress are more qualified to pass judgment. My comments are therefore restricted to the deployment decision as it relates to "thin coverage" only.

The dominant arguments now presented in favor of a quick deployment decision for the thin umbrella system are the following:

1. To give interim protection against the Chinese threat.

2. To assure survival of an adequate fraction of Minuteman ICBM's against a fully coordinated first strike Soviet attack.

3. Protection of command and control and protection against accidental attack.

I would like to comment in turn on these three arguments.

1. CHINESE THREAT

The justification for the partial system is presented in the context of a limited number of ICBM's in the 1975 time period. It should be made clear that there is no quantitative basis whatsoever for a specific projection. On the one hand the Chinese may exploit their ICBM potential for propaganda or political purposes only and not make the major economic sacrifice involved in an ICBM production program; moreover, they may find themselves unable to sustain a major program as a consequence of the chaos produced by the cultural revolution. On the other hand, the Chinese may give highest priority to the development of an ICBM threat. It is then technically feasible for them to reach numbers adequate to penetrate the thin shield.

The proposed defense is characterized by the fact that its effectiveness is highly sensitive both to the quantitative nature of the threat and the specific level of defense. Under all circumstances it is recognized by even the most ardent advocates that the protection it can give us is of an interim nature, i.e., that we cannot "win" a defense race against the Chinese ICBM's any more than we can "win" it against the Soviets. What purpose does this interim protection serve? It appears to me that such a system can primarily permit us to implement a strategic policy vis-a-vis the Chinese not unlike John Foster Dulles' "massive retaliation" which was invoked against the USSR during the time when the Soviets did not have a nuclear delivery capability. Under this policy a massive nuclear attack by the USA could be threatened with impunity as a possible consequence of unacceptable USSR military moves, even of a minor nature, yet this policy did not prevent the buildup of USSR strength to a level which made complete defense against nuclear attack infeasible, so that the USA was forced to rely on an assured destruction capability as its primary means of averting attack.

I see no reason why the outcome of such a course should be fundamentally different in Asia. At present we could, in principle, respond by "massive retaliation" to unacceptable Chinese moves were it not for other consequences (including Soviet response or moral considerations). A limited ABM deployment would extend this policy option until we will once again have to rely on deterrence as our primary means of strategic defense. Eventually a big enough buildup of ICBM forces can always concentrate its fire on sufficiently few targets and thereby penetrate the defense by sheer exhaustion if by no other means.

An argument often cited in support of the thin ABM defense against the Chinese threat goes as follows: If we fail to deploy an ABM system the Chinese can blackmail us by threats to our cities and population and thereby immobilize our willingness and ability to resist her expansionist military moves in Asia. This argument is recognized, however, as no more than a restatement of what I have said above and means only this: We can threaten "massive retaliation" until the Chinese buildup of their ICBM threat forces us to rely on deterrence once again rather than on an airtight ABM system for strategic defense.

What price should we be willing to pay to extend temporarily our present security from Chinese threats—especially when we discern little at present that serves to retard Chinese military buildup and political intransigence? Since the Chinese must realize fully that a nuclear first strike against U.S. cities would be suicidal for them, is not our deterrence effective protection? There is no evidence whatever that the Chinese are apt to be irrational in military ventures. The Chinese military action vis-a-vis Quemoy and Matsu and other targets under U.S. protection has been exceedingly cautious. I am therefore talking only about temporary protection against a totally irrational and suicidal attack by the Chinese which would result in limited damage to the U.S. in comparison with the tragic consequence for China. For this reason I believe that by itself the Chinese threat is a very weak argument for deploying at this time the "thin" system.

A further reason for questioning the "Chinese" argument for the deployment decision relates to the reaction of our Pacific allies. On the one hand they might feel *less* secure if the U.S. protected itself in order to avoid pressure from potential nuclear attack by China, while leaving them exposed and vulnerable as hostages. On the other hand, they might feel *more* secure in the knowledge that the USA could protect them without itself being exposed to nuclear attack. Given the choice between these two arguments I doubt that the Pacific allies of the U.S. would take much comfort in this second argument while fully realizing the first. At best this reasoning must be considered to be a standoff unless the U.S. is willing to extend ABM protection to its allies also.

2. PROTECTION OF MINUTEMAN

Although, historically, in the evolution of the Army ABM proposals "hard point defense" has not been a primary argument, I feel that the evolving rationale for deploying the limited system for defense of the Minuteman force has some justification. However, it is difficult to make it a high priority objective.

It is possible in principle that the Minuteman force can in time be denied its second strike effectiveness through increase in accuracy and numbers of the Soviet ICBM force and through the development and deployment of sophisticated, multiple warhead devices on the part of the Soviets. There is a minimum time interval between first indications of such a threat to Minuteman through new technical developments and a full-scale Soviet deployment of new devices endangering Minuteman. Should such a threat occur, an over all challenge to our deterrence would arise only if it were accompanied by the deployment of a truly effective ABM on the part of the Soviets to neutralize Polaris and Poseidon, and an air defense considerably more impenetrable than that now facing SAC bombers. Nevertheless, one can argue that all these events may happen with a lead time no longer than the time required to deploy active defense for the Minuteman force, or the time required to proliferate our ICBM force to keep up with the threat. Under these highly strained assumptions a case can therefore be made for a decision to proceed now with active defense of the Minuteman force.

Given such a decision there is still the question of whether the present system is technically the best means to accomplish this objective.

3. PROTECTION OF COMMAND AND CONTROL AND PROTECTION AGAINST ACCIDENTAL ATTACK

An argument for the "thin system" which has some validity is that it protects vital command and control points, in particular, Washington, D.C., in case of an accidental firing of a Soviet or Chinese ICBM, or in case of other limited threats. This argument in my view has considerable validity. It is certainly imaginable that there can be an accident of this nature and the chance of an irrational or ill-informed response on our part would be substantially reduced if the lines of command were protected so that meaningful investigations as to the source of actual firing and possible discussions over the "hot line" could take place before a course of action is decided.

The question may naturally be raised as to how ABM deployment, both in its present "thin" context and a possible full deployment, relates to the prospects for arms limitation or arms reduction. As you know, overtures have been made towards the Soviet Union to forego ABM deployment and to consider reduction of strategic weapons if the USSR showed some interest in a reciprocal arrangement. To the best of my knowledge these moves have not been successful, partially, of course, under the shadow of the Viet Nam war. It is my belief that including ABM in an arms limitation agreement with the Soviets would be a very difficult negotiation problem since, traditionally, the Soviet Union has been more defense minded than the USA: that is, the Soviet Union has always spent a considerably larger fraction of its strategic military budget on defensive, rather than offensive weapons. quite apart from these ongoing moves in relation to the Soviet Union one can argue that the "thin" deployment would make it more feasible to reach a disarmament agreement with the Soviet Union in the field of long-range strategic missiles. The argument is that should one reach an agreement involving *complete destruction* of long-range ICBM's, but if one lacked confidence in an adequate inspection system, then the thin ABM system would offer protection against residual, clandestine deployment. This argument is valid only provided means are found to reach a point of total elimination of strategic missiles without passing through a strategically unstable situation; I am not aware of any feasible proposal to achieve such a reduction in the presence of deployed ABM. If, on the other hand, an arms reduction move is being negotiated which would provide *reduction* of present strategic forces to a minimum deterrence level, then the presence of a limited ABM would raise the level which each nation would conclude to be required for minimum deterrence. In short, the relation of the limited ABM deployment decision to the prospect for arms limitations or arms reduction depends on the particular scheme under discussion. Since I consider the prospects for engaging in a meaningful dialogue with the Soviets aiming at complete elimination of long-range strategic missiles to be considerably less hopeful than engaging a dialogue aiming at a simple reduction of strategic force missiles, I feel that on balance the decision for limited deployment is an impediment rather than a help toward the prospect of arms reduction agreements.

To summarize, I continue to be very much opposed to full deployment of an ABM system and I also feel that the "Chinese Argument" for deploying a thin system now lacks validity. On the other hand, I feel that there may be valid arguments, although not of high priority, for deploying the thin system for protection of Minuteman and thereby reducing the pressure for proliferating the Minuteman force, and there are also valid arguments for the thin system for protection of command and control, in case of accident or otherwise limited attack. You will note that the two arguments which I consider to be valid for deployment of the "thin" system are limited in scope and in themselves could not be used as a basis for amplification of the system. The "Chinese Argument" on the other hand, which I do not consider to be valid, also contains the implied threat of pressure for the deployment of a vastly expanded system.

I hope you will find these comments useful; clearly a great deal more can be said on this very complex question.

Sincerely yours,

WOLFGANG K. H. PANOFSKY,
Director.

INSTITUTE FOR POLICY STUDIES,
Washington, D.C., December 1, 1967.

Hon. WILLIAM F. RYAN,
U.S. House of Representatives,
Cannon Building, Washington, D.C.

DEAR CONGRESSMAN RYAN: Thank you for letter of November 16 regarding the antiballistic missile problem. I am very much concerned with this problem and will be happy to provide whatever assistance I can in your study of this most important question.

The recent decision to deploy a "thin" ABM system is of course most disturbing. I believe it was a most unwise decision, leading us toward a much more dangerous future military position. It was clearly a decision impelled by the pressures of intense military-industrial (and Congressional) lobbying, in the face of Administration reluctance to initiate such a large and momentous new program at this time. The departure of Secretary McNamara only adds to my concern, since the forces resisting an all-out arms race will be weakened thereby.

It is clear from the history of ABM discussions that the "anti-Chinese" emphasis currently in vogue was developed to justify a program whose prime initial justification, as a defense against Soviet ICBMs, was not "selling". The Administration now wants to deploy such a system, directed against China, while at the same time avoiding an arms race with the Soviet Union. However, it cannot have it both ways. If the system will provide as effective a defense against the Chinese as the Administration has claimed, then it will also threaten the Soviet deterrent, and the Russians will have to expand their missile forces to keep their deterrent "credible". If the system is kept more limited, it will not work against the Chinese missiles, and cannot even be justified on those grounds.

This new program also refocuses world attention on nuclear weapons and will make it difficult to stop the spread of these weapons to other countries. This is perhaps the most important consequence of this decision. From the domestic political point of view, though, I do not see that much can be made of this, since it is difficult to raise it dramatically before the public view.

I enclose several things I have written recently on this subject, including an article in the Bulletin of Atomic Scientists on the arms control impact of ABM deployment, and a letter I have written to the New York Times on recent discussions of the deployment decision. I would also refer you to an article by Jerome Wiesner in the November 28 issue of Look Magazine.

In addition, the Federation of American Scientists has recently been in contact with Congressman Cohelan, who has also indicated interest in investigating the ABM question further. The Federation has gathered some materials for Mr. Cohelan, and I have asked Mr. Daniel Singer, its General Counsel, to make these materials available to you also.

If there is any other way I can be of assistance, please let me know.

Sincerely yours,

LEONARD S. RODBERG.

CORNELL UNIVERSITY,
New York, N.Y., February 29, 1968.

CONGRESSMAN WILLIAM F. RYAN,
CONGRESSMAN DONALD M. FRASER,
House of Representatives,
Washington, D.C.

DEAR CONGRESSMAN RYAN and CONGRESSMAN FRASER: I am delinquent in responding to your request of last November to share

with you some thoughts about the decision of the Secretary of Defense to develop and deploy an anti-ballistic missile system. I am enclosing some four articles that I have written on this subject.

I would particularly like to stress the importance of not separating the ABM question from that of strategic offensive forces. I believe that from the point of view of domestic politics and with respect to negotiations with the Soviet Union, as well as giving consideration to the problems of obtaining the signatures of non-nuclear countries to a non-proliferation treaty, we need to proceed from the assumption that the issue is now to halt the strategic arms race in both offensive and defensive weapons. I believe the Secretary of Defense in the past has done a disservice in emphasizing only the need to control the defensive aspects of the strategic arms race. I hope that your efforts can be directed along lines to rectify this lopsided way of looking at the question.

I think it would be very useful if members of Congress could turn their attention to means by which the U.S. could develop a negotiating position on means to curb the strategic arms race. I realize that the Soviet Union has been resisting negotiations on this question because of the Vietnam War. At the same time you should know that there have been several quiet discussions between U.S. and Soviet scientists on this issue. They are planning to meet again. As the Soviets move closer to more of a balance with the U.S. in strategic forces, it is likely that once again there may be interest in serious negotiations on this question.

Obviously, it would be desirable for both political parties to discuss this matter in a constructive light during the campaign or at least take the issue out of the campaign by not having the parties use it as an area of controversy.

In any case hearings to explore various negotiating postures might be enormously educational as a means of focusing Congressional and public interest on the question. This at least would help to indicate to the Soviets that influential political leaders in the U.S. took the issue seriously. Furthermore, this is one of the more important areas which could have some influence on non-nuclear powers to sign the non-proliferation treaty. If such powers think the two super powers are willing to curb their own armaments, just as they are using the non-proliferation treaty to prevent others from obtaining nuclear weapons, signatures may be more forthcoming.

As to other sources you should consult, you might want to talk with George Rathjens, Jack Ruina, Frank Long, and Paul Doty.

Sincerely yours,

BETTY GOETZ LALL.

THE ABM DECISION: $40 BILLION FOR ANTI-MISSILE-ESTABLISHMENTARIANISM

(By Betty Goetz Lall)

(NOTE.—Betty Goetz Lall is on the staff of Cornell University's State School of Industrial and Labor Relations.)

When Secretary of Defense McNamara announced last November that he was stepping up production of the newest U.S. strategic missile, the sea-based Poseidon, because there was increasing evidence that the Soviet Union had begun to deploy an anti-ballistic missile defense system around Moscow, he may not have anticipated the storm of controversy he was brewing up. His announcement raised the pitch of the debate about whether the United States should move from the research and development stage to the production and deployment stage of its anti-ballistic missile, the Nike X. The Secretary of Defense clearly does not favor spending an estimated $40 billion over a ten-year period for such a weapon of dubious effectiveness. If the United States were to deploy an ABM and the Soviets were then to act to counter this with an improvement in their own offensive capability, Mr. McNamara has said: "In all probability, all we would accomplish would be to increase greatly both their defense expenditures and ours without any gain in real security to either side." But since the Joint Chiefs of Staff and some important members of Congress favor early deployment of an ABM system around 50 American cities, along with a necessary accompanying large-scale fall-out shelter program, it seems prudent to examine the policy choices before the American government and people at this point in time.

What are the choices? 1. *Produce and deploy the currently developed Nike X system.* Enough research has been done on this system to consider it deployable. If the Soviet Union took no measures (a rather optimistic assumption) to counteract the Nike X, deployed both as an area defense and around about 50 cities, it is estimated that the U.S. fatalities from a Soviet strike might be reduced from 120 million to 30 million. If the Soviets improve their offensive capability to counteract the effect of the Nike X, which they easily can do, then the U.S. fatalities would remain at about 120 million.

The system itself would consist of three parts: a long-range interceptor missile, the Spartan, which would aim to detect and destroy Soviet incoming missiles above the atmosphere as much as 400 miles away; a short-range interceptor missile, the Sprint, which would attempt to destroy those attacking missiles getting by the Spartan; and a fall-out shelter program to protect people from the inevitable fall-out which would descend upon them by the detonation of the U.S. and Soviet missiles intercepting one another with their respective large nuclear warheads above large U.S. populations.

There are two main advantages in deploying such a system. One is the obvious saving of some 90 million lives in the event of a full-scale Soviet nuclear attack on American cities and provided no measures were subsequently taken to improve the Soviet missile capability to counter the U.S. deployment of Nike X. The second advantage is the possible further deterrent effect on the Soviet Union: it would not try to attack the U.S. because with the Nike X the U.S. would probably have the strength to counterattack and kill millions of Soviet citizens. Another, rather weak, argument is that other countries might be less likely to build their own nuclear weapons. Instead they would rely on a U.S. guarantee to come to their aid in the event they were attacked with nuclear weapons. It is contended that, if the U.S. had an ABM system deployed, such a guarantee would be more credible, i.e., the U.S. would be more likely to risk attacking a nuclear aggressor if it knew that its own population was relatively more immune from nuclear attack. A fourth possible argument is that the U.S. should adopt the Soviet strategy, spend money for an ABM system, and reduce its concentration on offensive missiles. The U.S. has been spending roughly $4 billion on offensive missiles for every $1 billion spent on defensive systems. If this ratio were reversed and the Soviets were also to rely primarily on defensive strength, then the U.S. offensive strength, which is considered four times that of the Soviet Union, may become less ominous to the Soviets and a reduction in tensions between the two countries might result.

SEVERAL ARGUMENTS

Arguments against ABM deployment include the following: First, the cost (estimated by McNamara to be $40 billion for defense of 50 cities and up to $100 billion for all major cities) is not worth it since it is unlikely that such a system would in fact reduce U.S. fatalities. The Soviet Union would surely counter U.S. deployment with stronger offensive systems, thus completely nullifying the U.S. effort. Such a large amount of money is more usefully spent elsewhere, on better offensive systems or on needed non-military projects.

Second, if the Soviet Union reacted to American Nike X deployment by improving or enlarging its own defensive force, the U.S. might then feel required to increase its offensive force, thereby reducing the possibilities for de-escalation of the arms race, improved U.S.-U.S.S.R. relations, and further arms control agreements. (In particular, ABM deployment would diminish chances to extend the partial test treaty to cover underground tests, because such tests give information on ABM effectiveness: it would reduce possibilities of an agreement to stop production of fissionable material for weapons purposes because the U.S. or the Soviet Union may decide they need to continue production for ABM nuclear warheads.)

Third, U.S. allies may decide that if the U.S. must have an ABM system, so must they, thus further reducing the likelihood of containing the spread of nuclear weapons. West Germany may have in the ABM a more effective argument for acquiring nuclear weapons than she had in wanting to participate in a NATO sea-based multilateral nuclear force. Germans might claim, just as the Russians do, that nuclear warheads for an ABM system are only defensive and, therefore, cannot be a threat to any nation.

Fourth, an ABM system may cause the American people and government to believe themselves invulnerable to attack and consequently to lose interest in further efforts to reach arms control and disarmament agreements; similarly, other countries would note the lack of U.S. and Soviet restraint in the arms race and conclude they should not show restraint in arming themselves.

Fifth, the U.S. is not yet absolutely sure what the Soviet Union is doing or is ultimately intending to do regarding an ABM system; a hasty U.S. decision to go ahead and deploy an ABM system might destroy the forces of restraint in the Soviet Union. (It is known that some Soviet scientists have urged their government to go slowly on deployment; if they have had some measure of success, a decision by the U.S. for major deployment would certainly weaken their position.)

Sixth, the U.S. deterrent posture should not be determined by imitating precisely whatever the Soviet Union chooses to do. There is no necessary principle of defense that states that because the Soviet Union has a certain weapon or employs a particular strategy the U.S. must follow willy-nilly. In fact, when the Soviet Union spent for air defense systems over twice what the U.S. was spending, the U.S. reaction was not to ape the Soviets in building more air defenses, but rather to concentrate on offensive weapons.

All this for and against argument, however, still leaves other choices to be considered:

2. *Decide against deployment now and concentrate on continuing to build offensive strength to overcome the disadvantages of any Soviet ABM system.* The main argument for this approach is that the deterrent to Soviet attack lies primarily in having a good offensive capability. Furthermore, the cost of a given amount of offensive capability is much less than the cost of a comparable effort in the defensive field. Offensive strength gives, moreover, greater confidence to U.S. allies that we have the wherewithal to protect them in the event war comes.

Placing major emphasis on continued offensive strength has its own disadvantage, however. This can pose as a threat to the Soviet Union, more so than defensive measures. Consequently the Soviet Union may feel compelled to continue its offensive buildup and to doubt the United States' interest in finding ways to curtail armaments.

3. *Seek agreement with the Soviets not to deploy further any ABM system.* This step would have the advantage of precluding vast expenditures for defense on either side. The status quo of the existing deterrent would remain. Each side would know that the other possessed overwhelming power to deliver deadly blows on its people causing 100 to 120 million fatalities to each side. Such an agreement might be embodied in a formal treaty or it might be an understanding or declaration made by the two sides. The need to perfect further the offensive missiles of both sides would decrease; for example, the U.S. may find it unnecessary to replace the Polaris sea-based missiles with Poseidon, thus saving at least $1.9 billion.

An agreement not to deploy an ABM system would not require inspection on the territory of the two powers. Satellite reconnaissance can detect the large radars and other equipment related to an ABM system.

Soviet unwillingness to negotiate any kind of an agreement on defensive weapons that lets offensive weapons stay intact is the main impediment to an agreement not to deploy an ABM. The Soviet Union has always been more defensive-minded and traditionally has spent more money on defensive measures than has the United States. Therefore, Moscow would not feel that its security had been enhanced if the U.S. were free to improve and enlarge its strategic offensive strength while the Soviet Union was forbidden to undertake defensive measures.

A simple limitation on ABM deployment by the U.S. and the U.S.S.R. had been the preference of the Secretary of Defense. In his budget presentation earlier this year the Secretary said that, although the U.S. would continue to push ahead with its ABM development program, the U.S. would "initiate negotiations with the Soviet Union designed, through formal or informal agreement, to limit the deployment of anti-ballistic missile systems." But since the Soviet Premier, in a recent letter to President Johnson, announced that he would not be content with so restricted a proposal, this leads to a fourth choice.

4. *Negotiate an agreement to limit both offensive and defensive weapons.* President Johnson apparently concurred in the Soviet request mentioned above to consider limiting both offensive and defensive missiles, and has instructed his Ambassador to the Soviet Union, Llewellyn Thompson, to pursue discussions. The principal advantage of this move is that, if successful, it would achieve a stability of the deterrent at no higher level than exists today and possibly even at a lower level. Money would be saved and valuable manpower released for other high priority projects. Non-nuclear powers would be encouraged to sign a treaty preventing the spread of nuclear weapons. Their chief complaint about such a treaty at present is that it would deny them a weapon which the two nuclear super powers had in great quantity but refused to limit in any way for themselves—relegating non-nuclear powers to a permanent position of inferiority. Already such a claim is being made among groups in West Germany, India and Japan. Restrictions on U.S. and U.S.S.R. offensive and defensive strategic weapons would demonstrate that these nuclear powers were acting to control their most important weapons.

But when offensive weapons are added to defensive as part of international arms control negotiations, there arise two added difficulties from the U.S. point of view. The U.S., since World War II (it did not take this position in the inter-war period) advocates rather complicated inspection procedures whenever it considers reducing an important part of its weapons arsenal, and these inspection procedures are usually so elaborate as to be unacceptable to the Soviet Union. The U.S. demand for inspection springs from a profound distrust of the Soviet Union, a suspicion that it would not honor its commitments; by the same token, the Soviet Union has rejected most U.S. inspection demands out of a profound distrust of the United States, a suspicion that it would use inspection as a means to carry out anti-Soviet activities in the Soviet Union. Whether this mutual distrust has dissipated sufficiently for the U.S. to moderate its inspection requirements and for the Soviet Union to accept some inspection is unlikely; but since relations between the two powers have improved slightly (though they would probably improve much more if the Vietnam war could be brought to a satisfactory end), a serious and sustained exploration of possible areas of agreement is certainly justified.

This brings us to the other problem in pursuing this choice, and that is the reluctance of powerful U.S. political and military leaders to see any diminution of the U.S. offensive strategic strength regardless of what policy is pursued by the Soviet Union. During the Senate consideration of the partial test ban treaty in 1963, the importance of testing for the perfection of weapons, both offensive and defensive, was one of the major concerns of those Senators who were skeptical about the treaty. Additionally U.S. political leaders have convinced themselves that offensive strength is the key to security and that the margin of superiority of U.S. to Soviet strategic offensive strength must be substantial (it is now between 3 or 4 to 1). Any attempt, therefore, to limit strategic offensive weapons is likely to be regarded with hostility by some influential members of the Congress and many members of the military, especially the Air Force.

The crucial question is, what kind of an agreement might be worked out. At the outset it should be understood that serious negotiations on what both sides regard as the heart of their military strength will necessarily be long and arduous. One of the advantages of such negotiation is that it would provide both sides with a reason to defer further activity in the defensive area and to slow down the pace of what they were doing in the offensive area.

The precise nature of any agreement will be delicate to work out. There are four aspects: deployment, reductions, production, and research and development. No one appears to be advancing any scheme to curtail research and development. This is difficult to inspect, and although provocative in a sense, not nearly as much so as either production, deployment, or an unwillingness to reduce existing stockpiles. With respect to deployment, it would probably not be a difficult task for each side to ascertain through reconnaissance satellites and other intelligence techniques that the other side was not increasing its deployment of either defensive or offensive strategic weapons. Furthermore, it would not be difficult to check on reductions of missiles, since this could be done by a so-called bonfire approach; each side would place its missiles in a given location for destruction, and destruction would be observed by those from the other side or by an international inspection team.

The more difficult question is that of production controls. In 1964 the United States proposed a production freeze on offensive and defensive weapons which would cover not only a freeze on the number of strategic missiles produced, but also on all of their important characteristics. This proposal had attached to it an elaborate inspection procedure requiring entry into all the known production plants for producing missiles as well as spot checks into other plants to insure that no missiles were being produced surreptitiously. However, if the freeze did not extend to the characteristics of missiles but only to the rate at which existing missiles could be replaced, then the inspection procedures might not be so onerous. This might not even require inspection of production plants, but rather, only inspection of the replacement. Such a procedure might be sufficiently unobtrusive to be acceptable to Soviet leaders.

The possibilities for agreement may be dependent on the course of the other areas of Soviet-U.S. relationships, particularly Vietnam. Any agreement may have to await the outcome of that struggle, but if that outcome can be mutually satisfactory, then there is real hope that the perplexing ABM problem can also be resolved.

[From the Bulletin of the Atomic Scientists, September 1967]

CONGRESS DEBATES THE ABM

(By Betty Goetz Lall)

(NOTE.—"On the ABM question . . . the pattern of Congressional interest shows some usual and unusual aspects. . . . They [Congressmen] are pondering many of the consequences of a decision to deploy or not to deploy. There is no panic and little oratory. They do not pretend to have pat solutions to the problem and clearly most would like to be confronted with a case of successful diplomacy to avoid a commitment to deploy.")

It is a virtual certainly that when President Johnson and Secretary of Defense McNamara decide to undertake some degree of production and deployment of an anti-ballistic missile system for the United States, Congress will not object. On major weapons systems, especially those recommended unanimously by the Joint Chiefs of Staff, Congress as a body does not usually try to override the decisions of the military and its civilian chiefs. The ABM case is not likely to be an exception. What Congress frequently does is to recommend production of arms before the Executive branch has judged them to be essential for the nation's security. When this happens the uncertainty is whether or not the Executive branch will adhere to Congressional conclusions.

On the ABM question, which become a major public issue in 1967, the pattern of Congressional interest shows some usual and and unusual aspects. It is the purpose of this article to discuss pertinent Congressional concerns as they have evolved by mid-1967.

HISTORY OF THE ABM AND CONGRESS

Research and development on the first U.S. ABM system, the Nike Zeus, began in fiscal 1955; it grew out of the Nike Hercules and Nike Ajax systems, the two surface-to-air missiles designed to protect the population from an attack by Soviet bombers. Congress authorized and appropriated the funds requested by the Executive branch for Nike Zeus research and development, without substantive comment, until 1959 when the Army announced that the system was ready for production and deployment. The U.S. Secretary of Defense, Neil McElroy, rejected the Army's request but the dispute precipitated considerable Congressional discussion; at that time the issue was resolved by Congress adding to the defense budget $375 million for the "acceleration of the Nike Zeus and/or the modernization of Army firepower." Because of technical weaknesses in the Nike Zeus, research and development began in 1963 on a new system, the Nike X. Congressional interest remained minimal, a technical question was asked now and then during authorization or appropriation hearings, but on the floor of the House or Senate no attention was given to the ultimate and strategic implications for U.S. national security policy.

Later in 1963, however, when the partial test-ban treaty was before the Senate, interest in ABM increased due to opposition to the treaty on grounds that it would pre-

clude perfection of an ABM. Once this opposition was overcome and the treaty ratified, Congress reverted in 1964 and 1965 to its previous relative disinterest.

In 1966, as a result of a recommendation by the Joint Chiefs that Nike X was ready for production and deployment, the Senate Armed Services Committee recommended an additional $153.5 million for preproduction of long leadtime items for the ABM and $14.4 million for additional developmental efforts. The House Armed Services Committee, in agreeing with the Senate, said in its report:

"Recent advances in technology and concepts of deployment permit a blanket of protection for the whole United States against a relatively small number of attacking missiles, and tighter protection against heavier attacks for 25 major cities, at a five-year cost of $8.5 to $10 billion. Because of its building block or modular design concept, the Nike X system lends itself to the initial deployment of a light defense for a small number of cities and a later addition of more extensive and intensive coverage as circumstances capable of defending against not only intercontinental ballistic missiles, but also missiles that might be launched from Polaris-type submarines. Even a modest ballistic missile defense might save millions of American lives in the event of an enemy attack.

"The committee is not attempting to define the ultimate type or scope of a ballistic missile defense deployment and it is not necessary to make such a determination now. The leadtime between a decision to proceed with deployment and the attainment of an operational capability is so long, however, that the committee considers the cost of buying a saving of about one year in such a deployment as being reasonably priced insurance when one considers the consequences of being attacked without any protection."

The Senate and House accepted their Armed Services Committees' recommendation with a modicum of debate—Representatives Bennett (D. Fla.), Sikes (D. Fla.), and Younger (R. Calif.) were for deployment and Senators Clark (D. Pa.), Young (D. Ohio) and Representative Cohelan (D. Calif.) were opposed. The Secretary of Defense subsequently announced that we would not spend the money at that time, on the grounds that it would not add to U.S. security because the Soviet Union would act to counter effectively any major deployment effort and China would not have an intercontinental ballistic missile capability before the mid-1970s.

In late 1966, probably to justify accelerated development and production of the advanced Poseidon missile—a substitute for the Polaris missile—Secretary McNamara announced that the Soviet Union had accelerated its deployment of an ABM system around Moscow. But the President and Secretary McNamara, in presenting the defense budget to Congress for fiscal 1968, continued to hold the view that deployment of an ABM system was not now desirable and that any such decision should await the outcome of proposed talks between the Soviet Union and the United States on an agreement to freeze ABM deployment on both sides. (The Soviets requested, in February 1967, that these talks be expanded to include strategic offensive as well as defensive missiles.) The major public Congressional reaction to the McNamara announcement was a telegram sent to the President by the Senate's Assistant Minority Leader, Senator Kuchel (R., Calif.), a member of the Defense Subcommittee of the Appropriations Committee, who urged agreement to freeze ABM deployment between the United States and the Soviet Union as a means to forestall "a new and ominous round in nuclear arms race" if both sides deployed ABM systems. Not objecting to this advice, the President nevertheless requested $377 million for ABM of which $91 million was for contingent funding for the initiation or procurement of an ABM system if talks with the Soviets proved unsuccessful Congress approved the Administration request.

SCOPE OF CONGRESSIONAL INTEREST

In contrast to its posture on most defense policy questions, Congress showed aroused interest in whether and when the United States should begin to produce and deploy the Nike X system, which expressed itself in the following ways:

What size system, when, and against whom. The Joint Chiefs wanted deployment of an extensive system around 25 cities, in addition to an area defense network; but the Secretary of Defense wanted to postpone a decision about deploying any system. The Senate Armed Services Committee took a middle course and recommended consideration, in the U.S. negotiations with the Soviet Union, "of the desirability of our deploying a 'thin' ABM defense against such threats [as China, an accidental firing, or a form of blackmail], or those that might be posed by future nuclear powers." Such a system could be expanded later, the Committee felt, until full deployment was reached covering the entire country, including protection of Minuteman missile sites. On March 21, 1967 Senator Russell (D. Ga.), chairman of the Senate Armed Services Committee, presented the Committee's views and added:

"It seems to me that the objective in defense should be to prepare to save all that you can, even if you are unable to save everything and everyone. Fortunately, it is not necessary to decide now what the ultimate scope of the deployment need be. . . . The Committee, of course, does not oppose negotiations with the Soviet Union on an agreement banning the deployment of complicated, expensive, and extensive missile defense systems. We believe, however, that these negotiations should take into account that a bilateral agreement would leave us vulnerable to a possible nuclear attack from Communist China, or even an accidental attack. The Committee feels that full consideration should be given to permitting deployment of at least the 'thin' ABM defense. . . ."

The Chairman's somewhat satirical response to the arguments of Mr. McNamara—that the Soviet Union would act to nullify any ABM system installed by the United States by improving its offensive systems—was "in trying to support its conclusions that it is expensively futile to build an ABM defense against the Soviet Union, the Department of Defense presented an involuted series of assumption, hypotheses, and assumption upon assumptions. In its latter stages, this exercise gets too esoteric for me to follow. If one accepts every premise in this syllogism, he will arrive at the conclusion the Department desires. More seriously, the Department's case is based more on . . . the assumption that the reaction of the Soviet Union to our ABM deployment would be 'equal, opposite, feasible, and possible'."

The Committee did not appear to be panicky about the need for haste to begin deployment (construction of a thin system would require at least four to five years) nor impressed with arguments that the decision should be postponed for an indefinite period. Some members of Congress expressed greater impatience. Senator Thurmond (R. S.C.), the most vocal in favor of immediate deployment, inserted into the *Congressional Record* several articles and editorials supporting this point of view and himself told the Senate: "The most urgent task facing the 90th Congress is to spur the Administration toward immediate and decisive action in beginning forthwith the preproduction engineering on the Nike X system as authorized and funded by Congress." Senator Fannin (R. Ariz.) addressed the Senate April 12 on "The ABM—Let Us Begin." His case rested on the report that the Soviets had begun deployment and were increasing their offensive weapon capability.

On the House side Representatives Ashbrook (R. Ohio), Evins (R. Tenn.), Gross (R. Iowa), Michel (R. Ill.), Roudebush (R. Ind.), Sikes (D. Fla.), and Taylor (R. N.C.), publicly indicated, through remarks in the House or inserts in the *Record*, that they favored proceeding immediately with deployment. Representative Berry (R. S.D.) proposed a radical step in order to obtain a favorable decision for deployment. On February 16, 1967, he introduced a bill (H.R. 5586) "to provide that no further appropriations for the purpose of furnishing foreign aid shall be deemed to be authorized by the Congress until an adequate antimissile defense system for the U.S. has been constructed." It is unlikely that the House Foreign Affairs Committee seriously considered such an extreme measure.

Is cost a factor? Although Secretary McNamara stated that cost was not a factor in deferring a deployment decision, his emphasis on a $40 billion program led several in Congress to evaluate the issue partly on that basis. Senator Symington, not necessarily an opponent of "deploy now," responded to testimony by Secretary of the Army Vance at hearings before the Senate Foreign Relations Subcommittee on Disarmament by saying:

"You say $3.5 billion to defend against the Chinese [referring to a 'thin' ABM system]. We had previous testimony on the Terrier, Talos, and Tartar. We used $3 billion alone for those lost missiles. I do not know how many billions were lost on Bomarc, but it was plenty. I do not know how much was lost on the Nike Ajax or Nike Hercules, or Atlas, but it was plenty more. I would guess the overall figure was $10 billion if it was a nickel. It might be a good idea if you would at some time get up a table for the record to show what we have lost on missiles abandoned, as one of the reasons for justifying not going ahead with the ABM."

Senator Gore (D. Tenn.), chairman of the Disarmament Subcommittee, stressed that cost was not a key consideration for him: "This business of equating the possible killing of 80 million people, which is almost half of our population, with a cost of $40 billion just would not appeal to me," he said. "But if there are other and more compelling reasons, then let us have them." Senator Symington agreed with this view. Also discounting cost an argument against deployment was Senator Ervin (D. N.C.) who said: "We scatter over the earth hundreds of millions of dollars in foreign aid; certainly this nation can afford to spend $40 billion for such a program." Senator Young (D. Ohio), opposed ABM deployment partially on cost. It "would be a complete waste of taxpayers' money," he asserted in the Senate, and advocated instead an overwhelming offensive as the best defense.

Negotiations with the Soviet Union. Since the Administration position was to postpone a decision on deployment until determining the outcome of negotiations with the Soviet Union, some in Congress directed their attention to the wisdom of this Presidential decision and the likelihood of successful negotiations. Senators Clark, Fulbright, Javits, Proxmire, Symington, and Young supported the President on his decision and Representatives Moss (D. Calif.) and Rosenthal (D. N.Y.) inserted editorials into the RECORD urging negotiations with the Soviet Union. This is probably the first time since the Cold War began that so many in Congress publicly urged the Administration to seek negotiations with the Soviet Union on an arms control measure. In the past Congress has been skeptical or hostile and seldom so willing to look to negotiations as an alternative to pursuing military strength.

Other Congressmen, however, expressed concern that negotiations would drag on and the Soviets might stall; meantime the United States would be falling behind the Soviet Union in proceeding with deployment. Some tried to obtain a firm answer from Administration spokesmen as to what would be a maximum time limit for negotiations. This answer tended to be vague or classified, but on one occasion a time limit of five or six months was suggested. Senator Gore was one who wanted a limit on negotiations. "This time element," he claimed, "is something about which I feel a sense of urgency that, in all candor, I have not detected in the President's statement." In a different tone, Senator Sparkman (D. Ala.) offered the advice: "My impression has been that the matter was rather sensitive and that, perhaps, it was felt that we would have a better chance of making headway with the Russians if we went into it in a soft and quiet manner. We ought to feel our way." Yet, Senator Symington pursued the point: "I do think here in Congress we ought to have some idea as to how long we wait." The answer from Secretary Vance: "I think it all depends on how the discussions seem to proceed. If we are making progress then we would be willing to wait longer than otherwise. . . ."

The Senate Armed Services Committee went on record as favoring negotiations but added that funding for initial production for deployment should be used "if an agreement that fully protects the interest of the United States cannot be consummated within a reasonable period." Senator Javits demurred from such a view and told the Senate that "even if the negotiations do not succeed, I would wish to evaluate the strategic implications involved in such an antiballistic missile system at that time." The New York Senator also took exception to the proposal in the Committee's report that negotiations with the Soviet Union should explore the desirability of deploying a thin system for protection against any Chinese threat. He said he felt this would not be "a proper element of negotiations with the Soviet Union."

Few Senators evinced interest in the kind of position being developed by the Executive branch for presentation in negotiations with the Soviet Union. Even after President Johnson announced on March 2 that he had accepted, at the Soviets' request, inclusion of offensive as well as defensive missiles in projected U.S.-USSR negotiations, Congressmen did not inquire about the U.S. negotiating position. On one occasion during Armed Services hearings, Senator Young (R. N.D.) asked Mr. McNamara whether an agreement with the Soviets to freeze ABM systems would require inspection. The answer, oddly enough, was deleted as being classified. Although the Secretary of Defense suggested that an agreement with the Soviets might be either formal or informal, Congress did not pursue the meaning of informal. Usually Senators in particular are sensitive to any possibility of the Executive branch circumventing use of the treaty power. In any event, without further inquiry into the nature of the U.S. position, Congress will not be knowledgeable enough to assess cause if the negotiations fail.

Only Senator Gore seems to have advanced a proposal for ABM agreement. He urged the Secretary of State to suggest "to the Soviets a willingness to discuss the feasibility of an international agency, preferably the U.N., deploying a thin ABM line. If you will look at the world in terms of a sphere, a thin line of defensive ABMs, running, say, from Greenland to Kamchatka, would bisect just about all fixed bases of missile trajectories from the Soviet Union to the United States. Has the administration given any thought to utilizing an international agency in this regard, to give some security, some feeling of safety to both countries?" Secretary Rusk promised to consider such a proposal, although he noted that there were problems of who would pay the cost and under what circumstances firing would take place.

Impact on the economy. Of interest to some in Congress is whether heavy defense expenditures, such as those that would be involved in an ABM production and deployment system, might have undesirable consequences for the economy. Senator Aiken (R. Vt.) expressed his apprehensions during the Disarmament Subcommittee hearings:

"I think we are overlooking one important phase of this whole program. That is the growing dependency of areas and States on Government orders until they get to where they are almost helpless. For example, for the State of Washington over 50 per cent of their gross national product is from Government. California and Connecticut are also highly dependent, and this will certainly increase. It might be a mutual dependency on the part of the Government and the States on how the work is being done, but I am wondering how far we want to go before we divert them back to something of a different nature. For instance, I believe the Connecticut Brass Works are now offering 33 per cent of their facilities in the production of shell casings. How far can they go in that direction, and then say, 'We have to keep on with this, we have got to look for uses for this product we make because we cannot afford to stop business or readjust anything.' "

On the same theme Senator Clark introduced into the *Record* an article, "Thirty Billion Dollars For Whom?—Politics, Profits, and the Antimissile Missile." The article by Frederic Collins in *The New Republic* listed some 20 companies as being important contractors in ABM development and production, and suggested that because the various plants of these companies permeate most of the states and a majority of Congressional districts, pressures may mount on Congress to seek a positive decision on deployment.

Although he did not label it blackmail, or any other opprobrious term, Senator Russell referred to a speech by Dr. Harold Agnew, head of the Scientific Laboratory Weapons Division of the AEC Los Alamos Laboratory, where Agnew said that "companies working on the Nike X were now ready for the next step but might disband their technical teams and convert their facilities to other uses if the system is kept in suspension another year."

Effectiveness of the system. Administration spokesmen claim that the present effectiveness of the Nike X in shooting down incoming missiles from Soviet territory would reduce American fatalities by 90 million in an all-out nuclear exchange. McNamara would deploy the system were it not for his conviction that the Soviets would act to counter it and thus render it completely ineffective. Not all Congressmen, however, have been persuaded that the present system is ready for deployment. When the Defense Department's authorization bill for fiscal 1968 was being discussed in the Senate, Senator Smith (R. Me.) said:

"It was with considerable reluctance that I joined in the committee's approval of the authorization with respect to the deployment of an antiballistic missile defense system. I can give no assurance that I will do so again next year. I am becoming more and more inclined to believe that the Secretary of Defense is right—but for the wrong reason—on this issue. I am not convinced that the state of the art on an anti-ballistic missile defense system has reached a relatively static status. . . . I am not convinced that the ground placements of what may appear to be Russia's anti-ballistic missile defense system are what they seem but that rather they may be decoys of classic deception designed to motivate us to a very costly defense system that may be obsolete or become obsolete in the near future."

In a different way Representative Dorn (D. S.C.) also objected to the system. Speaking on the theme, "$40 Billion Folly," and the fact that the Joint Chiefs' proposal would protect only 25 to 50 cities, he said: "What then would happen to my constituents and the millions of other patriotic Americans in the thousands of cities and rural areas throughout our country?" His answer—build a strong offense everywhere including space and under the sea. Representative Fraser (D. Minn.), in inserting an article by James Burnham against deploying ABM and instead relying on offensive deterrent power, was perhaps also indicating sympathetic interest in this viewpoint.

Senator Clark questioned the whole concept of relying so totally on either offensive or defensive power. He exclaimed during a Disarmament Subcommittee hearing:

"From where I sit there is a basic blind spot in this whole discussion, not only philosophically but logically. You gentlemen are, of necessity, engaged in utilizing your magnificent talents to attempt to defend the United States as best you can against an armed attack of any enemy nuclear force. You must, therefore, make the basic assumption that there is and always will be an enemy. But as politicians . . . we must devote our best interests toward developing international cooperation as opposed to international conflict. Accordingly, when you tell us what can and cannot be done with an antiballistic missile system, you are, in effect, merely giving us advice as to what we should do in our efforts to persuade the Soviet Union and China to substitute cooperation for conflict. Our task, therefore, is to try to bring peace to the world not through deterrence, but through disarmament. Your advice in that regard is essential to us, so that we should not take an undue risk."

Civilian versus military. Perhaps one of the principal reasons why debate on the ABM during 1967 blossomed into full controversy is that expert opinion in the Executive branch is divided. It would not be likely that so many members of Congress would take such an active part in discussions if the respective sides could not point to experts in the Administration to support their points of view. Most Congressmen consider themselves laymen, especially on military and foreign policy questions, and in the absence of expert advice tend to defer to those who appear to have superior knowledge. With the civilian chiefs, Defense Secretary McNamara and Army Secretary Vance, on one side, and the military Joint Chiefs of Staff on the other, members of Congress could be comfortable and confident taking either position publicly.

Senator Symington, however, expressed apprehension about the possible effect of the civilian-military division on the military. He felt there was too much anti-military feeling being voiced in his state. "Doesn't it worry you," he asked of the Defense Secretary, "to make a civilian decision of this character [not to deploy an ABM] against the unanimous opinion of the Joint Chiefs; and second, don't you think, when you do that . . . that it somewhat denigrates the position of the military before the American people?" The Secretary thought not.

Soviet intentions. Discussions of why the Soviet Union had undertaken to deploy an ABM system seemed to reveal an important shift in attitudes toward the Soviet Union on the part of some members of Congress. As witness after witness in the Executive branch explained Soviet behavior in deploying an ABM on the ground that historically the Soviet Union is primarily defense minded, legislators appeared not to question the conclusion held officially, though only a few years back, the government's view was

that the Soviet Union was an offensive, aggressive power. Senator Lausche (D. Ohio) finally asked why the Soviets did not follow our example: "Why haven't they gone forward with the development of an offensive system? Why have they gone forward with this defensive system? If it is good for them why isn't it good for us?" The answer from an Executive branch expert: "I can only repeat because I have it from history and I heard other people saying it, is that the Russians are defensive-minded and, for a country which has been throughout their history defensive-minded, an ABM would appeal to them." And Senator Case (R. N.J.), after listening to Executive branch witnesses discuss the fallout problem in an offensive-defensive missile exchange, commented: "This is leading toward the argument that the present antiballistic missile system would be more valuable for us [deleted] than to have our present and projected larger numbers [meaning large numbers of offensive missiles]."

These are the questions, comments, and views of those in Congress who are beginning to concern themselves with a major issue in defense and foreign policy. They are pondering many of the consequences of a decision to deploy or not to deploy. There is no panic and little oratory. They do not pretend to have pat solutions to the problem and clearly most would like to be confronted with a case of successful diplomacy to avoid a commitment to deploy. But they have not yet looked closely enough to learn in what manner the Executive branch is pursuing the course of negotiation.

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SUPERIORITY AND INNOVATION IN U.S. DEFENSE FORCES

(By Betty Goetz Lall)

Anyone who follows the U.S. defense program is aware of the constant change taking place as weapons conceived of yesterday, developed today, and produced tomorrow will be labeled, by military planners, as obsolete day after tomorrow. Those who are deeply engrossed in the process of weapons building—in the Pentagon, defense companies, and the committees of Congress that oversee the Defense Department—are necessarily preoccupied with the goal of achieving the most modern and advanced military force for the U.S., within a politically acceptable cost range. Most citizens shrink from any effort to evaluate what should be the proper dimensions of the defense budget and the principal factors determining the size and quality of the U.S. military force. And yet a growing question is: should not at least some citizens be capable of and interested in making competent judgments on how much of the nation's resources should be devoted to military activities? Is the matter of defense policy so different from other public issues that the citizen should be absolved of responsibility to inform himself and enter into discussions on the nature of the defense establishment?

In the current fiscal year, U.S. offensive and defensive strategic nuclear forces and civil defense measures constitutes slightly over 11 per cent of the total budget request. This total includes funds for Vietnam except for the supplemental requested by the President in December 1966. In fiscal 1964, the last year before the build-up in Vietnam, the strategic nuclear war forces amounted to about 18 per cent of total defense expenditures, $9.3 billion out of $51.7 billion. Of total funds for offensive and defensive forces, the offensive has since been absorbing about 80 per cent, an indication that the United States believes that offensive strength is better protection from attack than defensive strength.

The U.S. strategic offensive force began expanding substantially in the first year of the Kennedy administration. Although the Democrats in 1960 had charged that there was a deficiency in the number of U.S. intercontinental missiles compared to those held by the Soviet Union, this was found not to be the case once the Democrats took control and examined the evidence more closely. The United States possessed over 100 ICBM's compared to an estimated 25 for the Soviet Union. U.S. long-range bomber forces also exceeded by a considerable number those of the Soviets. The United States nevertheless, proceeded to build missiles at a fast pace until the ratio of U.S. to USSR ICBMs by 1964 was over six to one—1,250 to 200 (see the accompanying chart).

U.S. AND SOVIET STRATEGIC FORCES

	1962	1963	1964	1965	1966	1967–68
UNITED STATES						
B-52 (long-range bomber)	630	630	630	630	600	600
B-58 (long-range bomber)	90	90	90	80	80	80
FB-111A (long-range fighter-bomber)						210
Atlas (ICBM—66 in soft sites)	90	126	[1] 126	(2)		
Titan I (ICBM)	36	108	54	(2)		
Titan II (ICBM)			54	54	54	54
Minuteman I (ICBM)	150	180	600	800	800	(3)
Minuteman II (ICBM) / Minuteman III (ICBM)					50	1,054
Polaris A-1 (sea-based missile)	80	80	80	80	(2)	
Polaris A-2		80	208	208	208	208
Polaris A-3			128	208	448	448
SOVIET UNION						
Bison (long-range bomber)	120	120	120	120	120	(3)
Blinder (long-range bomber)		(4)			300	300
ICBM's	75	100	200	270	300	(5)

[1] 30 soft.
[2] Phased out.
[3] Phasing out.
[4] Coming into force.
[5] 300 plus.

Sources: The Military Balance, published annually by the Institute of Strategic Studies, London, and statements o fthe U.S. Secretary of Defense.

HOW MUCH SUPERIORITY?

Why is this level of superiority thought to be necessary? The Secretary of Defense has stated that the U.S. strategic forces "are far more than adequate to inflict unacceptable damage on the Soviet Union even after absorbing a well-coordinated Soviet first strike against those forces." He has further said: "It appears that even a relatively small portion of these forces would furnish us with a completely adequate deterrent to a deliberate Soviet nuclear attack on the United States or its allies. . . . The effective delivery of even one-fifth of the surviving weapons on Soviet cities would destroy about one-third of the total population and half of the industrial capacity of the Soviet Union." (See 1966 Presentation of the Defense Budget to the Congress.) The main reason advanced thus far by military specialists is that it is best to figure very conservatively when it comes to national security; therefore, even if only 300 missiles are necessary to assure the mission of the force, it is best to be cautious and procure five to six times that number.

Perhaps this answer should suffice for the citizen. He wants to feel his security is protected. But there are at least three other questions that emerge. The first is whether the country and its tax-paying citizens are so well off that buying five times more security than is needed is an acceptable national policy. Can this money be better used? Do we not face an unmet domestic threat of equally serious proportions—the deterioration of our cities, the cancer of spreading poverty, the slow rate of progress in achieving full equality and employment for all citizens, and the failure to raise appropriately the quality of educational and other social services? Do we not face a foreign non-military threat, potentially as great as the military, in the growing income gap between the so-called developed and developing nations?

A second question is how the Soviet Union reacts to a U.S. strategic offensive build-up that is over four times superior to its own. The Soviet Union decisions regarding the adequacy of its strategic force, while influenced by the parallel U.S. policies, apparently do not aim at achieving full quantitative or qualitative parity with the U.S. Its ICBM force has evidently more than trebled in the past four years. Qualitative improvements appear to be primarily in some hardening and increased mobility and in decreasing reaction time for missile firing. The Soviets have installed many second generation missiles as opposed to the third and fourth generation missiles being developed and procured by the United States.

A third question relates to how the United States can expect to achieve another national goal, presumably as important as military strength—that of stopping the arms race and mutual reduction of military strength—if we insist that this level of superiority be maintained throughout the disarmament process. Which situation buys the greatest security: a balanced reduction in the strategic strength of both sides, or an attempt to maintain current superiority and increase the size of the force whenever the Soviet Union attempts to reduce the gap? A balanced reduction of strategic forces implies a willingness to relinquish at least some of the superiority that has been achieved. To suggest such a relinquishment draws sharp criticism from most military officials. While there is no stated doctrine that a particular superiority ratio is essential to U.S. security, neither has there been a policy statement suggesting that the United States would be prepared under certain conditions to abandon its present position of superiority. Yet, it is difficult to comprehend how the United States could realize its disarmament objectives without such a willingness.

RATE OF INNOVATION

The quantitative ratio of superiority we have been discussing must be joined to the rate of qualitative change in U.S. strategic forces. How much should be expended each year on such change and what criteria should be used to determine how much qualitative change is necessary?

The American people seem to accept each year, almost as a tradition, the need to modify every model of automobile, kitchen appliance, and women's clothing produced. To what extent has this cultural phenomenon been transferred to the defense program? In the early 1950s the United States built a large force of B-47 medium jet bombers which could attack the Soviet Union from overseas bases. In 1960 the Defense Department began

phasing out these planes; they were to be replaced by a large force of over 600 B–52s and a smaller force of 90 B–58 intercontinental bombers. The B–52s were constantly being modernized so that by 1963 the number of models ranged from A through H and several hundred million dollars had been spent. By 1967 models A and B had been phased out and the Air Force was in the process of phasing some of the planes of models C to F, leaving a bomber force of 255 B–52 models G and H, 345 models C to F, and 80 B–58s. In the late 1950s the Defense Department began developing a prototype for a new bomber, the B–70, and spent $1.7 billion on development before military decisionmakers decided that it was not the plane they wanted as a replacement for the B–52. Development then began on a combination fighter-bomber, the FB–111A, and in 1966 the Secretary of Defense agreed to recommend an initial procurement of 210 of these airplanes to be fully operational by 1968 at an investment cost of $1.9 billion. But many in the Air Force believe another plane is also desirable and they are pressing for full development and procurement of the AMSA (advanced strategic aircraft). Several members of Congress, especially in the various armed services committees, also believe the AMSA should be developed but have not yet convinced Secretary McNamara that such a plane is needed. One of the Secretary's argument is that there is no agreed purpose for such an aircraft. Another is that since the Soviet Union has not given evidence it is building a new long-range bomber, the United States should not proceed in such an endeavor. Some congressmen are not impressed with this argument and plead instead that it is simply time to have a new plane.

An alternative to pursuing innovations in weapons at a rather rapid rate, one seldom discussed by those responsible for military policy in Congress, is a simultaneous phasing out by the United States and the Soviet Union of a given type of weapon. A few years ago the United States did offer to dismantle its B–47s if the Soviet Union would also dismantle its Badgers, the comparable Soviet medium-range bomber. The Soviets countered that since the B–47s were being dismantled anyway both countries should dismantle all bombers. The United States never agreed to this proposal, one likely reason being that since it had such a ratio of superiority over the Soviets in long-range bombers, 600 to 300–400, this was not a good trade. Another possible reason for retaining a U.S. force of long-range bombers, despite what the Soviets do, is that this requires the Soviet Union to spend money on bomber defenses; without such expenditures the Soviet Union could divert funds to other purposes, military or civilian. As Secretary McNamara said: ". . . a force of 255 operational B–15 G-Hs would be sufficient to compel the Soviets to maintain their present antibomber defenses."

In the absence of any bomber agreements with the Soviet Union, matters for U.S. defense policy consideration should include the criteria by which the United States should decide to retain through 1975 B–52 models G and H by further modernization, at a cost of $1.3 billion through 1972 and another $600 million through 1975; to initiate further procurement of the FB–111; or to institute a $4 or $5 billion program to build the AMSA.

Similar questions can be raised about rates of innovation in the U.S. strategic nuclear missile force. The first strategic ballistic missiles were the Thors and Jupiters, sufficiently short range so that they had to be stationed in Turkey, Italy, and England, and were vulnerable to Soviet attack. They were replaced as soon as the United States had a fair-sized ICBM missile force stationed on its territory: 90 Atlas missiles and 36 Titan missiles. Since the Atlas missiles were also vulnerable they too were replaced by a hardened force of 108 Titans. The Titan I was fully produced and operational in 1963 but the next year saw the replacement of half the Titan I force by Titan II, which had an increased payload. Today the remaining 54 Titan I missiles have been phased out. Almost simultaneously with the Titan the Defense Department began deployment of Minuteman I, a solid fuel missile with better hardening qualities than the Titan, and the sea-based missile, Polaris A–1. A force of 180 Minuteman I and 80 Polaris A–1 missiles was operational by 1962. As they were being installed work proceeded on Minuteman II and Polaris A–2; in 1967 the latter two models will be replacing Minuteman I and Polaris A–1. Additionally, about 448 Polaris A–3 and 1,054 Minuteman III missiles will be installed as replacements for many of the Minuteman I and II and the Polaris A–2 missiles. The new models generally have longer range, increased payload, and better accuracy than their predecessors. In December 1966, Secretary McNamara announced that accelerated development on the Poseidon missile was proceeding as a replacement for Polaris A–2 and A–3. (In the fiscal 1967 budget $300 million was allocated for the Poseidon.) Also, early developmental work is going forward on an advanced or Improved Intercontinental Missile as a possible replacement for Minuteman II and III.

TO BE CONTINUED?

The story of the rate of innovation in the strategic force is not unlike the story of innovation in other weapons for tactical warfare or for bomber or missile defense. In the absence of knowledgeable public opinion to balance discussions on defense policy it is almost inevitable that the momentum of defense innovation will continue. As the Vice-Commander of the Air Force Systems Command reported to an advanced planning session for defense industry officials: "The task of the Air Force Systems Command is to provide qualitatively superior systems for the Air Force. In order to perform this mission, we must advance aerospace technology as rapidly as is practical and adapt it on a timely basis to the needs of our aerospace systems." Although the Systems Command is expected to relate its work to the military threat posed to the United States, the momentum of the activity in its own right is sufficiently strong that the nature of the threat appears to become less and less a factor in the analysis and in subsequent decisions about building new systems.

Few citizen groups concern themselves with Department of Defense assertions about the level of superiority or the rate of innovation in military weapons procurement. Many of those private citizens who are knowledgeable are consultants to the Defense Department and are reluctant to share with the public criticisms or alternative suggestions they may have. Ordinarily, a natural place for citizen evaluation is in the Congress where legislative review of executive agencies is one of the most important functions of congressional committees. Yet, committees most involved in military affairs tend to become friendly spokesmen for the armed services. The Chairman of the House Armed Services Committee reminded Air Force witnesses before his committee: "If you don't have any friends on this committee you don't have any friends. We are your voice in Congress. We are the only official voice, there aren't any others."

Committees with foreign policy functions in general do not review defense policies and their implications for foreign policies including disarmament. Nor do committees charged with the overall economic health of the nation and the desirable allocation of resources and division of government expenditures challenge the absolute priority of defense over other needs. An exception is the work of Congressman Reuss' subcommittee hearings on the decisionmaking process in federal research and development programs.

One possible conclusion is that unless more citizens and citizen groups interest themselves in defense policy questions there will be no effective challenge to the Defense Department's budgetary requests and policy directives except from those groups with more narrow military interests which are usually after more, not less, defense outlay. If greater public discussion can take place this surely will inspire Congress to carry out its supervisory functions more completely and comprehensively. And it will help prevent political parties and politicians from becoming demagogic about defense policies, which they are likely to do in the absence of sufficient public enlightenment and articulate concern.

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GAPS IN THE ABM DEBATE

(By Betty Goetz Lall)

There is one distressing aspect of the current discussions on whether the United States should now deploy an antiballistic missile system at a cost ranging from $4 to $40 billion. The President, the Secretary of State, the Secretary of Defense, and other government officials imply that if they cannot persuade the Soviet Union to enter into an agreement against ABM deployment the United States may then feel compelled reluctantly to go into full production and deployment of such a system either as an attempt to protect some of the people living in American cities or as protection against our own land-based intercontinental ballistic missiles. The President, in his State of the Union message, in reference to his assertion that the Soviet Union "has begun to place near Moscow a limited antimissile defense," stated that "any additional race would impose on our peoples, and on all mankind for that matter, an additional waste of resources with no gain in security to either side. And I expect in the days ahead to closely consult and seek the advice of the Congress about the possibilities of international agreements bearing directly upon this problem." The main clues as to what kind of agreements are being sought are contained in statements by the Secretary of State at a news conference on December 21, 1966 and the Secretary of Defense in his annual budget presentation to the Congress on January 2, 1967. Mr. Rusk referred to the earlier proposal of the United States that the two major nuclear powers freeze their production of offensive and defensive strategic nuclear delivery systems. Mr. McNamara said that the Executive branch proposes: "To initiate negotiations with the Soviet Union designed, through formal or informal agreement, to limit the deployment of antiballistic missile systems" and "To reconsider the deployment decision in the event these discussions prove unsuccessful."

What is missing in this discussion is the important point that in all previous arms control discussions on ABM with the Soviet Union the Soviets have indicated that the way to make negotiable a proposal on restrictions against ABM deployment is to include reductions in offensive systems as well. If Mr. McNamara and other officials of the Administration lead people to think that the only issue up for negotiation is antiballistic missile deployment then when the negotiations fail, as they are almost certainly likely to do if they do not include limitations on offensive strategic weapons, there will be the inevitable pressure in the United States to proceed with full production and deployment of our own Nike-X antimissile system.

It is difficult to know whether Administration officials have convinced themselves that the strongly held Soviet view—that offensive missiles must be part of any ABM agree-

ment—has changed; or, that they know it has not changed but still cannot bring themselves to propose an agreement which includes reduction of part of the Soviet and U.S. land-based or sea-based intercontinental ballistic missiles. With respect to the first possibility there is little evidence in the public domain that the Soviet Union has changed its attitude. Soviet officials at both private and official conferences have fiercely supported the concept that building defensive systems is not as provocative as offensive systems. Soviet scientists privately have acknowledged that ABM systems are not effective in shooting down incoming rockets, particularly if they have multiple warheads, but such scientists have also indicated they have failed to convince their generals and members of the Politburo of the undesirability of installing an ABM system—such a view has been well known to U.S. experts in the arms control field for at least four years. The need for defense of the "motherland" can arouse as much emotion in many a Russian as the need for anticommunist measures can arouse in many Americans. When Soviet Premier Aleksei Kosygin was in London in February he seemed to reconfirm the Soviet view when he said in answer to a question about ABM: "What would you say is more of a step toward tension in the military field, an offensive weapon or a defensive weapon?" And his answer to his own question: "The system that warns of an attack is not a factor in the arms race. On the contrary, it is a factor that reduces the possibility of the destruction of people."

If the United States realizes there is little probability that the Soviet Union would be interested in an agreement limited to ABM systems alone what is the explanation for the absence in the Executive branch of proposals for reductions of ICBMs as part of an agreement? The most apparent explanation is that the United States is simply not interested in reducing its own offensive strength. A U.S. proposal to reduce a specific number of its ICBMs in return for a similar reduction of some of the Soviet ICBMs would substantially increase prospects for agreement not to deploy further ABM systems on both sides. Along with such reductions it would be desirable to freeze for several years the production of new ICBM systems by the two countries. The United States proposed a production freeze in 1964 but has yet to suggest an agreement that would also include reductions in strategic offensive missiles. One can almost predict that if the United States did propose some scheme for reductions in offensive strength our policymakers would tie on to the reductions an elaborate inspection system that would almost certainly be unacceptable to the Soviet Union and which would perhaps in some degree go beyond the needs of the case. Given the knowledge we now have about Soviet weapons developments in the strategic field would it not be possible to check on reductions of missiles by an inspection team witnessing their dismantlement or destruction, an inspection measure the Soviets in the past have stated they would be willing to accept? Whether further inspection of production facilities would be necessary is a matter to be scrutinized carefully before decisions are taken to seek elaborate inspection of them.

The probable reason why the most likely course for the United States to follow is not to seek agreement to limit offensive systems is that the domestic pressures are almost totally one-sided. Within the Executive branch the Air Force and Navy argue strongly for a continuation of development of offensive systems because this is their mission. General John P. McConnell, Air Force Chief of Staff, said November 11, 1966, that "In the final analysis, this problem [whether an effective antimissile system by a potential enemy could lead to nuclear war] boils down to the question as to which nation stays ahead in the technological race for superior aero-space power. . . . I am confident that we can keep our deterrent strong enough by maintaining a safe margin of strategic superiority." And General Bernard A. Schriever, retired Air Force missile expert, said last November 27 that the United States should concentrate on developing better missiles rather than an antimissile defense system because there was "a grave question with respect to the effectiveness" of an antiballistic system against Soviet missiles. The Army which has the responsibility for an antiballistic missile defense takes a different view and is in favor of deploying an ABM system. This is the only important field for Army strategic missile activity and the Army naturally wants to preserve this mission. Chief of Staff of the U.S. Army, General Harold K. Johnson, told Congress last year: "I recommended that the funds be granted in the 1967 budget for preproduction, to establish a production base for the deployment of Nike X with an initial operational date of [deleted]."

Comparable pressures, other than the Secretary of Defense himself, do not seem to have come to light on the other side of the issue. One of the most vocal was the Republican Whip in the Senate, Senator Kuchel, who called upon the President last December to initiate discussions with the Soviet Union "to seek common cause to reverse the trend in weaponry which Soviet actions [to deploy an ABM system] may have started." The Secretary of Defense's view is: "The Soviets have it within their technical and economic capacity to offset any further Damage Limiting measures we might undertake, provided they are determined to maintain their deterrent against us. It is the virtual certainty that the Soviets will act to maintain their deterrent which casts such grave doubts on the advisability of our deploying the Nike X system for the protection of our cities against the kind of heavy, sophisticated missile attack they could launch in the 1970s. In all probability, all we could accomplish would be to increase greatly both their defense expenditures and ours without any gain in real security to either side. . . . I believe that, once started, an ABM system deployed with the objective of protecting the United States against the Soviet Union would require an expenditure on the order of $40 billion over a ten year period."

The probabilities for a satisfactory outcome to the ABM debate are not great. And the Soviet Union may just want the United States to invest the kind of money in ABM systems Mr. McNamara is talking about. Since Soviet Leaders regard defensive systems as non-provocative and since they would prefer to see the United States utilize its resources in such an endeavor, rather than to other endeavors which could be more damaging to Soviet interests, the Soviet leaders have every reason to encourage the United States to decide to produce and employ an ABM system. This may explain why the Soviet General Pavel A. Kurochkin claimed, as he did on February 20, that "detecting missiles in time and destroying them in flight is no problem." Such a statement strengthens the argument that the United States may be falling behind in ABM technology and, therefore, should proceed with ABM deployment. And it is this view that is likely to prevail rather than the view that the best interests of the United States would be served by pouring our best diplomatic strength in an effort to negotiate an agreement with the Soviet Union to limit both offensive and defensive strategic weapons systems.

GENERAL LEAVE

Mr. COHELAN. Mr. Speaker, I ask unanimous consent that all Members may have 5 days in which to extend their remarks on the topic of this discussion.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from California?

There was no objection.

GENERAL LEAVE TO EXTEND

Mr. YATES. Mr. Speaker, I ask unanimous consent that all Members may revise and extend their remarks in connection with the colloquy on the special orders this afternoon.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Illinois?

There was no objection.

PROPOSED ABM SYSTEM

The SPEAKER pro tempore (Mr. STRATTON). Under a previous order of the House, the gentleman from Wisconsin (Mr. REUSS) is recognized for 60 minutes.

Mr. REUSS. Mr. Speaker, before recognizing the gentleman from Connecticut (Mr. GIAIMO), and the gentlewoman from Hawaii (Mrs. MINK), and some others who have been on their feet, I do want to say to the gentleman from Indiana (Mr. DENNIS) that I welcome his transforming this monologue into a debate, and during my time I shall attempt to provide some additional answers to the very legitimate question the gentleman raised.

I will now yield to the gentleman from Connecticut (Mr. GIAIMO).

Mr. GIAIMO. Mr. Speaker, I thank the gentleman from Wisconsin for yielding.

I would state that I rose for the purpose of trying to address an answer to the legitimate question of the gentleman from Indiana who stated that he was concerned that at some future date there may be an attack by the Chinese, and that we do not have an ABM system to defend us against such an attack. He properly asks, how would we feel then had we taken this position today?

I believe the answer to the question is that if we had an antiballistic missile which was effective, if we were convinced that it would provide an adequate defense against an attacking Chinese missile, we know it will not provide a defense against a Russian missile—if we knew all that, then there would be all reason and justification for deploying this system today.

But the evidence seems to be clear that we will be living under a false security if we deploy an ABM system which will not be effective.

To date the evidence before this Congress consistently has indicated on the part of the military that the ABM missile would not be effective against an attack because, although they say that a thin system might be effective in what they would call a small attack, they clearly indicate that it would not be effective against a missive attack by the Soviet Union.

But although they state it might be effective against a small attack by the Chinese, we must presume and assume

that if we deploy an ABM system, the Chinese, who have not as yet deployed an ICBM system, would develop a sophisticated attack system which would be able to overcome the defense of an ABM system.

What would that be? It might well be an attack by submarine, in which case an ABM system defense is clearly not effective. It might be an attack with deceptive devices which would negate the effectiveness of such a defense. It might be an attack by airplane, it might be an attack by a bomb literally carried into this country on board some surface ship against which an ABM system would not be effective.

It might even be an attack such as was mentioned by the gentleman from Washington (Mr. ADAMS) which would be preceded by a preliminary weapon which would destroy our radar capability, therefore, allowing the second and deadly weapon to come in.

The fact of the matter is that the essence of this debate both in this body and in the other body has been that we are being asked to deploy a system which has not demonstrated its capability of defense. Before we do that, before we get involved into an expenditure which can run into billions of dollars, and come up with an ineffective system, we should pause and we should hesitate.

There has been ample warning from all sides that we should do this to determine just what we are doing and where we are going before we foolishly rely on an inadequate defensive system.

Mr. REUSS. The gentleman from Connecticut, I think, has made a very sincere attempt to provide an answer to the question raised by the gentleman from Indiana.

Just to summarize what the gentleman from Connecticut has said in his answer to the question put—What will happen 3 years from now if the Chinese lob a thermonuclear device over the room in which we are now speaking?—it seems to me there are three answers. First, the adoption of an ABM is not going to prevent that. The ABM is $60 billion worth of obsolescent hardware before it ever gets off the ground. As Dr. Jerome Wiesner, former science adviser to President Kennedy and provost of MIT, recently said:

> Some weapons system are obsolete in the conception, and I think this is probably true for the anti-ballistic missile system before us. I have, in fact, come to the conclusion that any system that depends on projectiles—rather than, say, nuclear rays of electromagnetic beams or laser beams—is futile.

So an ABM system now would be putting all our eggs in one very leaky basket and it would mean that we do not proceed with the research and development of devices that are more promising ways to achieve this miraculous bullet that shoots the bullet.

If we could do this, then truly mankind might rest relatively easy for the first time since 1945.

The second answer to the question raised by the gentleman is that, if we do proceed to deploy the ABM in its present conceptual form, it is a simple matter for a very primitive Red China, instead of lobbing just one missile over us, to lob two, the first one by its ionized gases to immobilize our radar system and the second one to do the business.

Third, and perhaps the most fundamental point, is simply this:

Since the fission of the atom, since these terrible weapons were unleashed on the world 24 years ago, the whole science of warfare has changed. People everywhere in the world are menaced by sources of military power indescribably far off.

In such a world, it is very easy for anyone, including the sincere and well meaning, to say, "Look, the device that I propose, though it costs $100 billion, could bring us a tiny fraction closer to security."

Yet, as the world is now constructed, there is no real security, and in the end our security must come through a leveling off or deescalation of weapons of destruction.

I want to thank the gentleman again for posing the important question that he did.

Mr. YATES. Mr. Speaker, will the gentleman yield?

Mr. REUSS. I yield to the gentleman.

Mr. YATES. I think the gentleman gave an excellent answer to the question posed by the gentleman from Indiana.

I would just like to add this final thought and that is that the thesis of our defense today is our power to retaliate with the basic offensive capability that we have. There is no defense that we have against the Russian power to unleash its missile might upon us except our power to retaliate.

I have been unable to understand why, if we are satisfied, perhaps perforce, to accept this position and this confrontation with the Russians, the two missile giants holding each other off by the power of their offensive might, why that thesis is not equally valid against the Chinese, who have no missile threat in being, who will only have a primitive missile threat in the foreseeable future, and whose country and whose people can be destroyed by our nuclear missiles as well. Why if we are willing to have this kind of confrontation with the Russians with this powerful force, why is it not equally and even more valid against the Chinese?

Mr. REUSS. I believe even the Pentagon would concede that our current missile potential is greater than that of Communist China, and under the circumstances we would be bargaining from power. I think the gentleman has raised a point so delicious in its simplicity as so far to have escaped the powers of the Pentagon.

Mrs. MINK. Mr. Speaker, will the gentleman yield?

Mr. REUSS. I yield to the gentlewoman from Hawaii.

Mrs. MINK. I would like to join my colleagues in commending the gentleman from Wisconsin and his colleagues for giving us this opportunity to hear this very important debate, and also to make our small contribution.

Hawaii was one of the recommended locations for the ABM. Until this date a specific site has not been selected. The people of my State are quite concerned about this issue. I have longed for an opportunity to express myself.

I think that the most grave fault in this recommendation comes from the false sense of security that the people would derive from the construction of such a system, the innocent belief that it would provide them with protection from a nuclear catastrophe.

I believe that everyone recognizes that a nuclear was is unthinkable, and yet, as unthinking as it is, people naturally have the feeling that they would want to survive if one should ever come.

On September 18, 1967, Robert McNamara announced plans for a limited ABM defense system called Sentinel. We are told that he reached that decision under intense political pressure against his better judgment. His own words seem to bear that out, for in announcing the system, he made a better case against it than for it.

He said:

> There is a kind of mad momentum in the development of nuclear weaponry. If a system works, there is strong pressure to deploy it out of all proportion to the prudent level required.

Mr. McNamara feared that the construction of a light ABM system would lead at once to demands for a heavy one; and he said we must firmly resist those demands, because our greatest deterrent against attack is not a costly defense system of questionable reliability, but a fully credible, offensive, destruction capability.

It is an accepted fact that the one thing which prevents any nuclear power from attacking another, is the certain knowledge that such an attack would be suicidal. It is a situation which has been properly described as "the balance of terror," and it is the situation which now prevails. It is certainly not a pleasant situation, but it has worked. Now the proponents of the ABM seek to disrupt that balance of terror, and they tell us that the deployment of the ABM will make us a little safer, will give some assurance to our survival as a nation.

I think otherwise.

In the first place, any argument in favor of the ABM system must be based on a number of assumptions. It seems to me that two of the most important assumptions that must be made are: first, that the system will work, not only under laboratory conditions but under the unpredictable conditions of an actual nuclear exchange. That is generally accepted as a rather questionable assumption. Second, we must assume that the Russians will do nothing to counter the ABM. That is not even a questionable assumption—it is innane.

I subscribe to Jerome Wiesner's view of a high degree of unreliability in the system and to the probability that we shall never know about that unless the system is employed under the actual conditions of an attack, and such conditions cannot be duplicated under any controlled situation, nor can they even be predicted. Who can say what will happen in the environment when a hundred or several hundred warheads are exploded within minutes of each other on both sides of the globe and throughout the atmosphere? No one can.

But even if it would work—even if we could be guaranteed that it would work—the question would still remain, "should we build it?"

What would be the effect of such a system on present international relations? I think it would clearly exacerbate them. Could we really expect the Russians or anybody else to improve relations with us while we are at the same time stripping them of their nuclear deterrent which they truly believe to be necessary to their continuing existence? The idea is ridiculous. We are completely convinced that our survival depends entirely upon our nuclear capability, but we fail to understand how the Russians or the Chinese might hold the same conviction. Assuming that they do hold that conviction, they could never consider an American ABM as a purely defensive system no matter what we might say about it. And viewed in the context of the theory of deterrence it could not be a purely defensive system since its mere existence would negate some part of their deterrent system thus giving us a greater offensive capability as compared to theirs. That situation would be intolerable for them, and the arms race would run on at a new and higher level.

So there can be no question about the Russian response to an American ABM—they would be compelled to counter it, and we will be asked in turn to counter their countermeasures, and so on without end.

Another thing that is disturbing about the question of an ABM system is this: When the missile people talk about losing one-half of our population without ABM, or losing something less than that with ABM, they are talking only about the number of people who will die in the first few hours of a nuclear war—the tens of millions who will die in the first great exchange of warheads—they do not tell us about the days that will follow. With our cities burned and twisted, with tens of millions dead, with untold millions of others dying of burns and radiation disease, with millions paralyzed by fear and panic, with the Nation completely demoralized, the enemy missile submarines will rise from the bottom of the sea to deliver the second blow. What will ABM be worth at that point?

So as the debate over this vital issue continues, let us not be caught up in the grotesque numbers game played with human lives and the very life of this earth.

If we succumb to a debate only of alternative levels of destruction, and what degree of damage is acceptable and what is not, then have we not already made the psychological adjustment to the inevitability of nuclear war?

So let us not ask only how many millions of dead are we willing to accept, but whether we must accept any at all.

The question we must decide is not how many lives will ABM save, but what will be its effect on the likelihood of a nuclear war.

The ABM—like every other weapon in the history of man—may be a self-defeating device, it may save millions of lives in a war that might not have occurred save for the existence of the system itself.

Mr. REUSS. Mr. Speaker, I thank the gentlewoman from Hawaii for her contribution.

I would like to yield first to the gentleman from Indiana, who has been on his feet seeking recognition.

Mr. DENNIS. Mr. Speaker, I thank the gentleman from Wisconsin for yielding.

I would like to say that, as I understood the answer addressed by the gentleman to my previous question, at least the first part of it was that we were dealing with an inadequate defense system.

I think I indicated previously I really lacked the technical information on that subject, and I am openminded on the question. It seems to me that it is basically a technical question on which it should be possible to get a relatively adequate technical answer. If I understand the gentleman, if it were adequate, then he would be for it. That seems to me an appropriate position.

What I would perhaps differ with a little more are some of the suggestions I thought I heard here, that rather than putting the energy and research and effort into answering that question, they should go to certain social endeavors, and so on, which, whatever their virtues, if we had no country here in which to experiment, would not amount to much. Therefore, it seems to me, if we are in accord, if we can get an adequate defense that has to be the first thing.

I should like also to suggest to the gentleman from Wisconsin that an interest in acquiring such a defense, to my thought, is not at all inconsistent with exploring these great questions of war and peace and accommodation. They may have to go hand in hand.

Mr. REUSS. Certainly not. The purpose of the conversation here this afternoon is to bring to bear such information as your colleagues in the House have been able to obtain.

May I say this: When warriors from the war on poverty come before us in the Congress, we feel able to, and do, give them the most rigorous going-over. That is as it should be.

When warriors from the war against crime appear for their appropriations, they likewise are subjected to rigorous analysis.

I see nothing in nature which should insulate the warriors of the military-industrial complex from similarly passing muster before this, the elected body of the people.

Mr. DENNIS. Neither do I.

Mr. REUSS. That is the purpose of this afternoon's debate.

May I say, finally, that I am one of those who are against the ABM, and for two reasons. One is that it appears to me not apt or adequate to do the job it is asserted it will do; namely, bring us true security. And I am against it second, and in conjunction with the first reason, because what this country needs, is to focus some of its financial and scientific power on the great issues of enabling mankind to live the good life here on earth, and that includes massive attacks upon our polluted environment and our degraded cities, a goal which I am sure the gentleman shares.

Mr. BROWN of California. Mr. Speaker, will the gentleman yield?

Mr. REUSS. I yield to the gentleman from California (Mr. BROWN).

Mr. BROWN of California. Mr. Speaker, I also want to commend the gentleman from Wisconsin and the gentleman from California (Mr. COHELAN) for stimulating this very interesting discussion.

It has not yet reached the point of debate, because even despite the contribution of the previous speaker, who raised the question about the Chinese ICBM, the full presentation of the arguments in favor of this system have yet to be made. I think they need to be made.

I have been seeking to understand them, in all good faith, because I do not believe one can successfully rebut any argument unless one understands that argument.

The problem has been, as some of the previous speakers have pointed out, that there has been a little slipperiness with regard to the reasons for this system. I will get into that a little later.

There is also the very real question as to whether some of these arguments can ever be successfully met because at the root—I doubt if we will get to the root this afternoon or even during the course of this session—there are certain articles of faith with regard to the support of or the opposition to the ABM system. There is on the part of the proponents a faith, for example, that the continued proliferation of weapons, the continued development of nuclear power or other nonnuclear power, contributes to the security of this Nation and of the world in today's situation. That faith is hard to reason with. For a Member of Congress or a general who feels that any military expenditure must contribute, just because it is a military expenditure, to the security of this country there is very little that logic can do to persuade him otherwise.

It is my own contention that the continued expansion of military expenditures on the part of this country not only does not contribute to the security of this country but is actually weakening our security in many, many ways. This point has to be stressed over and over again not only in view of what it deprives us of in the way of resources for domestic problems but, in fact, because it may be leading us to a militarily less secure position.

I think there are many sound technical arguments that can be made on this point. Obviously every large-scale military system which has been proposed and which was funded and then failed over the last few years has been fervently supported by the planners in the Pentagon who proposed it, by supporters in the Congress, and by many others. Nevertheless, many of these systems have failed.

Mr. Speaker, underlying the technical arguments, which are too sophisticated for most Members of Congress, there are certain nontechnical arguments which are articles of faith and which are difficult to rationalize. Some of it, also, in-

volves geopolitical considerations that have not yet been expressed. For example, our desire to feel that we have a central or core interest as a nation that extends throughout the world. There are many who honestly believe this. They think our power and leadership role in the world requires that we assert a core interest in almost every part of the world. Others assert this, and there is no arguing with them that you assert it through military means or at least the potential of applying it in these areas for they believe that America's role requires it. You will not be able to argue with them rationally on sophisticated technical grounds that a particular weapons system will not work or something of that sort.

Mr. Speaker, I want to make one additional point. There has been, of course, a fight over the ABM system that goes back 15 years. There were proponents who sought to have this system deployed during the Eisenhower years. It was rejected by the President at that time on sound grounds. It was sought to be deployed by the Joint Chiefs of Staff and many of their supporters in Congress. The system was actually funded. For several years the Secretary of Defense, Mr. McNamara, refused to spend those funds, which brought him into conflict with certain very able Members of this body. In late 1967 he changed his mind. I am sure you are all familiar with the history. He acted to authorize funding for the initial steps for the light system. Now, it is my contention that the Secretary of Defense did not make this decision because he had suddenly changed his mind with regard to the technical sufficiency of the system. I think—and the evidence, I believe, will support this beyond any question—that he was told to change his mind and he did so with reluctance. The reasons why he was told to change his mind had to do with the political realities of the time. There was then developing a strong attack by many Members of Congress and many political figures, and it was not just confined to the leaders of the opposition party but included some in the Democratic Party. There was the beginning of a large-scale political attack on the wisdom of the President and his subordinate, the Secretary of Defense, for not deploying this system. It was to be made an issue in the 1968 Presidential campaign just as the so-called missile gap was made an issue in the 1960 campaign. All of us recognize that making an issue of this sort bearing directly on the security of our country can be a very telling political thing to do in an election year.

In fact, there are some who ascribe the victory of the late President John Kennedy to his effective use of the "missile gap" issue even though it was admitted by all parties after the election that this was a specious issue—that there was no missile gap.

I think President Johnson feared this particular sort of issue and that he was not about to be trapped into being a victim of this kind of an issue.

I have here in my hand, as the late Senator Joe McCarthy used to say, a little booklet which was put out by the Republican National Committee which says:

> The missile defense question. Is L. B. J. right? Russia deploys antimissile network. United States refuses to keep pace.

This lays the groundwork on the part of the Republican committee for this political attack about which I am speaking. At that time the President was a potential candidate for reelection and I think did the smart political thing by pulling the fuse on this issue by telling Secretary of Defense McNamara, in effect, "I do not care what you think about the system. You go ahead and say you are going to deploy it." That is exactly what happened. I believe this accounts for the fact that we are today fighting the fact that the system is already authorized and funded. And, I believe, as with many other things that happen in this great country, once you make a decision, even though it is a mistake, it is extremely hard to go back and correct it. I hope that will not be the case in this instance because this decision not only has its roots in a generation past, but it has its fruition in a generation yet unborn. If we do not correct it today, we may be storing up trouble, more trouble than we can imagine, for the future.

One last item here. I understand that our distinguished former colleague who is now the present Secretary of Defense, the gentleman from Wisconsin, Mr. Laird, held a press conference last week in which he made certain points. I do not have the text but I have the article which states:

> Laird Taking Harder Line on Soviet Military Threat.

In this article—and I do not vouch for its accuracy or authenticity—the present Secretary of Defense makes certain assertions to this effect: "The Soviets are testing a 'sophisticated new ABM system,' and that construction of the Galosh ABM around Moscow may have been held up for this development."

Mr. Laird's statement to the effect that the Soviets are testing a new ABM system came as a surprise here. Further quoting from the article:

> There was no mention of this possibility in the annual posture statement submitted to Congress by former Defense Secretary Clark M. Clifford on January 15.

And, here, I want to ask the Secretary if he is prepared to present to us information—facts which indicate that things have changed so much in the last few weeks or if he has acquired additional information—that would indicate a basis for stating that the Soviets are now deploying a new sophisticated ABM system.

He makes a similar statement about the FOBS system. Secretary Laird says that the Soviets are deploying the FOBS system at the present time. On the other hand, just last year, it was stated that we could not differentiate between the FOBS system and other ICBM systems.

Mr. Speaker, I would like to ask Mr. Laird what information he has upon which he has suddenly decided 3 weeks later that the Soviets are deploying the FOBS system.

Third, he said that the Sentinel could act against Soviet sea-launched ballistic missiles—SLEMS—the FOBS, and accidentally launched ICBM's.

This brings in another argument—the capability of defense against sea-launched vehicles which only last year was denied.

I would like to know what new capability of the system would now make it effective against sea-launched systems of any sort.

Fourth, there is this point: Mr. Laird stated that the Soviets are now spending $3 to every U.S. dollar for strategic defense, exclusive of research and development and for Soviet defense needs.

This makes it look as if the United States is not spending enough on the ABM system. I have had other information to the effect that a portion of these dollars went into antiaircraft defense. I would like to ask Mr. Laird what the components of these figures are and if he can in this way justify the position which he has now taken.

It seems to me that this is the type of presentation that we hear all too often just before an appropriation bill is considered for discussion. If the Navy is going to testify for their new antisubmarine warfare vehicles, then just a few days before that we always see a spate of stories about Soviet submarines off our coasts. If the Air Force wants money for their new advanced manned orbiting platform, or whatever it is, they suddenly find out that the Russians have got some new, fantastic, advanced bomber.

Now, I am questioning Secretary Laird as to whether he has been using a little psychology on the Congress.

Mr. YATES. Mr. Speaker, will the gentleman yield at that point so that I may advance some information on that subject?

I too will have some things to say about Mr. Laird when I make my complete statement later on.

Mr. REUSS. I will yield to the gentleman from Illinois for that purpose.

Mr. YATES. I thank the gentleman for yielding.

In my version of the Laird statement before the committee, which appeared in the Chicago Sun-Times last Sunday, it is stated this way, I will say to the gentleman from California:

> Laird said that the Soviet Union has "already deployed an ABM system," but the committee forced him to agree that the system around Moscow is only half completed and that it corresponds roughly to a system the United States abandoned because it was ineffective.

Laird stated this:

> If the Soviet Union launched an attack, the United States could retaliate devastatingly. Then he downgraded the U.S. deterrent.
>
> He asserted that the Soviet Union outstrips the United States in megatonnage. But he agreed when Senator STUART SYMINGTON said that although some Russian rockets can carry heavier warheads than some U.S. missiles, the total power of U.S. bombs is greater than the Russian total.

So I am inclined to agree with the gentleman in the conclusion he draws from the remarks that the Secretary made.

Mr. BROWN of California. Mr. Speaker, will the gentleman yield further so that I may continue for one more moment?

Mr. REUSS. I yield further to the gentleman from California.

Mr. BROWN of California. I thank the gentleman very much for giving me this extensive time.

Mr. Speaker, I have a longer statement which I would ask unanimous consent to insert in the RECORD at this point.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from California?

There was no objection.

Mr. BROWN of California. Mr. Speaker, behind the debate over international ramifications of ABM is a basic, yet generally ignored, factor: that the United States decided to deploy this grossly questionable system more from internal pressures and fears than from any real external threat.

Intricate political maneuvering played a major role in the go-ahead on ABM. Indeed, such maneuvering closely resembles—and, of course, is related to—the recently renewed missile gap controversy. Whether or not an ABM gap exists—and despite all his purported facts, figures and testimony, Defense Secretary Laird cannot prove that there is such a thing as an "ABM gap," it is less important than the prospect raised that it "might" exist.

As a perspective, we should look at the history of the ABM concept and how it relates to the recurring "missile gaps." Contrary to arguments used by many ABM proponents, it was the United States, not Russia, which first undertook extensive anti-missile-system research. That was back in the mid-1950's when Bell Telephone Laboratories made initial studies proposing the Nike-Zeus system.

During the late Eisenhower years, Nike-Zeus won Army approval and tests were made of prototype components. Deployment never was fully implemented, but research efforts continued.

The first missile gap suddenly appeared in 1960, largely fueled by Soviet achievements in space and by American military fears. Though the gap was mainly on paper, it had important impacts on both domestic and foreign affairs. It created a new drive for increased U.S. offensive weapons spending. Soviet reaction to this move came when the Russians announced that a Galosh ABM had been deployed. The arms race began to accelerate.

The Democratic Party used the missile gap in 1960 as a lever in gaining national control. Once in office, the Kennedy administration quietly quashed the gap. As a political tool of the military, it proved significant; in reality the gap was a sham, created by the military and shunted aside by the military when its usefulness was gone. But, it was only shunted aside; as a tool it had proved effective once, and its nature was such that it could be used and reused with frightening effectiveness.

In practical terms, the missile gap uproar resulted in a restructuring of U.S. military objectives. Since 1960 the arms race has sped blindly ahead with few hesitations. The military budget already has bloated to over twice its 1960 level, with most of the increment in sophisticated electronic and missile systems. According to former Defense Secretary Clifford, if there is a missile gap today, the balance tips in our favor with the United States holding at least a 3-to-1 advantage over the Soviet Union.

Measured against the early American ABM efforts and the military philosophy which has led to both the Soviet Union and mainland China being virtually surrounded by nuclear-equipped U.S. forces, Soviet deployment of ABM does not seem unrealistic. But, for the superhawks and militarists, such Soviet deployment became another vehicle for promoting even more U.S. spending for weapons systems.

By 1967, missile gap tactics once again reappeared, this time in the guise of an ABM gap, and this time forwarded by the Republican Party. A major Republican National Committee background report on the subject summarized the issue this way:

The question of an anti-ballistic missile system for the U.S. has become a major issue as a result of the deployment by Russia of an ABM system.

This question achieves added significance from the progress made by Red China in developing an offensive missile system. Evidence indicates that China may test an ICBM this year and may have ICBMs operational by 1975. But the Chinese are reported to be making faster progress than was anticipated sometime ago by Pentagon analysts. Red China may develop medium-range ballistic missiles this year.

An apparent difference of interpretation exists as to the progress made by Russia in developing an ABM system. President Johnson has said Russia "has begun to place near Moscow a limited anti-missile defense," and this low-key estimate is supported by Defense Secretary McNamara. But other interpretations, based on U.S. Intelligence reports, are that Russia has made substantial progress in laying out a sophisticated "area" defense system which eventually may close off the entire Soviet Union.

The U.S. is developing the Nike-X system as an answer to the Soviet project, but has kept this system in the research stage and has made no move up to this time to deploy the system. There are reports that, despite marked improvements made in recent years in the Nike-X system, it is still a "point" defense system, or less sophisticated than an "area" defense plan.

Deployment of the U.S. system, according to reliable estimates, would require about five years. This is because of the sheer physical difficulty of translating research into actual installations.

Thus the Russians are years ahead of the U.S. in actually laying down a missile defense. How far the Russians are ahead of the U.S. depends on the degree of progress made by them in deploying their system and how long they have been at it.

Evidence was developed four years ago indicating that the Russians had installed anti-missile sites around Leningrad. *The Washington Star* published a report to this effect in March, 1963. If this evidence is well-founded, the Russians may be further advanced in missile defense deployment that the Administration seems willing to believe.

Establishment of an ABM system by the U.S. would cost up to $40 billion, according to present estimates, depending upon the depth of the defense undertaken. Various reports state that this huge cost would include collateral defense programs, including fallout shelters, improved bombers against a possible bomber attack, better defense against missile-carrying submarines. The cost would be spread over a number of years, since even a "crash" program could not accomplish the entire undertaking hurriedly.

Consideration is being given to a "modest" missile defense, costing from $3 to $10 billion. Such a defense would be directed primarily at the Chinese or similar threats not expected to materialize for some years.

However, the Administration for six years now has rejected repeated recommendations that the U.S. move forward with a missile defense. These recommendations, originally made by the Army, in recent years have been supported unanimously by the Joint Chiefs of Staff.

In the face of now acknowledged evidence that the Russians are deploying an ABM system, President Johnson and Secretary McNamara continue to reject proposals for a similar defense for the U.S.

Instead, the Administration is seeking through negotiations with the Russians to work out some kind of agreement to halt further development of nuclear weapons. Some reports have referred hopefully to a possible "moratorium" on further development of ABM systems.

Soviet Premier Kosygin, at a news conference in London, said that a missile defense would increase international tensions less than an offensive missile system, and was preferable. This was interpreted as indicating the Russians would reject the President's overtures.

The President stated in his budget message for the 1968 fiscal year that he would "reconsider" his decision not to proceed with a missile defense if efforts to negotiate with the Russians fail. He earmarked $375 million in the budget to start work on a missile defense if this happened. This reportedly is intended to start work on a defense for U.S. ICBM bases and not cities. There is still no plan in the works to begin production of a defense for cities.

Defense Secretary McNamara for years has cited various reasons for not proceeding with a ballistic missile defense, such as: the system is imperfect, research has not been completed; the system would have to be combined with a highly expensive fallout shelter program. He has leaned strongly to the idea that the best deterrent to nuclear war would be a strong offensive missile or ICBM capability.

Recent reports state that improvements in research on the Nike-X system reveal that a relatively "modest" fallout shelter program would suffice in combination with it, costing half the previous $5 billion estimate for shelters. This is said to be due to improvements in the Nike-X defense mechanism.

In a "posture" statement issued in January, McNamara argued that spending billions of dollars now to build a missile defense system would buy no real security for this country. His basic theme was that Russia would improve its offensive missile capability to erase any advantage from an ABM system. Conversely, he argued that the U.S. would maintain its ability to inflict unacceptable damage on Russia through its offensive missiles, regardless of Russia's missile defense.

However, apparently reliable reports state that Russia has made vital breakthroughs in developing offensive missiles as well as an ABM system.

Some military men take issue with McNamara, saying the time has come to cut metal for an ABM system. Otherwise, they contend, the situation could lead to nuclear blackmail or to a nuclear war.

The Republican report put the Johnson administration into a quandary. Refusal to deploy ABM became an increasingly hot political issue. But deployment would mean deferring vital domestic programs. And, in that situation, the political forces favoring ABM heavily outweighed dissenting opinions.

Pressures came at many levels. Fear tactics stemming from the Republican

background paper grew steadily. Politicians began to sense the immense pork-barrel aspects of ABM. Potential contractors saw ABM as a huge profitmaking endeavor.

Yet, once the decision was made to begin the "thin" ABM deployment, the critics were quickly silenced. The commitment had been made. The "gap" closed again.

Internal forces were crucial in the ABM deployment decision. Now, they are working toward expanding the ABM system. And, in the course of that expansion drive, many unsettling points are becoming apparent.

Slowly, but surely, the main objective of ABM is shifting away from that of protecting American cities and American citizens, and is becoming, instead, a watchdog for U.S. military interests. According to the following article from the February 13, 1969, Los Angeles Times, one study already has asked that ABM be limited only as a defense for offensive missile sites:

SENTINEL DEFENSE URGED FOR ICBM SITES ONLY—PRIVATE STUDY ASKS REORIENTATION OF ABM SYSTEM TO OMIT PROTECTION OF CITIES

(By Ted Sell and Ruby Abramson)

WASHINGTON.—A private study being circulated on Capitol Hill urges that the controversial Sentinel antiballistic missile system be reoriented to protect U.S. intercontinental ballistic missile sites rather than cities.

Such a move would completely reverse the strategy conceived when then-Sceretary of Defense Robert S. McNamara ordered a go-ahead on Sentinel deployment Sept. 18, 1967.

From sites near the remote ICBM nests in Western states, the ABM network, with its relatively shortrange missiles, would offer little protection for population centers—the mission for which the Sentinel system originally was conceived.

An ICBM-oriented ABM system might also fit more closely into the ideas of President Nixon and Defense Secretary Melvin R. Laird. Both have indicated they see an ABM system more in terms of defending against Russian attack than against a lesser Red Chinese threat.

LAIRD HALTS WORK

Work on Sentinel deployment was halted by Laird last week pending a review.

Laird lumped the Sentinel delay decision with similar reviews on six other major weapons systems which the Republicans also inherited from the Democratic Administration. But the Pentagon conceded Wednesday that no orders to halt the other programs have gone out pending completion of the studies.

Identity of the author of the ABM study now circulating cannot be disclosed. But he is known to be an expert on nuclear weapons, and his views are expected to carry substantial weight with legislators who question the value of an ABM system around major cities where some citizen groups have protested.

No action has yet been taken on the study. It is certain to figure in congressional hearings on ABM. The Senate and House Armed Services committees and the House-Senate Committee on Atomic Energy have said they will hold hearings.

Adoption of the ICBM-oriented network would be a victory for figures in Congress, the Administration and the military who have argued all along for an ABM defense against Soviet attack.

KEEPS IT ALIVE

As far as military experts are concerned, a principal benefit at the moment in such a deployment would be to keep a part of the ABM program alive during a period when it otherwise is in trouble with Congress.

It would avoid for the moment the objections raised in major cities, perhaps until residents could be "educated" to overcome resistance, including fears of an accidental explosion of nuclear-tipped missiles. It also would keep scientists, engineers and missilemen in the program and help develop ABM technology.

Pentagon experts on antimissile research and strategy, however, admit that a deployment designed solely to protect ICBMs would be of marginal strategic value—and only then in what is considered the most unlikely form of Communist attack.

This would be if an enemy—presumably Russia—chose to launch a limited number of ICBMs not at American cities but at U.S. missile bases as a form of international blackmail, hoping to force the United States to back down on some major issue.

Under past doctrine, any report of enemy warheads heading toward the United States was to have resulted in a massive launch of American ICBMs so that the U.S. missiles could be out of their silos before the enemy warheads streaked into targets.

There would be no question but that World War III had started and that in its first hour a major share of Russia's population and most of its industry would be pulverized.

Even if Russian ICBMs were targeted on American ICBM fields, under this theory, the 15-minute warning time which U.S.-radar would provide would mean that the Soviet nuclear warheads would strike only empty silos.

DIFFERENT ATTACK

On the other hand, the idea of placing the first ABMs around U.S. ICBM fields carries tacit recognition that an altogether different kind of nuclear exchange might occur and that an attack by Russia with only a few missiles might not be the signal for starting World War III.

"If we saw only two or three warheads coming in," one Sentinel project figure said, "what would the President do?"

"Would we go to war?"

"If they were coming at our Minutemen fields, and we were sure we could stop them, it would buy more time for the President to decide what to do—whether to destroy Russia or do something else."

Ironically, U.S. ICBM fields already are the best-protected installations in the nation, in terms of nuclear attack. The 1,000 Minutemen are in hardened underground silos at six bases in Wyoming, Montana, North and South Dakota and Missouri.

DISTANCES A FACTOR

Because of the distances between silos and the concrete hardening, experts calculate the Russians would have to target at least two ICBMs on each Minuteman to have a good chance of destroying it on the ground. With 15 or even fewer minutes warning, the missiles could be fired before they were destroyed.

In terms of a possible Red Chinese attack when China builds ICBMs, however, the ICBM-oriented ABM makes almost no sense, Pentagon leaders said. The Defense Department expects China to have a small ICBM force in mid-1970s.

But with a small ICBM force, according to strategic planners, it would be highly unlikely that China would target on the hardened U.S. missiles in an effort to force the United States to desist from any international move.

It would not be profitable to target scarce ICBMs on hard-to-damage targets, particularly when the American population would lie open in what planners call soft cities.

Moreover, China would be immediately hit by American missiles from Polaris submarines, from shorter range missiles on Okinawa and from bombers in the Pacific, which under current targeting theory are more involved in retaliation against China than the U.S. ICBM fields.

The ICBM-oriented ABM would reverse the order of priority discussed by McNamara in ordering Sentinel deployment.

McNamara argued that it would be cheaper to build more ICBMs than to put ABMs around them. In effect, this accepted some ICBM loss in a sudden strike, but by providing far more ICBMs it was intended to insure that enough survived to maintain the margin needed to inflict wide damage on Russia.

McNamara stressed fears that ABM might come to be considered a potential defense against Soviet missiles and he marshaled vast expert advice to the effect that such protection was impossible against the type of heavy attack Russia could launch.

The Sentinel system manager, Gen. A. D. Starbird, in a briefing before House Appropriations Committee members confirmed that the second of the three objectives of the authorized ABM system is "to provide an option for defending Minutemen with Sprints."

Traditional interservice competition is now beginning to heat up over ABM. The following stories, from the February 21, 1969, Los Angeles Times and from the February 19, 1969, Washington Evening Star, indicate that both the Air Force and the Navy are asking for ABM systems of their own:

[From the Los Angeles (Calif.) Times, Feb. 21, 1969]

ANTIMISSILE FUNDS SOUGHT BY AIR FORCE

(By Ted Sell)

WASHINGTON.—The Air Force is lobbying behind the scenes to get money for its own antiballistic missile system, perhaps in competition with the Army.

The Army has been assigned responsibility for developing and deploying, as well as operating, the controversial Sentinel ABM.

But the Air Force would like to get some of the action, too, partly out of concern that continued Army work on ABMs would in time put the Air Force out of the space-defense business it was assigned after it became a separate service.

Air Force officers are seeking about $15 million to test out their ideas that discarded Minuteman intercontinental ballistic missiles can be modified into ABMs.

APPROACH LEGISLATORS

Air Force officials have privately approached key legislators on the project. The action has the effect of encouraging delays in going ahead with Sentinel on grounds the Air Force may be in the process of developing a better and cheaper substitute.

How successful the Air Force effort will be on Capitol Hill is open to question. The current dispute in Congress is over whether the Army's Sentinel will work and whether it will be worth the $5 billion to $10 billion estimated cost.

The Air Force already had started to acquire the expertise it might need to operate an ABM. At Eglin Air Force Base, Fla., it built a $62 million one-of-a-kind advanced radar installation in 1967. Since then the Air Force has trained technicians to operate the unit in excess of the needs for simply one such radar, while admitting it did not plan to build others.

The Eglin radar is of a type called phased-array, an advanced system far beyond those now needed by the Air Force but similar in principle to those to be used in the Army's Sentinel system.

One of the advantages the Air Force sees in its proposal is that it would use hundreds of Minuteman 1 missiles which otherwise will become surplus as the new, multiwarhead Minuteman 3 missiles are produced.

APPROVED IN 1957

The Minuteman program was approved in 1957 as the first project to use solid-fuel missiles as ICBMs instead of the earlier liquid-fueled Atlas and Titan missiles. Solid-fueled missiles can be stored longer and fired much faster than missiles which have to be fueled with the toxic and corrosive liquid fuels immediately before firing.

By 1963, the Air Force had 800 Minuteman 1 missiles. The figure is down to 600, with the other 400 missiles in the 1,000-rocket force being later model Minuteman 2.

Each of the Minuteman 1 models cost on the order of $7 million to $8 million. The Air Force sees an ABM system based on these weapons as saving much of the cost otherwise involved in buying new Spartan and Sprint missiles.

The major modification involved in the Air Force plan would be to convert guidance systems from the offensive mission—directing the Minuteman in an upward path that would put it on course to plunge onto within about a quarter mile of a target in Russia—to a defensive one.

The defensive mission would involve placing the Minuteman warhead within a close enough distance of an incoming Russian missile to destroy it either with blast effect or a shower of radiation to neutralize the nuclear warhead.

Significantly, the Air Force thinks the guidance might be made accurate enough to get away from a nuclear warhead for the ABM—that conventional explosives might do the job.

[From the Washington (D.C.) Evening Star, Feb. 19, 1969]

PENTAGON EYES SENTINEL AS SUB MISSILE SHIELD

(By Orr Kelly)

The Defense Department is considering a significant new use for an anti-missile system—protection against a possible Soviet submarine missile attack—in its current review of the Sentinel defense system.

Defense Secretary Melvin R. Laird raised the possibility that the components of the Sentinel system might be arranged to provide protection against Soviet submarine-launched missiles for the first time yesterday in a Pentagon press conference.

"I believe . . . the technology that is ready now for deployment and could be deployed if we were to go along with the Johnson-Clifford budget proposal or a modification of the Johnson-Clifford budget proposal, would have certain side-defense capabilities as far as Soviet-launched weapons from submarines or from space platforms, or false launches," Laird said.

Although Defense officials are convinced an effective defense against the Soviet force of nearly 1,000 land-based missiles is impractical now, it was learned that they are considering the possibility that a high degree of protection could be provided against submarine-launched missiles through much of the 1970s.

Defense experts, working under the direction of deputy defense secretary David Packard, are considering about 10 possibilities in their review of the Sentinel system, developed under the Johnson administration.

The possibilities being considered include continued research and development, with no deployment at the present time, plus the number of different ways of deploying the radars and missiles of the Sentinel system. Not under consideration is the so-called "thick" system designed to protect this country against a full-scale Soviet attack, according to Pentagon sources.

But an effective defense against submarine-launched missiles is considered a possibility.

As presently planned, the Sentinel system would have only limited capability to shoot down submarine-launched missiles because it is designed to detect and destroy missiles coming in from the north. But it could be redesigned to look seaward as well, probably at a significant increase in cost.

The Russians now have about 45 submarine-based missile launchers, compared with 656 launchers on American polaris nuclear submarines.

The Soviet Union deployed its first boat comparable to the early Polaris-type American submarines last year and is now estimated to be building from one to two new ballistic submarines a year. Each is capable of carrying 16 missiles.

At this rate of production the Russians could have about 237 launchers on submarines by the mid-1970's, of which about half might be deployed at any one time. If, in the event of war, two or three subs could be destroyed before they launched their missiles, an American missile defense system might well be able to intercept most, if not all of those remaining.

Whether the cost of checkmating the Soviet ballistic missile submarine effort through much of the next decade would be worthwhile when the Russians would still have enough land-based missiles to destroy this country, is debatable.

But American defense planners consider the 41 U.S. Polaris submarines this country's most important means of preventing a nuclear war and would be greatly concerned if the Russians found some way to nullify this force. They could thus decide it would be worth a great deal to prevent a similar Soviet force from becoming an effective threat.

The following three stories from the February 15, 1969, Armed Forces Journal show other directions that ABM supporters are taking in order to expand the system:

TESTIMONY FROM SECRETARY OF DEFENSE

Congress intends to ask Defense Secretary Melvin Laird to advise it on the possibilities of deploying an anti-ballistic missile system that will "shoot down anything."

L. Mendel Rivers, Chairman of the House Armed Services Committee, told the Journal that the committee will ask Laird to testify on the possibilities of:

Using non-nuclear ABM warheads.

The Air Force and Navy participating in ABM defense.

The development and deployment of an entirely new ABM system.

Laird will be asked to testify as part of the hearings on the "412" military procurement authorization bill. The hearings are due to be held in the latter part of March.

Laird recently suspended all ABM site and construction work. The move was coincident with objections from some members of Congress to the location of nuclear ABM warheads near cities.

Rivers explained that prior to the 1967 approval of the Sentinel system, the Armed Services Committee did not "explore every possible alternative for ABM deployment.

"In our eagerness to have an ABM system to defend the country, we just assumed that the problem had been worked out, and that the Sentinel was the best thing we had."

Rivers said that this might not be the case today. "We may have something that will shoot down everything."

He suggested the possibility that the other Services may not have been given an adequate opportunity to participate in the planning of ABM deployment.

If the other Services have a system that will aid the Sentinel, Rivers said, then the mission should be "shared."

"If this is so, then we ought to be told." The country should be defended with the best possible ABM system, the pro-ABM Chairman said.

Rivers strongly emphasized that the Committee action should in no way be interpreted as a criticism of Laird, whom he said will be, in his opinion, a "wonderful Secretary."

SENTINEL ADVANCES

(By Walter Andrews)

The Army now is evaluating Sentinel ABM intercept improvements that, if proven feasible, would permit the use of lower-yield nuclear warheads and possibly even the eventual use of conventional warheads.

Industry studies for greatly improving the accuracy of the Sentinel system's Spartan long-range, ICBM intercept missile are presently being evaluated by the Army's ABMDA (Anti-Ballistic Missile Defense Agency).

The studies are referred to as SIPS (Spartan Improved Performance Study) and center on the high performance third stage.

ABMDA is part of the Army's Office of Research & Development (OCRD), and provides long range R&D for the Sentinel system.

Nothing is officially firm on when the improved Spartan missile would be incorporated in the Sentinel system.

However, indications exist that the Army would like to have the improved missile in the Sentinel system sometime during 1974. As presently conceived, the Sentinel is slated for operation in 1971.

The proposed improvements would give the Sentinel a new deployment flexibility, which could conceivably mitigate the effect of recent objections to the location of nuclear ABMs near cities.

Officials pointed out to the JOURNAL, however, that a "massive change" would not be involved.

SIPS AND LOITER

SIPS, if proven, would give the Spartan an in-flight "loiter" or "wait" capability, which could possibly be measured in minutes or seconds.

It would permit the Spartan to be redirected in flight, with all that capability implies in terms of improved accuracy. With a "loiter" capability, the Sentinel would not have to commit a Spartan to intercept until time had been allowed for the atmosphere to separate the real warheads from decoys.

JANUARY PROPOSALS

Since the middle of January, ABMDA has been evaluating studies by Boeing, McDonnell Douglas and Martin Marietta on the feasibility of developing a new third, "loiter" stage for the three-stage Spartan missile.

These funded efforts studied the feasibility of a new, third stage utilizing solid-propellant.

A previous McDonnell Douglas effort considered the possibility of developing a new third stage utilizing liquid rocket technology.

SOLID VERSUS LIQUID

The usual advantage of liquid propulsion over solid is that thrust and missile attitude can be controlled and varied more. Once ignited, it is difficult to control the burning and vary the thrust of a solid rocket. This is done in liquid rocket motors by controlling the flow of fuel or oxidizers.

Solid motors, however, have the strategic advantage of readiness.

The Army therefore is studying methods to vary the pulse and attitude of solid motors.

RFP'S SOON

In the near future, it will request industry proposals for the best method of building such a controllable solid motor. The industry "answer" could involve a near term solution of clustered motors or the development of a new type of solid motor control nozzle.

Officials also told the Journal that technology has been postulated by industry (LTV was mentioned as being in the forefront) of "near-zero miss distances."

In its evaluation of technology the Army

would take into consideration work done by the Air Force on satellite intercept by rocket.

The R & D job facing DoD and the Army's ABMDA right now involves feasibility evaluation of these postulated capabilities.

CONVENTIONAL WARHEAD?

Officials said that a successful SIPS effort would permit the utilization of a much lower yield nuclear warhead.

They added that the attainment of accuracies sufficient enough to permit the utilization of conventional pellet or steel rod type warheads "is still farther down the road.

"The people in DoD are as eager as anyone to develop a non-nuclear warhead. It's a goal we are shooting for—unfortunately it's not easy. The probabilities involve distances of a few feet."

SPARTAN AND SPARTANS

In ABM developmental language, officials told the Journal "the proposed improved third stage would let you wait until the atmosphere has sorted out the ballistic coefficients of all the things involved."

The 1967 approval of the Sentinel system was predicated on the development of a new, longer-range, "exoatmospheric" Spartan missile.

This missile will use the radiation from a high-yield nuclear warhead exploded outside the atmosphere—the so-called "big bang effect"—to intercept and disarm incoming ICBM warheads.

A NEW MISSILE?

Prior to the go-ahead for the Sentinel system, the Spartan was called the Extended Range Zeus (DM15X2), which was developed by McDonnell Douglas.

Except for the public relations/political rationale for renaming the Extended Zeus the Spartan, there would be a good possibility of the improved Spartan being given a new name.

Officials said that such a missile would be combined with the exoatmospheric Spartan for the area defense of the country.

Presumably, the shorter range Sprint ABM interceptor also would find a place in the new scheme.

REMOTE SPRINT

Consideration also has been given to a "Remote Sprint" Sentinel configuration, in which the Sprint missiles would be placed away from the detecting Perimeter Acquisition Radars (PAR) and the tracking Missile Site Radars (MSR).

The benefit here would be that such a Sprint configuration would better utilize the "reach" of the longer range radars.

When positioned close to the radars, the short range Sprint missiles only utilize a fraction of the radar's range.

Officials told the JOURNAL that Remote Sprint is considered a potential improvement. However, no decision has been made as yet, they said.

The obvious trade-offs are the cost of new site acquisition and additional command and control installations.

In a possible new Sentinel configuration, the exoatmospheric Spartan missiles containing the high-yield nuclear warheads could be positioned away from cities.

The SIPS version of the Spartan could be emplaced nearer the cities for the "area defense" of the population centers.

The Sprints, remote or otherwise, could be used for the defense of radar sites and possibly ICBM installations.

SABMIS AND SENTINEL

"Proven technically feasible" are the words used by officials to describe the present status of the Navy's Seaborne Anti-Ballistic Missile Intercept System (SABMIS).

Officials told the Journal that concept formulation of the system is "completed right now" as far as the technical feasibility of the system is concerned.

A SAMBIS would be a good system for intercepting enemy ICBMs in the boost and mid-course phase, officials said. As such it would complement the Army's Sentinel system.

SABMIS presently is funded at a low level, officials said, but a lot depends on DoD decisions made during the next month.

Industry feasibility studies on SABMIS were completed last year. Companies participating were: Hughes, PRC, General Electric, Northrop Nortronics, Sperry, Boeing, McDonnell Douglas, Martin Marietta and Raytheon.

Along with the superhawks and militarists there has been a third powerful ally in the recent campaign for an expanding ABM—the military-industrial complex, that great aggregation of military, corporate, and lobby power that President Eisenhower warned us about, but which too many persons have shrugged off as being nonexistent or unimportant.

By this time we should not be shocked by the abject profiteering and correspondingly low quality production which has marked the armaments industry over the past decade. The complex has been able to call all the shots without much anxiety over being turned down.

I do not expect ABM to be much different from past weapons systems. Once again, I foresee high profit margins, poor reliability, and early obsolescence. Seymour M. Hersh, in his article, "The ABM Pork Barrel," published in the January 1968 War/Peace Report, presents a dismal picture of the relationship between the military-industrial complex and the decision to deploy ABM:

THE GREAT ABM PORK BARREL

(By Seymour M. Hersh)

President Johnson's decision to begin deployment of the Chinese-oriented Nike X antiballistic missile defense system is the biggest thing that's happened to the electronics industry since color television. Beyond that, it's impact drops off sharply.

Nike X won't stop the arms race, won't hinder Russian second-strike capability, won't prevent a Chinese nuclear attack, won't protect our allies, won't add to the U.S. deterrent, won't protect U.S. civilians—and probably won't work.

The presidential decision to build the ABM was announced by Defense Secretary Robert S. McNamara last September 18, but there is some evidence that it wasn't fresh news to the electronics industry and the brokers of Wall Street. Between July 1 and September 30 last year (the third quarter), 75 mutual funds sold other holdings and invested nearly $90 million in electronic stock. Ten of the mutuals bought more than 250,000 shares of General Electric, expected to be one of the big contractors for one of the sophisticated radar units of the Nike X (renamed the Sentinel system by the Pentagon last winter). All told, 15,000 companies are expected to profit from the deployment of the Nike X; 12,000 of these are small business firms ("Thin Nike, Fat Orders," said one trade magazine headline). A partial list of the main contractors sounds like a Who's Who of the military-industrial complex: Douglas Aircraft, General Electric, Bell Telephone, Martin-Orlando, Raytheon, Western Electric, Thiokol Chemical, Sperry Rand, Avco, Burroughs, Control Data, Westinghouse, General Dynamics, I.T.&T., Lockheed and Aerojet.

One brokerage house described the then-pending Nike X deployment last summer "as the day they will shake the money tree for electronic companies. All will stand to benefit. The demands will be too high not to be felt by all in the industry." Based on Pentagon estimates, it's probable that three contractors—Douglas, Martin and Raytheon—each will receive more than $600 million in Nike X funds over the next five years. General Electric could get nearly $400 million. All play major roles in the system. Western Electric, another prime contractor, has received more than $1.5 billion since 1963 for its role in developing the missile system.

Is there really a military-industrial complex? A reporter for the *National Observer*, the weekly Dow-Jones newspaper, randomly surveyed six leading defense contractors recently and found former Pentagon officials and officers in all. "One office said its 30-man staff included only two Pentagon retirees," the newspaper said in its November 6, 1967, issue. "Further questioning brought out that one—a two-star general—was the office director. He handles relations with the Pentagon. The other, a consultant, is a former chairman of the Joint Chiefs of Staff." An oft-cited 1959 congressional survey found more than 1,400 ex-officers above the rank of major working for the top 100 defense contractors, including 261 generals and admirals. The survey, one index of the relationship between big business and the military, sorely needs updating.

MEANS BREAD AND JOBS

Frederic W. Collins noted in *The New Republic* last year that as few as 29 of the major contractors for the Nike X employ as many as one million persons in 300 plants located in 172 congressional districts in 42 states. To those 172 congressmen (and the 84 senators also affected) Nike X is a pork-barrel issue—bread and jobs for constituents. Maybe that helps explain why McNamara was not able to convince Congress of the folly of a Russian-oriented ABM (antiballistic missile defense) during his many appearances before committees in past years.

Critical to that failure has been the administration's lack of success in persuading Congress that the Russian deployment of an ABM system around Moscow and elsewhere poses no threat to U.S. security. In his speech announcing U.S. ABM deployment, McNamara noted that "the Soviets are now deploying an antiballistic missile system. If we react to this deployment intelligently," he said, "we have no reason for alarm. The system does not impose any threat to our ability to penetrate and inflict massive and unacceptable damage on the Soviet Union. In other words, it does not presently affect in any significant manner our assured destruction capability" because of the growing U.S. nuclear ICBM (intercontinental ballistic missile) arsenal.

McNamara's congressional sales job was spelled out nearly four years ago in the *Bulletin of the Atomic Scientists* by Freeman J. Dyson, a physicist at the Institute for Advanced Study: "The crucial problem that remains is to convince the American Congress and public that Soviet ABM systems are not necessarily a deadly threat. The American people must become accustomed to the idea that they may be better off without an ABM system, even if the Soviet people believe thy are better off with one."

This sort of reasoning, however persuasively presented by McNamara and others, leaves the military buffs in Congress cold. Sen. Henry M. Jackson, Washington Democrat, in announcing a hearing on the Nike X last fall, declared that "an ABM defense in Soviet hands lends itself superbly to bluffing and blackmail. Would an undefended U.S. maintain its resolve to act strongly if a defended U.S.S.R. appeared willing to risk a move against Berlin or any part of Western Europe?" Never mind that McNamara has repeatedly said the answer is Yes. Jackson's answer, as he told the Senate last November 30, is that the United States should begin building a new generation of ICBMs and nuclear submarines "to maintain political stability" in the world.

Another example of the attitude toward the Nike X on the part of that small, power-

ful clique who run the Senate and House Armed Service Committees came from Sen. Strom Thurmond, South Carolina Republican, shortly after McNamara's speech. Thurmond, a two-star general in the Army Reserve, wrote in the October issue of *Data Magazine* that "the true significance of the recent decision to deploy the ABM in the United States is the production time advantage that we shall have in any future confrontation with the real enemy—the Soviet Union. We will have completed the preproduction engineering, will have production lines established and will have some units installed. If we decide later that the 'thin' missile defense has to be thickened, American industry, that once produced miraculous numbers of Liberty Ships, planes and tanks, can gear up for mass production of ABM components as well.

The generals, the Congress and big business all stick together from thin to thick.

GOING TO THE PEOPLE

Playing politics with the ABM is not only a congressional game. During the savage infighting between McNamara and the Joint Chiefs prior to the Nike X go-ahead, both took the issue, in effect, to the people. The Joint Chiefs drew up a list of 50 cities late in 1965 that would be given special protection under the ABM system envisioned; the list was presented to congressional committees. Under the Joint Chiefs' recommendations, a thick defense of long-range Spartan area defense missiles would be installed to protect the United States, including Hawaii and Alaska, with 50 cities given the added protection of short-range Sprint antiballistic missiles. The military leaders planned to press for the immediate protection of 25 cities at a total cost of $10 billion. On the list of the first 25 cities to get protection was Charleston, S.C., home of Rep. L. Mendel Rivers, chairman of the House Armed Services Committee and advocate of everything military. McNamara argued vigorously against the Joint Chiefs' approach, telling them they would never be able to draw the line between 50 cities and the rest of the nation. To prove it, he eventually had some details of the top-secret plan leaked to his favorite Pentagon reporter, Richard Fryklund of the *Washington Star* (now a deputy assistant secretary of defense for public affairs). The resulting protests from the cities left off the list convinced the Joint Chiefs that such a strategy would be politically unfeasible.

After this clash, all signs pointed toward the deployment of the light Chinese-oriented ABM costing under $10 billion. In the spring of 1967 the usually reliable DMS market intelligence report, a privately produced survey of future Pentagon research and development prospects, noted that the Defense Department's "procurement request for fiscal year 1968 is believed to provide for the initial funding of a $4 billion to $7 billion system over five years." DMS, which is circulated among 3,500 Pentagon contractors, is staffed by many former Defense Intelligence Agency (D.I.A.) officers. In his press conference of May 18, 1967, McNamara carefully left the thin ABM door open. After explaining once again that any U.S. ABM system would not be capable of stopping a Soviet missile attack but would stop a Chinese ICBM attack, the defense chief testily added: "I frequently read in the press discussions of antiballistic missile systems which fail to distinguish between these two types of systems and which, therefore, are quite misleading in indicating the capability that we have for protecting our people."

McNamara then was asked if "the fact that we are asking the Russians to agree to a limitation of ABMs leaves open clearly the possibility that both sides could deploy this limited system." "Yes, I think so," he answered. "We haven't foreclosed any action by our desire to engage in discussions with the Soviet Union, but I think it definitely does leave open the possibility."

Some sophisticated analysts saw other signs of a favorable Nike X decision. A brokerage house that closely watched the Nike X debate reported in mid-1967 that research funding for the system was remaining stable but added, however, that "all may not be as it seems." It noted that "work on the new Spartan missile appears to be accelerating" and that "radar efforts have centered around the development and construction of a single radar system for testing. Once the initial model is fully completed and moved into test stages, funding will drop off except for modifications and testing activities. If the system is deployed, the contracting companies will then be characteristically told to go back and build 25–50 more just like the first one." The report concluded by urging investors to plow funds into the electronic companies and, indeed, most electronics stocks have gained substantially since September.

A few weeks after the Nike X decision was announced, the *Washington Post* added an illuminating, if little noted, sidelight. It said it had learned that the United States originally was headed toward a December announcement of the thin ABM. President Johnson, faced with strong congressional opposition on all fronts, the newspaper said, "suddenly accelerated the ABM timetable in an effort to ease the political pressures on him. Among the president's multiple objectives," the *Post* said, was a desire to outflank zealous pro-ABM forces in hearings planned by Senator Jackson, plus an attempt to solicit support for the president's stymied tax increase proposal from pro-ABM members of Congress." It should be noted that, according to the *Post*, political pressure was responsible only for moving up the date of the announcement—and nothing more.

When McNamara quit his Pentagon job in November and announced he would move early this year to the World Bank, the *New York Times* said that some sources believed a key factor was his disagreement with Johnson over deployment of the ABM. The newspaper added that McNamara's September 18 speech initially called for a restatement of his policy against deployment of the antiballistic missile defense system but had been rewritten a few days earlier by presidential fiat. The evidence tends to suggest, however, that McNamara's basic dispute was not over the deployment per se of an ABM defense, but over what kind of a defense was necessary and how much to spend on it. By mid-August he was circulating to key aides in the Pentagon a draft recommendation to the president calling for deployment of the thin Nike X. His private beliefs notwithstanding, it seems significant that publicly McNamara did nothing to discourage the possibility of a thin Nike X deployment.

A few days before the initial announcement of the deployment of the thin Nike X, the Pentagon's public relations office put out an information sheet for the press. It included a long series of hypothetical questions and answers and as could happen only in the Pentagon, even its own questions were not answered. For example:

"Q. Can this system be used as a first-step toward a large-scale system?"

"A. There is no plan or intention to expand the system."

In announcing the go-ahead for the Nike X, McNamara explained there was a possibility that in the next decade China might "become so incautious as to attempt a nuclear attack on the United States or our allies." Since it is the job of strategic planners to always "take into consideration even the possible irrational behavior of potential adversaries," he said, "there are *marginal grounds* [my emphasis] for concluding that a light deployment of U.S. ABMs against this possibility is prudent."

In effect, the secretary was postulating that the multi-megaton U.S. deterrent was capable only of preventing a Soviet missile attack and not one from China, a rationale described dryly by one expert as "indeed remarkable." A more Soviet-oriented reason for the ABM deployment, however, was given by McNamara in a *Life* magazine interview shortly after the Nike X decision was announced: "Our deployment isn't designed to protect the cities of America against a Soviet strategic attack, and thus it in no way threatens the Soviet ability to deter an American attack. The fact is, however, that they [the Russians] have been building up their strategic missile forces. We had no choice but to take additional steps to maintain the adequacy of our own deterrent. We considered a number of alternatives—adding more missiles, a new manned bomber, or even a new strategic missile system. We reached the conclusion that one of the most effective steps we could take, and the one least likely to force the Soviets into a counter-reaction, was the deployment of an ABM system which would protect our Minuteman [ICBM] sites, so that our own deterrent is not diminished."

During the hearings last November on the Nike X before Jackson's Military Applications Subcommittee of the Joint Atomic Energy Committee, this significant exchange took place between John S. Foster, Jr., director of Pentagon research, and Rep. Craig Hosmer, California Republican:

"FOSTER. The thin Nike X provides a cover over all of the United States against ICBMs launched from China . . . the second capability is being able to add additional Sprints and radar necessary in order to provide still additional coverage of the Minuteman silos against attempts by the Soviet Union to knock out those silos.

"HOSMER. That confirms the suspicion, of some people at least, that this is really the first stage of an anti-Soviet ABM as well as an anti-Chinese ABM. Is that right?"

"FOSTER. It is certainly not . . . This is not being deployed as a building block for some heavier system."

Many sources disagree flatly with Foster's assessment. In a special issue on the Nike X system last October, the authoritative magazine *Aviation Week & Space Technology* noted: "A preponderance of opinion in Washington, however, appears to be that, once a thin defense is in place, the American predisposition to go 'all-out,' coupled with the Nike X building-block concept, makes it almost inevitable that the system will harden and grow." Opinion aside, the incredibly complex radars for the Nike X (estimated to amount to between two-thirds and three-fourths of the total cost) known as Perimeter Acquisition Radar (PAR) and the Missile-Site Radar (MSR) have been developed in close coordination with two larger and even more technically sophisticated radars, known as the Multifunction Array Radar (MAR) and a Tactical MAR (TACMAR). The more complex radars will not be included in the thin system largely because of their cost but will continue to be developed by the Pentagon. If a decision is made to install a Russian-oriented heavy ABM, the more elaborate radars are capable of easily fitting along with PAR and MSR into the larger system. As one commentator has said, the light ABM defense would be "like pregnancy, hard to stop before full term." The line between Nike X/ No Nike X is much more sharply fixed than the division between thin Nike X/ thick Nike X.

J. I. Coffey, a former Army officer writing in *Foreign Affairs* months before the ABM decision was announced, argued similarly: ". . . as China's technology and industrial capacity grow, so also will the sophistication of its weapons. To counter this, we will probably find it necessary to extend, to deepen, and perhaps to improve our antiballistic missile system and to build up our air defense and antisubmarine warfare forces. Thus, whatever the initial form of an ABM system designed for use against Communist China, it will ultimately become either largely ineffective or little different from that required

to defend against Soviet forces. In the long run, therefore, ballistic missile defenses capable of coping with a Chinese attack are likely to increase markedly our capability to limit damage by Soviet strategic forces—a point which the U.S.S.R. is not likely to miss."

Ironically, as many experts have pointed out, the Nike X offers no assurance of doing its primary job—defending the continental United States from a Chinese nuclear attack. Who's to say China won't forego the ICBMs, if it irrationally decides to strike. It could use airplanes launched from a ship or submarines capable of firing nuclear-tipped torpedoes or medium-range missiles.

COSTS UNDERESTIMATED

There is considerable evidence that McNamara has sharply underestimated the cost of deploying the thin Nike X. Dr. Charles M. Herzfeld, former director of the Pentagon's Advanced Research Projects Agency (ARPA), told a House Defense Appropriations subcommittee last March he would favor deployment of a thin ballistic missile defense—"a high altitude system to cover most of the United States, and in particular to cover our ballistic missile sites"—in short, the Nike X. Asked for a cost estimate, Herzfeld answered: "I think one could do reasonably well with $10 billion, maybe $12 or $14 billion. If you stretch it over a period of five years, it isn't all that much money, really."

Cost for the radars, computers and the necessary underground sites for the Nike X is estimated at $3.5 billion, with an additional $1.5 billion earmarked for the missiles and their silos. Annual operating costs, an expense rarely mentioned in the daily press, will total about $500 million annually for the system, with another $1 billion needed to purchase the nuclear warheads for the Spartan and Sprint missiles. Total research and development costs in connection with the system are expected to reach about $500 million a year. One electronics trade magazine wrote last October that "the figure of $5 billion spread over the next five to six years has appeared frequently of late, but it ignores annual support costs and research, engineering and facility costs that will push the figure to a more realistic $11 billion by 1973." It further should be added that roughly $4 billion has been spent on the Nike X and its precursor, the Nike Zeus, since 1957—this is more than was spent on the entire Manhattan Project in World War II. The Pentagon has acknowledged only that the $5 billion estimate does not include operating costs.

Another usually unmentioned Nike X cost factor involves the equipment and manpower needed to coordinate the new antimissile defense with existing defense systems, such as Over The Horizon Radar (OTHR) and the Ballistic Missile Early Warning System (BMEWS). DMS reports that the deployment of the Nike X "would not supercede BMEWS since it would still be used to provide early warning against manned bombers." OTHR could help detect a missile launched from a Fractional Orbiting Bombardment System (FOBS), which McNamara announced last November is under development by the Russians. (A FOBS missile is fired into a very low orbit about 100 miles above the earth, but could be dropped onto its target before the first orbit is completed. The Nike X would not be capable of stopping a determined FOBS missile attack, Mr. McNamara said.) It is not known how much money will be needed to interface the Nike X with the older warning systems.

One brokerage house experienced in large-scale federal research projects has estimated for its clients that "the maximum expenditure levels for any one year will be $2 billion" for the Nike X. That figure might be reached by 1969, a private analysis said, adding that "1970 would almost certainly reach the $2 billion mark. The NASA (National Aeronautics and Space Administration) budget and the trend of space expenditures have taught us all a lesson in the unpredictability of federal outlays in specific programs," the analysis concluded.

McNamara himself has hedged his prediction, telling the House Armed Services Committee last March 2, for example, that the Nike X costs, "if past experience is any guide, may be understated by 50 to 100 per cent . . ."

Obsolescence is another potential cost factor. In an article for *Look* last fall, Dr. Jerome B. Wiesner, former science adviser to Presidents Kennedy and Johnson, flatly declared that he was "certain that the system we are now planning will be regarded as ineffective before it is installed." There is much evidence to support this. Now under development by ARPA is a missile booster called Hibex that accelerates many times faster than Sprint. The Hibex, slightly smaller than the Sprint, is designed to be fired directly from its underground silos, while the Sprint is ejected by a gas-propelled piston and does not ignite until it is above ground. Hibex could be the short-range interceptor of the future. In addition, the Army now is studying the possibility of developing an improved third stage for the Spartan missile that would enable it to "loiter" in space, and thus increase its capability to attack incoming ICBMs. With this added capability, the Spartan would not have to be targeted at the time of launching, which should be a major help in sorting out decoys among incoming missiles.

There are other potential costs. The Johnson administration's responsiveness to the Army ABM proposals has encouraged the Navy and Air Force to seek a piece of the high-priced ABM pie. The Navy has been pressing for a sea-based antiballistic missile system (codenamed SABMIS) that would theoretically make the Nike X's job easier by knocking down enemy ICBMs before they reached the skies over the United States. The Air Force is reported to be taking another look at some of its earlier ABM proposals, including the use of such airplanes as the giant Lockheed C5A transport as a launching platform for antiballistic missiles. Studies also are under way of the concept of using satellites to aid in the detection and discrimination of ICBM targets. ARPA further has told Congress it is investigating the use of lasers as possible missile kill mechanisms.

AN AMBITIOUS SYSTEM

The Nike X is an ambitious system. It requires radars and computers to detect and track a decoy-accompanied warhead capable of traveling more than 15,000 miles per hour, and then to guide a Spartan missile to an intercept point in outer space for area defense. It requires similar capabilities for the Sprint missile, which, is designed to destroy warheads after they re-enter the earth's atmosphere.

Electronic reliability will be a major factor in the success or failure of the Nike X. If a typical Nike X radar or computer uses 200,000 microcircuits, the Army expects it to operate for approximately 1,000 hours before one circuit fails. "If home television receivers had this reliability level," *Aviation Week* says, "a lone TV repairman operating in a city of 150,000 persons would go bankrupt, because he could expect only a single service call over an entire year, assuming that each set was operated for an average of three hours every day."

The system, expected to be in operation by the early 1970s, has four main components:

Spartan—An advanced solid-fuel three-stage version of the 5,000 m.p.h. Zeus missile that is believed capable of traveling 600 miles into the atmosphere with a large nuclear warhead. It is now under development by Douglas Aircraft, but has yet to undergo testing. Estimated per unit cost is $1.25 million, but no reliable estimate of annual operation costs is available.

Sprint—A smaller high acceleration solid-fuel missile that will be capable of meeting targets 25 miles away in about five seconds. Built by Martin-Orlando, it is now undergoing tests. Like the Spartan, the Sprints will be housed in vertical missile silos. Estimated unit cost is $1 million, with annual operating costs set at about $700,000. Both the Spartan and the Sprint are designed to destroy or immobilize enemy missiles by thermal radiation, particle radiation, high-intensity x-rays or combinations of these effects. Pentagon officials have indicated that the nuclear weapons used in both weapons have low fallout, but the low-level use of Sprint could present radiation hazards. About 1,100 of the missiles will be produced, according to DMS, with Sprints accounting for 700–800.

Missile Site Radar (MSR)—A relatively small radar complex basically designed to track targets and control the Sprint interceptor missile, although it will have some area defense (Spartan) responsibilities. To be built underground along with the missile silos, a prototype MSR is now being constructed at the Nike X test site on Kwajalein Atoll in the Western Test Range. It should be operational by the end of this year. (Along with the Kwajalein site, Nike X tests are being conducted at Ascension Island in the Eastern Test Range and at the White Sands, N.M., missile range. By December, working models of the radars are expected to be available and the system will begin testing in stages, starting with the Sprint and MSR.) About 14 of the MSR radars are expected to be incorporated into the thin Nike X.

Perimeter Acquisition Radar (PAR)—A sophisticated phased-array radar designed for very long-range search (up to 1,000 miles) and the targeting functions needed for the Spartan interceptor missile. While Par is under development, the initial Nike X tests at Kwajalein will be conducted with simulators. According to DMS, about six PARs will be installed near the Canadian border at an average cost of $85 million each. (Some critics have claimed that if an enemy missile ever is engaged by the Nike X system, the contact and explosion probably will take place over Canada.) Both PAR and MSR are believed to be capable of picking up reliable target information when the enemy missiles climb to 10–15 degrees above the horizon. Aided by Univac digital computers, the radars will be able to target search, identify, track and communicate data automatically. (The heavy costs for this kind of equipment have produced a side benefit for the major contractors: the Pentagon is urging them to automate their electronic component production lines in an effort to trim costs. The industry has been slow to introduce automation.)

HOW NIKE X WORKS

The Nike X system works this way: Once a potential target is picked up by the radars, the computers must determine if it is a missile or merely a satellite or meteorite by tracking the object long enough to determine its trajectory. Should more targets appear, the computers also must assess whether they are warheads that should be tracked or decoys that can be safely ignored. This is the crux of the Nike X system. If the number of targets threatens to saturate the radars, the computer must decide which should be handled on the highest priority. If the potential target is maneuvering and not following a simple trajectory, the computer will need more time to predict its future operations.

Aviation Week has noted: "The operation of an antiballistic phased-array radar has been compared to man trying to juggle several golf balls, a couple of basketballs and one baseball bat simultaneously. Timing is critical. The critically brief duration of a mass missile attack can tolerate no computer malfunction, and it leaves no time for human trouble-shooting and repair."

Many experts simply don't believe the Nike X can work without massive testing, which would violate the 1963 test ban treaty. Most

notable of these is Wiesner. In his *Look* article, the scientist argued that "few competent people expect the extremely complex ABM system to work the first time; yet it must to have any effect. There will always remain a big chance that even if the system is working as designed, it will not intercept all of the enemy missies. . . . Remember that if a single enemy nuclear weapon leaks through the defense to a city, the city will be destroyed."

A team of scientists headed by Dr. Ralph E. Lapp and Leonard S. Rodberg also has concluded that the Nike X could not be immediately effective. Writing in *Science and Citizen* last year, they noted that it is not unusual for complex weapons to do poorly in battle. Specifically cited was the low rate of kill of the Russian-built surface-to-air (SAM) missiles used against American fighter planes in North Vietnam.

There already have been some ominous reports of production complications. The Martin-Orlando company is said to be faced with a number of operational and guidance problems due to the extremely high velocity of the Sprint missile. *Electronic Design* magazine last October reported: "The rocket's skin temperatures are reported to soar higher than those in any other rocket. This has raised serious thermal problems with the on-board electronics," although the magazine noted that the firm's engineers claim to have solved them.

In addition, *Aviation Week* has reported that the specially built computers for the Nike X (expected to be able to handle more than four million instructions a second with a single processor) are creating staggering programing problems. The magazine notes that "there is relatively little experience in programing for missile intercept and discrimination, especially against massive attacks involving decoys and other countermeasures. . . . This does not mean that the programing cannot be solved," the magazine said, but it will take more time and more money than many experts had expected.

These kinds of problems apparently prompted Sen. Joseph Clark, Pennsylvania Democrat, a harsh critic of the ABM, to tell the Senate last July 27 that it "should know that the United States has not yet experimented with using the Sprint, the Spartan, and the radars together and probably will not be capable of doing so for at least two years. How can we consider deploying, at a cost of some $5 billion, a system that has never been fully tested? I personally think that such an expenditure is outrageous, considering the crying need that this country has for funds for domestic programs to alleviate poverty, to provide adequate education for our youth, to rebuild our cities, to feed the hungry and to eliminate air and water pollution."

AN ABM FOR INDIA?

In his May, 1967, news conference, McNamara was asked this question: "If we employed an ABM system for defense against a Chinese threat, do you think a country such as India would lay claim to the need for such a system?"

He gave this answer: "Whether or not India would or would not wish to deploy an antiballistic missile system to protect itself against a potential attack from Red China, assuming we did, I can't say. My guess is that they would."

The defense chief had a different analysis in his October interview with *Life*. Asked if the U.S. deployment of the ABM wasn't a step in the direction away from a nonproliferation treaty, McNamara replied: "One of the assumptions inherent in negotiations of the nonproliferation treaty is that the real deterrent to China's use of nuclear weapons is the overwhelming nuclear capability of the United States . . . China's leaders know that an attempt to attack the United States would invite the utter devastation of urban China. Our allies know that the same constraints that prevent China from attacking the United States prevent China from attacking them. . . . We firmly believe that it would serve no useful purpose for nations in Asia to acquire nuclear weapons of their own with all the financial burden . . . that would entail."

India, which is well within range of China's present stock of intermediate-range ballistic missiles, thus has its choice. On one hand, it can go along with the belief that the United States deterrent against China should suffice (although it must be difficult to understand why the United States itself doesn't trust its own deterrent—hence the ABM), or it can begin laying out funds for missile defense. Pressure has been growing inside the country for the latter move. The United States, by in effect voiding its own arguments for nonproliferation, has escalated the arms race.

Suspicious allies, and China, for that matter, can question whether the U.S. goal in deploying the ABM is to eliminate a potential source of what some senators call "nuclear blackmail" in Asia and the subcontinent. Instead, the ABM may assure American military planners of free and easy intervention in any part of the world (at least until the 1980s, when China is expected to develop ICBMs with sophisticated penetration devices—a development Wiesner believes can be accomplished with the aid of reports available in American aerospace journals).

McNamara's theory, as outlined in his San Francisco speech, is that the light "Chinese-oriented" ABM poses no challenge to Russia, hence that country should not react by increasing its offensive forces. That reasoning amounts to asking the other fellow to exercise restraints that we are not willing to accept ourselves. Although it is still unclear whether Russia is building a full-scale ABM defense around Moscow and other cities, the United States already has reacted to the Soviet move by initiating steps to increase its offensive striking force. A $2 billion program to replace the submarine-based Polaris missiles with larger Poseidons capable of carrying improved penetration aids was begun last year, along with a massive program of adding multiple warheads (MIRV) to the new, improved Minuteman III.

RESPONDING IN TURN

Few of America's European allies believe the United States will stop at the thin system, although McNamara warned in his speech that "The so-called heavy ABM shield . . . would in effect be no adequate shield at all against a Soviet attack, but rather a strong inducement for the Soviets to vastly increase their own offensive forces. That, as I have pointed out, would make it necessary for us to respond in turn—and so the arms race would rush hopelessly on to no sensible purpose on either side." Yet France immediately seized on the U.S. ABM announcement to urge once again that a separate French nuclear force is more necessary than ever. "Some Frenchmen," Don Louchheim of the *Washington Post* reported last October, "have even suggested that by creating an antimissile barrier in the United States, Washington has made Europe more vulnerable, as a common enemy might prefer to send its nuclear weapons toward undefended targets."

Victor Zorza of the *Manchester Guardian*, considered a leading expert on Russian military affairs, has reported that the U.S. ABM will aid those Russians who are eager to get a larger share of the nation's budget for military spending. Noting also that there is no proof that Russia has decided to go ahead with a full-fledged ABM system, Zorza wrote in the September 20 *Washington Post* that the Soviet military-political lobby already has won increased allotments of steel for military use. The question being debated now, he added, is whether the United States can somehow allay the misgivings McNamara's announcement "is bound to have aroused in the Kremlin."

As Coffey presciently wrote in *Foreign Affairs*, "At the very least . . . the deployment of antiballistic missiles would in all probability lead to a hiatus in arms control negotiations, while both sides tried out their new weapons, decided on countermeasures to the other's deployment, and reestablished an effective and acceptable strategic balance. It could mean the loss of any chance for an early agreement on a comprehensive test ban and on the nonproliferation of nuclear weapons, leading to decisions by countries such as Italy or India to proceed with their own nuclear weapons programs. And it could lead to a new arms race with the U.S.S.R."

Even more significant to some will be the increased pressure to break or void the existing nuclear test ban treaty because of the need to test the ABM in the atmosphere. "The developers of the ABM system will soon be telling us that they cannot assure its effectiveness without nuclear tests in the atmosphere," Wiesner glumly wrote in *Look*. "The pressure on the president to renounce the treaty in the interest of national security and protecting our multimillion dollar investment will be overwhelming."

Major strategic mistakes are not unknown to McNamara. In his September 18 speech, the defense chief revealed—apparently for the first time—that he had seriously miscalculated soon after taking office in 1961 (a major election factor being Kennedy's charge of a "missile gap") and helped promote the recent Russian build-up. Shortly after taking office, Kennedy sent Congress a supplementary military budget request for $1.94 billion to bolster the forces above the Eisenhower levels for fiscal 1962; included was $1.48 billion earmarked for strategic deterrent forces, largely Polaris missile submarines.

"In 1961, when I became secretary of defense," McNamara explained, "the Soviet Union possessed a very small operational arsenal of intercontinental missiles. However, they did possess the technology and industrial capability to enlarge that arsenal very substantially over the succeeding several years. Now, we had no evidence that the Soviets did in fact plan to fully use that capability.

"Since we could not be certain of Soviet intentions—since we could not be sure that they would not undertake a massive build-up—we had to insure against such an eventuality by undertaking ourselves a major build-up of the Minuteman and Polaris forces," McNamara added. "Thus, in the course of hedging against what was then only a theoretically possible Soviet build-up, we took decisions which have resulted in our current superiority in numbers of warheads and deliverable megatons. *But the blunt fact remains that if we had more accurate information about planned Soviet strategic forces, we simply would not have needed to build as large a nuclear arsenal as we have today.*" (My italics.)

It seems no one is immune from making the same mistake twice.

While the ABM certainly represents a profitable splurge for the military-industrial complex, for the rest of the economy it is a drag. Over the past 3 years, increasing resource demands by the military have been a leading factor in the steady rise in wholesale and consumer prices. Further ABM deployment will exaggerate these serious inflationary pressures. And we must remember that each marginal dollar allocated to ABM is one less dollar for better education, for more livable cities, for a cleaner environment, for an equitable and just society.

Of course the ABM is not the only piece

of fat in the swollen defense budget, but it does stand out as an overly visible example of foolish spending. Both last year and earlier in this congressional session, I have argued that the defense budget must be cut. I have pointed out where the highly reputable Congressional Quarterly has shown areas in which over $10 billion could be sliced from the defense budget—and instead, where those same areas received a net increase of around $1.75 billion for fiscal 1970.

In the March issue of the Washington Monthly, Robert S. Benson, formerly a member of the staff of the Assistant Secretary of Defense, Comptroller, gives another perceptive analysis showing where $9 billion could be slashed from the defense budget without reducing national security:

HOW THE PENTAGON CAN SAVE $9 BILLION

(By Robert S. Benson)

I have a modest proposal.

I should like to demonstrate, in as brief and as simple a way as the complexities permit, how $9 billion can be cut from the Pentagon budget without reducing our national security or touching those funds earmarked for the war in Vietnam.

Let me emphasize at the outset that this is truly a modest proposal, offered from an earnest belief in its practicality and with the conviction that savings from its adoption could be applied to our fiscally undernourished concerns for human opportunity.

The process by which the Pentagon budget—as well as the rest of the federal budget—is shaped and reviewed is a strange and not always wonderful thing. Any new program is usually given thorough scrutiny in Congress: debate rages over the program's purposes and over the level of funding required. Once it is accepted, however, only the funding level is certain to receive continuing Congressional attention. A nation's needs change, but rarely is a program's reason for existence ever challenged again, either in the executive branch or on Capitol Hill. On the contrary, its administering agency and its Congressional advocates, cheered on by its beneficiaries, strive to perpetuate or expand it, seldom pausing to ponder whether it is still worthwhile or whether something else is needed more.

The process can be insidious. Man, the social animal, takes comfort from acting in accord with the wishes of friends and associates. But over years of advocacy he loses some ability to discriminate, to relate the particular to the whole. In the case of Pentagon outlays, the built-in protection inherent in established programs often achieves invulnerability.

Because a mystique of secrecy and complexity surrounds the Pentagon, most Americans feel uncomfortable, or even vaguely unpatriotic, if they question any part of the military budget. But the fact is that the federal budget's provisions for defense far exceed our national security requirements. Although not many Americans realize it, a great deal of information about the threats to our security (and the forces we procure to meet them) can be gleaned from unclassified papers: budget statements of the President every January, annual posture statements by the Secretary of Defense, transcripts of Congressional hearings, and articles in the newspapers. Any serious student will soon discover that items in the defense budget, as in any other, range from fundamental to marginal. The difference is that in the Pentagon budget (a) vastly larger sums are involved, and (b) far less Congressional scrutiny is applied to them.

I

Using the sources above, my two years of experience in the Comptroller's office of the Department of Defense, and my own judgment of the issues, I hope first to outline how the budget can be trimmed by $9 billion and then proceed to a discussion of the weaknesses in the system which allowed this fat to survive even in the cost-conscious regime of Robert S. McNamara.

In our budget-cutting exercise these ground rules will apply:

None of the cuts is related to the war in Vietnam.

None of the cuts would impair our national security requirements.

All of the cuts are in what the Pentagon calls ongoing core programs.

All of the cuts could be effected within the next 24 months, which would allow the savings to be applied rather quickly to unfilled domestic needs.

The focus is on areas where forces or weapons systems are either duplicated or outmoded, where an enemy threat is no longer credible in today's political and technological environment, or where money is being lost through grossly inefficient performance.

Perhaps the best place to begin is with the Manned Orbiting Laboratory, which receives half a billion dollars a year and ought to rank dead last on any rational scale of national priorities. The MOL, a carbon copy of the National Aeronautics and Space Administration's spacecraft operation, is in the budget because the Air Force wants a piece of the extraterrestrial action, with its glamor and glory, and Congress has been only too happy to oblige.

Although there have been valiant attempts to make the MOL seem different, Pentagon space research is alarmingly similar to that of NASA. Listen as Dr. Alexander H. Flax, Assistant Secretary of the Air Force for Research and Development, tries to draw the distinction for members of the House Appropriations Committee:

"If you view the objectives of these programs as being simply to get data on humans exposed for some period of time, I think you have to conclude that there is a great deal of duplication, but I tried to make the point that our objective is primarily to test equipment, not humans. The humans interact with the equipment, of course."

True, there are potential military uses for space vehicles. But little thought appears to have been given to whether a separate program was required or whether the same results could have been achieved through slight adjustments in the parallel NASA activities. The MOL program is duplicative and wasteful. Of the $600 million requested for it last year, Congress approved all but $85 million. This year's budget calls for $576 million. I would strike all of it.

As for grossly inefficient Pentagon performance, the most obvious example is manpower management and utilization. Manpower is the single largest commodity the Defense Department buys; this year, the Pentagon will directly purchase the services of nearly five million Americans. Assuming an average of $7,000 each in pay, allowances, and supplementary benefits, the department payroll is about $34 billion, of which about $22 billion goes to military personnel and $12 billion to civilians.

The Pentagon has little direct control over the costs of its civilian personnel, who are recruited mainly through a government-wide civil-service pool. But its control over military personnel is complete, covering not only the $22 billion payroll but also about $7 billion annually in training costs and nearly $2 billion in moving expenses for men changing assignments.

Most men enter the armed forces either because they are drafted or because they enlist in preference to being drafted. All enlisted men entering the service receive basic training, which in the Army takes eight weeks and costs about $1,000 per head. After advanced training in a specialty, these short-term new servicemen generally spend the rest of their hitches on assignments requiring that specialty.

A more flexible training policy would not employ such a lockstep approach. Some basic training is needed for everyone, and combat infantrymen certainly need the full eight weeks. But not all of the Army's 535,000 new soldiers this year will serve in combat, and four weeks would suffice for the others. The Navy and Air Force have already abbreviated their basic training; for the Army to do so would yield, in direct training savings alone, $50 million.

Although the pattern of training and assignments for officers is far different, even greater economies are possible—and with a clear gain in individual job performance. After initial training, which is more diverse than it is for enlisted men, almost every officer is shuttled around through an amazing variety of assignments and further training designed to give him enough breadth of experience to become Chief of Staff some day, often at the sacrifice of obtaining no deep experience in any one field. The expectation is that every seasoned officer can lead an infantry battalion through a swamp on one assignment, promulgate personnel promotion policies behind a Pentagon desk on the next, and discuss black separatism with Ethiopians as military attache in Addis Ababa a year later.

In this age of specialization, such a philosophy is anachronistic and expensive. No efficient business would move its men around in so illogical a pattern. By perpetuating the illusion that every officer can aspire to the top organizational position, rather than screening the candidates earlier in their careers, the services suffer from having an excessive number of men struggling to learn totally unfamiliar jobs. Moreover, today's technological and analytical complexities demand the development of specialists whose entire experience is focused on performing one particular function well. By attempting to fill the growing number of specialist slots with generalists, job performance diminishes for all.

If we were to reduce by a modest one-fourth the present number of assignment changes (whereby servicemen move almost once a year), the annual saving in transportation and moving costs alone would be slightly over $500 million, to say nothing of the improvement in work effectiveness.

A further saving can be accomplished by changing the way the military calculates individual manpower requirements. Unlike business, which requires work units to absorb the impact of absences, the Pentagon includes a cushion to compensate for men absent on leave, in the hospital, in school, and en route to new assignments. And the military's 30 days of annual leave—which all servicemen get—is far more than the norm for civilian work forces of comparable age and experience, even acknowledging that the 30 days includes weekends. The military argues that this amount of leave time is compensation for being on duty 24 hours a day, seven days a week—but this is a myth long in need of explosion. Except for those at sea and in Vietnam, most military men work evenings or weekends no more and no less than civilians do. Cutting leave time to 20 days a year—with the exception of men on hardship duty overseas—would reduce the total armed forces manpower requirements enough to save $450 million annually.

Thanks to Beetle Bailey, *Catch 22*, and the fact that so many Americans are veterans, the supernumerary theory of military staffing has had great visibility. But an area of far greater inefficiency—supplier performance on large weapons system contracts—draws almost no attention at all. This is especially serious because the same contractor who can be extremely efficient under the conditions imposed by the private competitive marketplace can waste millions when working under a government contract. Few Americans are aware that about 90 per cent of the

major weapons systems that the Defense Department procures end up costing at least twice as much as was originally estimated. Some of this cost growth comes from Pentagon-ordered changes in design or configuration, but much of it results from inefficient contractor practices or from his knowledge that the government will underwrite his excessive overhead.

It is up to the government, therefore, to impose on a non-competitive defense contractor the same cost discipline that the contractor would be forced to impose on himself in a competitive situation. Instead, the present procurement system is geared almost exclusively to securing timely delivery and good technical performance. Cost comes last.

The engine contract for the controversial F-111 fighter-bomber offers a classic illustration of what happens to costs after a decision is reached to proceed with procurement.

An aircraft of this kind has three major components: airframe (wings and fuselage), avionics (electronic navigation and weapons-guiding gear), and engines. For a technologically advanced fighter-bomber, the airframe will account for about 55 per cent of total cost, avionics 25 percent, and engines 20 per cent. The initial F-111 contract for 2,053 engines was awarded to Pratt & Whitney on the basis of an estimated cost of $270,000 per engine. Today the engines are expected to cost more than $700,000 each.

In the F-111 case, and in general, four major factors account for such cost escalation:

1. The Buy-In: Our procurement system encourages contractors to play the game called "buy-in." The rules are simple. Contracts are awarded to the company which offers the lowest bid with a straight face. Later cost overruns may bring a mild reproach or a stern reprimand, but they will not prevent the contractor from getting enough money to cover all his costs and pocket a profit. A contractor rarely takes these reprimands seriously; he knows that his competitors have similar experiences. Besides, the procurement officials have told him to worry about performance and prompt delivery, not about cost. So the buy-in game produces initial cost estimates that everyone knows are unrealistically low.

2. Design Changes: From the time bids are requested on a new weapons system until final delivery, a great many changes in design specification develop. These changes are often initiated by the Defense Department, although some reflect contractor production problems. In either case, the costs change—usually justifiably, but almost always upward.

3. Volume: Changes in volume are even farther beyond the contractor's control. In large contracts, economies of scale are often achievable; if a weapons system is found highly useful, as was the F-4 fighter, and more units are ordered than were initially planned, the later unit costs are lower. In the case of the Air Force F-111, however, cancellation of British orders and the Congressional decision to kill the Navy version reduced the number of aircraft to be purchased, thereby raising the unit cost.

4. Sheer Inefficiency: These costs arise because a contractor has slipshod purchasing procedures, poor scheduling of men and machines, ineffective work standards, or other managerial deficiencies. Such extra costs would be a threat to a company's survival in the competitive private marketplace; they should not be tolerated in defense procurement.

In calculating how much of the F-111 engine's cost growth was due to this intolerable fourth factor, we need to begin by figuring how much the first three factors cost.

We know that the original $270,000 estimate was artificially low. Allowing for buy-in fibbing and for some early required changes in design, an initial figure of $450,000 would have been more realistic. Later design changes may have raised the allowable price to $500,000. But the contractor's final estimate of $700,000-plus, made after the British action but before the Congressional cutback, probably should not be adjusted for volume changes, because the British buy was to have been proportionately very small and there are good indications that this actually enabled Pratt & Whitney to disengage itself from some expensive subcontracts. So unjustifiable contractor inefficiency amounted to around $200,000 per engine.

It could have been worse. Past practice in such cases, where the government is dealing with a single supplier rather than with several competitors, has been to accept whatever price is commensurate with the costs the supplier has incurred, regardless of how efficient or inefficient he is. But, in an unprecedented action, the Defense Department ordered an investigation of Pratt & Whitney operations to determine how much such an engine ought to cost if produced under efficient manufacturing procedures. After that, the Navy—which had contract responsibility for all F-111 engines—took the further unprecedented step of unilaterally setting the price it intended to pay. Indications are that the Navy compromised its position somewhat after some hard bargaining, but the final contract did reduce by about 15 per cent the price proposed by the company, which customary procedures would have accepted outright. This saved the government roughly $200 million.

Two other good examples of spiraling costs were described in recent hearings before the Congressional Joint Economic Committee. A. E. Fitzgerald of the Defense Department reported that the C-5A transport may cost $2 billion more than the original contract ceiling of $3 billion; yet when Defense negotiated the contract with Lockheed, then-Secretary of Defense Robert S. McNamara described it as "a model method of doing Defense business . . . a damn good contract." In another case, retired Air Force Colonel Albert W. Buesking, a former financial officer for the Minuteman intercontinental ballistic missile, said the Minuteman contractors received a 43 per cent pre-tax profit based on net worth, or about twice the normal industrial return; he estimated that defense contract costs are 30–50 per cent "in excess of what they might have been under conditions of competitive-type commercial environment."

Conservatively assuming that aerospace and shipbuilding contractors harbor an inefficiency of 15 per cent, and figuring that the average annual amount provided for research and procurement of such systems over the past three years is about $17.9 billion, then wiping out the inefficiency would annually save the government $2.7 billion.

This is no pipedream. It requires no dramatic breakthrough in management techniques. Such savings could be achieved quickly if the Secretary of Defense and the Secretaries of the individual services resolved to focus the energies of their top financial and engineering men on procurement of these major weapons systems. What is needed is some truly independent cost-sleuthing into contractors' operations, with firm backing from top Defense management for appropriate follow-up efforts.

The most fruitful way of all for saving defense dollars is to eliminate forces which no longer pack a credible punch or which were designed to meet a threat that is no longer credible.

The Navy's Polaris/Poseidon fleet ballistic missile program is vital to our national security. But the Navy's three primary and independent conventional warfare missions—tactical air, amphibious operations, and shipping protection—are overequipped, as are their associated support units. Current force levels cannot be justified by any potential threats. In my view, President Nixon was misguided when he decried America's loss of sea power during the campaign last fall. He made the mistake of applying the same argument the admirals use when they attempt to eternalize and expand their favorite programs: that the United States must have superiority in numbers, ship-type by ship-type, over the Soviet Navy. This is a legacy of late-1940's thinking, when it was assumed that we must always be ready to fight and win an extended war at sea. In the nuclear age, such thinking is highly unrealistic.

Fifteen aircraft carriers are presently assigned to the Navy's tactical air mission. Since the wallop they pack is purely the firepower of their aircraft, they should be compared with the alternative means of delivering that firepower—Air Force tactical aircraft. Carriers can deploy quickly to areas where we have no airfields, and they are safe from insurgent attacks (though they now appear to be vulnerable to Russian Styx missiles). But this flexibility comes at a high price. Independent studies place the cost of carrier-based tactical missions at three to four times that of similar missions flown from ground fields. Because of the many air bases we have built all over the world, we can rapidly deploy land-based aircraft to most areas. Carriers still play a necessary role in providing the potential to fight in a handful of otherwise inaccessible places and in meeting initial "surge" requirements for a non-nuclear war. But there is no justifiable reason to use them on extended deployments in major wars as we do now in Vietnam. Although the Defense Department will never admit it, the only reason we continue to employ carrier-based air strikes there is that the jealous Navy doesn't want to be shut out of some role in the war.

Tactical aircraft carriers could be cut from 15 to 10 without risk to the country's security. The average annual peacetime operating and modernization/replacement cost per carrier appears to be about $120 million. Assuming that the costs of expanding Air Force tactical missions to take up the slack were one-third as much, the net annual saving from the elimination of five carriers would be $400 million.

Marine Corps amphibious assault tactics have been used in minor contingencies such as Lebanon and the Dominican Republic, but against a major power they would be highly vulnerable to a tactical nuclear weapon. Nor are Marine forces now structured logistically for sustained combat, the type of war that Vietnam would suggest is most probable. Without eliminating any Marine troops, we could—by restricting their amphibious training and equipment and phasing out a proportionate share of assault ships—save $100 million annually.

A classic example of continued spending for protection against a no longer important threat is the third major area of Navy tactical forces—protection for shipping. The structuring of our anti-submarine and supporting antiaircraft and fleet escort forces harks back to the post-World War II prospect of a sea war with Russia. If we ever do begin destroying each other's ships, there seems little prospect of avoiding escalation to nuclear war, which would make shipping protection irrelevant. Further, as various jumbo aircraft near production, the cost gap between a ton-mile of plane transportation and a ton-mile of ship transportation is narrowing. Yet instead of scaling down our protective forces, we are keeping them up and even expanding them, through last year's implausible decision to begin procuring VSX anti-submarine aircraft. Killing this program and reducing overall shipping defenses to a sensible level—four anti-submarine carriers and three air groups rather than the present

eight carriers—would save an annual $600 million.

Another major area in which our involvement is unreasonably large is our troop commitment in Europe. We have about 310,000 soldiers there now, accompanied by more than 200,000 dependents. Such a staggering share of the NATO burden was appropriate while our World War II allies struggled to get back on their feet, but they can now afford a larger load. Part of the thesis behind U.S. deployments is to make certain that any substantial attack by Warsaw Pact forces would engage American forces, thereby creating potential consequences that the Soviet Union would find untenable. But this could be assured with far fewer than 310,000 U.S. troops. Says Senator Stuart Symington (D-Mo.), a former Air Force Secretary recently assigned as chairman of a Foreign Relations subcommittee that will investigate the involvement of U.S. forces abroad: "Surely 50,000 American troops would be sufficient to make sure that no Soviet probe could succeed in Berlin or elsewhere in Europe without a direct confrontation with the United States."

In the event of a truly major Soviet attack, not even 310,000 U.S. troops plus the NATO allies' forces would be sufficient to thwart it. But both sides recognize that an assault of such proportions is likely to evoke a nuclear response.

Psychological reasons prevented us from making a major cut in our European forces close on the heels of the Russian takeover in Czechoslovakia last year. But that should not deter us from effecting the cut this year. If anything, our non-response to the Czech invasion simply reinforces the reality learned in Hungary in 1956—that the United States is not about to send troops into Eastern Europe no matter what the Soviet provocation.

Realistically, we could cut back to a total of 125,000 troops in Europe plus 50,000 at home earmarked for NATO contingencies, and cut by one-fourth the air power assigned to the European theater (a McNamara comparison shows that NATO air forces can deliver a payload more than three times greater than that of their Warsaw Pact counterparts). Altogether, these reductions would annually save about $1.5 billion.

The final two programs of questionable value—the SAGE-Air Defense Command system and the Sentinel antiballistic missile system share some common characteristics. Both are defensive, in an age when the balance of terror rests on offensive missile strength. Both encompass a detection function and an intercept guidance function. And numerous technical experts express serious doubts about the potential operational effectiveness of either.

SAGE represents yesteryear's attempt to defend against the Soviet version of our Strategic Air Command. It is widely conceded that the Soviets have grounded their bomber development efforts and no longer pose their primary strategic threat in this area. Nonetheless we persist in trying to further refine our bomber defenses, when in fact we have already achieved a satisfactory capability in the detection sphere. Moreover, SAGE's role as a guide to interceptor pilots is rather superfluous, given its imperfections and our primary reliance on a strong offensive deterrent. Some reductions have already been effected in the Air Defense Command, but conversion from a full defensive system to purely a warning system ought to save $600 million annually.

If SAGE is intended to sustain a mostly futile yesteryear system, the Sentinel ABM represents a misguided attempt to provide protection tomorrow. Against the destructive power of the missile, our best defense is a good offense. Particularly tragic is the staggering cost of a full-blown "thin" Sentinel system. Because it is so expensive, and the work is therefore parceled out to many Congressional districts, many politicians have favored it. It therefore may be difficult to stop before we have spent $40 billion. However, the Sentinel program faces increasingly fervent opposition in the Senate this year—partly because residents in four cities where ABM sites are being developed have objected so loudly.

Sentinel would make some sense if it truly promised blanket protection against strategic offensive missiles. But it doesn't. As Secretary McNamara said in a speech in San Francisco 18 months ago: ". . . any such system can rather obviously be defeated by an enemy simply sending more offensive warheads, or dummy warheads, than there are defensive missiles capable of disposing of them."

Secretary McNamara opposed the Sentinel, but President Johnson overruled him and decided to proceed with the program. Today we are on the road toward building a $5 billion ABM system, ostensibly for protection against Chinese missiles—as yet undeveloped—should Peking miscalculate our potential response and attack us.

It seems unrealistic not to expect the Soviets to perceive the $5 billion "thin" Sentinel as a first stage in a $40 billion "thick" defense against themselves. Senator Richard B. Russell (D-Ga.) said as much last year when he was chairman of the Senate Armed Services Committee: ". . . there is no doubt that this is a first step in a defense system against an atomic attack from the Soviet Union." Yet all seven of the men who have served over the past decade in the jobs of Science Adviser to the President or Director of Research and Engineering in the Defense Department have recommended against deployment of a "thick" ABM system designed to protect our population against a Soviet attack.

By halting the Sentinel now, before it acquires irreversible momentum, we could save $1.8 billion this year, not to mention vastly larger sums during the next decade.

The items above do not exhaust the list of things to cut—there are other savings to be made in such areas as mapping operations, the reserve forces, logistics—but the total here will serve as a start. It amounts to a total savings of $9,276,000,000.

II

If all these Pentagon budget cuts are so obvious, why didn't the cost-conscious McNamara regime push them through? Did the Whiz Kids fail? Were they really trying? I think a fair assessment would have to conclude that they were trying hard but were only partly successful, for five basic reasons.

First, McNamara's Band was greatly outnumbered by experienced adversaries bound together by a shared goal—more and bigger military programs. All the elements in this military-industrial-Congressional complex are served by an enlarged defense budget, though their motivations are different. Industry wants greater sales and profits. The military wants expanded power, plus the assurance that they will be on the forefront of technology. Congressmen respond to pressure from contractors and military employees in their districts, and those on the military committees yearn for the prestige and power that comes from presiding over a bigger slice of the federal pie. The combination made life difficult even for a man as strong and courageous as Robert McNamara.

Second, in selecting systems to analyze for effectiveness, the Whiz Kids chose to concentrate on the relatively uncluttered strategic programs instead of digging into such fat and messy activities as we have catalogued here. Within their selected framework, they generally performed technically sound, objective initial analyses. Once they arrived at a position, however, they too often "overdefended" their conclusions; that is, they were unwilling to reassess them against subsequent cost experience, technological advances, or a changing international political environment. For example, the current structuring of our programmed airlift/sealift needs emanates from a carefully developed linear programming model. This model attaches a high value to rapid deployment, stemming from an early 1960's Europe-oriented study which showed high benefits in terms of political bargaining power and casualty minimization. This analysis still makes good sense in Europe, but now appears grossly misapplied in Asia. Yet nothing has been done to revise the high value placed on rapid deployment. Such a change would point to a different desired mix of airlift and sealift.

Third, the Defense Department's budget review process concedes too much at the beginning. Last year's budgeted amounts are generally taken by everyone as this year's starting points. This practice ignores the possibility that fat crept into preceding budgets or that some of last year's activities are now outmoded. Consider, for example, the subject of training, in which the armed services have been pioneering for years by applying new technology to education. This area should be a prime candidate for frequent review from the ground up (what the managers call "zero-base" budgeting). Rather, the Defense Department budgeting process virtually concedes last year's amount and focuses on whatever incremental changes have been requested. The result, of course, is higher budgets, with past errors compounded year after year.

A fourth limitation also derives from the planning and budgeting system. Discussions about the desirable level of various forces are conducted in terms of numbers of things—missiles, carriers, fighter wings. This flows naturally out of intelligence estimates of enemy forces and subsequent analyses of how much counterforce the United States needs to nullify them. Approval is then given to the Air Force to buy 40 more fighters or the Navy to buy four more submarines, each with specified capabilities. But carrying out such purchases is not like walking into an automobile showroom and asking for a yellow Plymouth Belvedere sedan with power steering. As a submarine is built, many unanticipated choices present themselves; they involve different levels of effectiveness or convenience for different levels of dollars. Inevitably the generals and admirals want to buy as much capability as possible; it is almost always more than is required to meet the threat. For want of adequate follow-up by top procurement officials, the generals often have their way.

Finally, the President and the Budget Bureau have shied from making public any meaningful comparisons between military and domestic programs. Systems analysis, the technique that aims to measure the relative national worth of results obtained from alternative programs, cannot precisely compare the benefits to be gained from highly diverse activities. Yet inexact as such comparisons may be, the Budget Bureau does make them and present them to the President from time to time. If the President, for his part, were to discuss national priorities more frequently and candidly with the public, then Congressmen might be less likely to base their judgments on the only other available view—that the present balance of activities is about right.

The present balance of activities is anything but right. Unmet national concerns for human opportunity and the quality of life require an investment even larger than the amount that would be freed if all of the Pentagon reforms outlined in this report were carried out.

Perhaps the clearest, most thorough delineation of these high-priority social needs is found in the report of the National Advisory Commission on Civil Disorders. To redress root causes of despair and frustra-

tion, the Commission recommended a long series of measures which, if enacted in full, would cost between $13 billion and $18 billion a year over their first several years.

The only way to begin addressing these unfilled needs is to take money away from Pentagon programs that must rank lower on any rational national-priority scale. Examples provide compelling support for this argument. We have such choices as:

Funding the Manned Orbiting Laboratory—or providing Upward Bound summer courses for the 600,000 additional ghetto students who have the potential to go to college:

Spending this year's Sentinel funds—or training 510,000 more hard-core unemployed;

Continuing to operate one of the marginal tactical aircraft carriers—or training and supporting 20,000 more Teacher Corps members;

Maintaining our full troop complement in Europe—or diverting an additional $10 million to each of 150 Model Cities;

Permitting excessive contractor costs to flourish unchecked—or providing Head Start education for 2,250,000 more children, plus enough school lunches to feed 20 million children for a whole year.

These alternatives are real and immediate. They do not represent wishful dreaming. The choices are up to Mr. Nixon, to the Congress, and ultimately to ourselves.

In real terms, no cost is too high for true national security. Let there be no doubt. I fully back any concept which protects and advances the security of this Nation. But I am unwilling to support fantasies of the military-industrial complex in the quest for an ever-increasing share of our national product.

It is absurd for Congress to authorize a program which can cost up to $100 billion and which—even if it did work—may concede the lives of up to 90 million persons. Other Members today are presenting an overwhelming case documenting the sketchy premises upon which the ABM system is being built. I shall not repeat those arguments. Justification for ABM has yet to be proved, and it is nonsense to continue to deploy the system on the basis of the arguments brought forth so far by its proponents.

Were scare merchants willing to put as much effort into establishing a functioning Nuclear Nonproliferation Treaty and to seeking peaceful ways to end the suicidal arms race, then I might hold a different view of their judgment and motives.

My own personal views on means of achieving a secure and lasting peace are best reflected by a major policy statement recently released by the National Council of Churches entitled "Defense and Disarmament: New Requirements for Security," which I would like to insert in the RECORD at this point:

DEFENSE AND DISARMAMENT: NEW REQUIREMENTS FOR SECURITY

(NOTE.—This Background Paper is issued by the Department of International Affairs of the National Council of Churches for use in connection with the NCC Policy Statement on this same subject.)

INTRODUCTION

It is the purpose of this statement to address the issues of national defense and security in Christian perspective in an effort to provide a new concept of, and a new context for, national security. We believe that a new international community is coming into being in the midst of the system of nation-states, which for so long have been preoccupied with their own security—a security understood largely in military terms. This new system of increasingly global interdependence is one in which security must be seen more and more in its international dimension—bound up with technology, international finance and trade, and cross-cultural encounter. The world view that provides the context for present United States defense policies seems to be an inadequate reflection of this reality.

One of the dominant elements of the post-World War II period has been the "Cold War" and the arms race that it has spawned and on which it has fed. This phenomenon grew largely out of the convergence of two historical events—the development of atomic and nuclear power and the ideological rivalry between "the free world" and "Communism." Enormous scientific and technological advances have put at man's disposal an unprecedented amount of power. At the same time, demands for national security, generated especially by the ideological and power confrontation between the Great Powers, have led to the channeling of a large portion of this power potential into defense and defense-related projects. Each of these events has aggravated the other.

During the past two decades questions of defense and national security have increasingly become the chief concern of the United States Government. A growing proportion of our national substance is being channeled into defense-related endeavors in a search for increased security. This has created an astronomical increase in the destructive power of our military forces. As a result, the problem in the nuclear age is no longer the increase but the controlling and curbing of power.

Without denigrating the legitimate duty of nations to provide adequate protection and security for their peoples, we believe that it is incumbent upon Christians and others to declare that an increase in military power is not necessarily an increase in security, prestige, or any other value. If the requirements of a just peace and the understanding of a responsible use of power, as suggested by the National Council of Churches,[1] have validity, it is therefore imperative that Christians in the United States address themselves to questions raised by the United States emphasis on military power in the pursuit of security.

The emerging international community is at present more of a community of risks than a community of mutual concern and action, but it is a historical reality and not simply a disembodied ideal. The Christian faith must recognize and celebrate the development of this new universal community and must view the policies of nations in this light. That faith requires no less a perspective than one that embraces all nations, and it does not permit the interest of any nation to become absolute. Thus, both historical events and the demands of the Christian faith lead us to ask for a new approach to questions of national defense and security by the citizens and the Government of the United States.

I. THEOLOGICAL PERSPECTIVE

Man in his finite freedom can use the power he has developed in ways useful and redemptive for humanity or in ways destructive and dehumanizing. The Christian must therefore be particularly concerned, along with all men of compassion and human sensitivity, with the management of power, especially military power.

For the Christian this concern stems first from his belief that God is Lord of creation. Man has been given the whole of creation to tend, to develop, and to use in his freedom for the common good. Creative in the image of God, man is to be creative also, using his God-given power and freedom in ways that will serve the common good and further God's loving purposes for His world.

Second, this Christian concern stems from the belief that God is sovereign over His creation. The sovereignty of God imposes limits on all national sovereignties and on the use of power by these sovereignties. At the same time it gives a degree of legitimacy to national sovereignty since, in our era, it is the nation-state that is a primary instrument through which men work to shape the conditions of human community—conditions without which men could not realize their intended potential.

Third, the concern of the Christian is based on his belief that God is active in His creation through participation in its history. The sovereign Lord of creation is also the God who "was in Christ, reconciling the world to himself" and who calls us to be agents of reconciliation. In our era, when the political sphere is so determinative for the direction of history and for human existence itself, the Christian must seek to discern and to respond to the political dimension of this reconciling activity.

Within this theological framework, there has been historically a diversity of Christian conscience regarding military power, its legitimacy and use. For some defense is grounded in the commission of government to maintain peace and order in a world always threatened by chaos, to develop and maintain a positive order of justice as a work of love, and to provide a stable political existence within which life may become more genuinely human. For others, the use of military power cannot be supported by Christian teaching. For them, the reconciliation and love which the gospel proclaims and to which it summons men are antithetical to the use of military force. Most would agree, however, that the roots of the Christian concern for the management of existing power, i.e., the belief in God as Creator, Sovereign, and Reconciler, place qualifications on its establishment and use. First, man's responsibility for the created order is a responsibility to preserve and develop it, not to abuse and destroy it. The use of large amounts of the world's wealth and manpower for the development of ever-improved means of destruction calls into question the quality of the stewardship man exercises in his care of the earth. Defense policies that threaten the destruction of a large part of the created order are likewise to be questioned.

Second, God's sovereignty, which imposes limits on political sovereignty, also places limits on the moral autonomy of any aspect of the political order. A government's political or military activity that tends to exceed the limits of its commission or to frustrate the intentions of that commission is in effect an act of self-idolatry and a denial of God's sovereignty. This precludes an uncritical "my country right or wrong" attitude on the part of Christians.

Third, God's reconciling act in Christ, the response to which is the Christian vocation of reconciliation, denies the ultimacy of the parochial political community and affirms that the "enemy" is the brother for whom Christ died. Defense policies that intend or threaten to destroy the enemy society deny the inclusiveness of the human community and in effect reject the Christian mission of reconciliation.

The function of politics, and the legitimate concern for security must, according to Christian faith, be controlled by and responsive to God's creative, ordering, and reconciling work. Man's relationship with man is marked by much distrust, disorder, and alienation, particularly in the relationships among national communities. Technology

[1] Policy Statement, "Imperatives of Peace and Responsibilities of Power," adopted by the General Board on February 21, 1968.

has created a community of mutual dependence but not one of trust and mutuality. In this political realm the Christian vocational concern is not with establishing a perfectly moral order. Rather, it is a concern to provide better conditions for an effective work of love in which such trust and mutuality can be more effectively realized, i.e. conditions under which the mission of reconciliation can be carried on in relatively better circumstances. The appropriate conditions to be sought, however, may vary considerably, depending on the situation calling for a response. While we are to serve the growth of community and reconciliation, we have to seek them through an endless variety of circumstances and in a world that often does not permit us to seek them directly. On the other hand, the mutuality of interests that does exist must be utilized to its greatest advantage in order to broaden and strengthen the basis for future international cooperation.

II. SECURITY AND THE INTERNATIONAL SITUATION

As men and nations seek to create conditions under which the work of reconciliation can be carried on more effectively, there must be a clear perception of the international situation to which they must respond.

Under present conditions the instruments of international order are inadequate to resolve the most persistent and threatening conflicts among the nations of the world. Given these conditions, which we believe to be transitional to more integral forms of international community, it is to be expected that the various nation-states will assume the responsibility to maintain their own security arrangements, either individually or in concert.

In the pursuit of such security arrangements, however, at least two nations, the United States and the USSR, have already developed the power virtually to destroy whole societies and to lay waste that social fabric that is indispensable for meaningful human existence. The goal of the policies that resulted in this great accumulation of power has been a legitimate one—national security or, as it has sometimes been stated, the kind of world in which we and others wish to live. But there is real evidence that this goal has not been fully achieved and that, in fact, the defense policies and strategies designed to realize it have in some ways tended to thwart legitimate security goals.

In theological terms, the adequacy of present defense policies must be questioned in view of the following dangers: First, they threaten to destroy the created order for which man is responsible, not only because of the immediate effects of nuclear blasts and fire damage but also because of the long-range effects of genetic damage and nuclear contamination of the earth. The ecological effects of chemical, biological, and radiological warfare can be equally destructive of the created order. Second, the requirements of present policies seem to have become self-validating in actual practice and to have subordinated other values. Such relatively unquestioned acceptance, often in the name of military necessity, tends to make the policies self-justifying ends in themselves. Third, the possibility of advanced escalation in an actual nuclear war implies the destruction of the adversary's population and social order and, in so doing, denies the inclusiveness of the human community. The destructiveness of large-scale conventional warfare may have the same result. In each instance, then, there is a breach of the limitations that the Christian faith would place on defense measures.

In political terms, the adequacy of present defense policies must also be questioned in the light of the criticisms of many knowledgeable observers. There are several aspects of the present international situation that, in view of the positive political goals they seek, call into question both the wisdom and the effect of current national defense and security arrangements. Among these are the following:

(a) The national security of the United States has declined as the nuclear arms race has increased. Though our defense capabilities already go far beyond the needs of deterrence, rarely in history have men been so fundamentally insecure, especially those in nuclear nations. There is no adequate defense against a sophisticated nuclear attack. In a nuclear confrontation our massive power could be employed only at the cost of reciprocal national suicide. Thus the mutual escalation of the nuclear arms race increases only mutual destructive capabilities. It does not increase security.

(b) The distrust and suspicion of the Cold War are often further exacerbated by some of the military postures that are designed to cope with it. Mutual deterrence can easily generate new fears, lead to higher levels of unnecessary armaments, and undermine efforts toward arms reduction and mutual accommodation, which are necessary for a stable international order. Regardless of intentions, actions by either the United States or the USSR to increase its nuclear capabilities trigger similar reactions on the other side. So long as this "action-reaction phenomenon," which fuels the arms race, continues, fears will be aggravated rather than allayed and nuclear arsenals, already greatly in excess of what is needed to be credible, will continue to grow.

(c) The nuclear arms race and the perpetuation of the Cold War have resulted in an enormous outlay of money and resources for military purposes which jeopardizes other national programs. With the added impetus of the Vietnam war, two thirds of our total national expenditures are now spent for defense-related purposes. Currently, the military expenditures of all nations amount to about $140 billion annually, with the $72 billion United States defense budget for fiscal 1969 more than equaling the defense expenditures of all the rest of the world combined. This vast use of our money, manpower, natural resources, expertise, and energy for defense-related purposes removes these resources from more humane and constructive uses, and perpetuates the long-standing neglect of increasingly dangerous domestic problems. It also means increasingly inadequate efforts to deal with the overwhelming security problem posed by the world's hungry and deprived majority. The $140 billion spent by the nations annually for defense pales into insignificance the $9 billion spent by all nations for international development.

(d) The power and influence that inevitably accompany the control of such a large portion of our national resources mean that military considerations now influence virtually all other national decisions. This is not to say that some conspiratorial military-industrial cabal is responsible for this phenomenon. It is doubtlessly more accurate to see it as the result of a huge military establishment, whose needs have of necessity given rise to a large private defense and research industry. Together, tied by bonds of common interest, they have become a major political force. Nevertheless, the result has been that the issues of war and peace, of international trade, of economic development at home and abroad, and of science and higher education are being determined increasingly by government decisions concerning strategic deployment of military forces and weapons and military technology. The allocation of the nation's resources, the determination of its priorities and purposes, and the possibility of free political debate and academic inquiry are all affected by these decisions.

(e) There are dehumanizing elements in the nuclear strategies of the Cold War. Weapons of mass destruction lead inevitably to calculations of human destruction in terms such as "megadeaths," as opposed to the more sobering "one million dead human beings." This effectively dehumanizes the enemy, especially when he is also thought of collectively in ideological terms like "Communists" or "Cong." The remoteness of push-button warfare, removing the enemy from the immediate presence of his adversary and making killing easier psychologically, strengthens this tendency. Dehumanization is also a danger within the nation. The acceptance by the populace of a national commitment to use weapons of mass destruction can, over a long period of time, lead to ethical desensitization. This can also be the result of living in what has been termed a "weapons culture," a society increasingly devoted to and organized for the production of the tools of war.

(f) An overly ideological approach to the world's ills on both sides influences the perception of events and causes distorted interpretations of the facts to fit the preconceived ideology. The oversimplified and now outdated bipolar world view, formulated at the end of World War II and still adhered to in some quarters, tends only to perpetuate the dated dogmas of the Cold War. Such a world view seems increasingly inadequate to describe the contending interests within and between blocs and the new realization of common interests between supposedly implacable foes. This gap between perception and reality can only exacerbate the dangerous Cold War rivalry, slow down the advance toward international order, and have a deleterious effect on that open communication between nations that is essential for understanding and reconciliation. At the same time, such an ideologically-colored perception of reality can set in motion the mechanism of the self-fulfilling prophecy.

III. A NEW CONTEXT FOR SECURITY

The demands of the Christian faith, and the most salient features of the international situation to which Christians must respond, lead us to ask for a new approach to national defense and security issues on the part of the citizens and the Government of the United States. Such an approach should encompass at least three interrelated requirements:

A. A first requirement is a new understanding of security. We believe that present military planning, with its emphasis on the continuing buildup of military forces, is out of touch with the real security needs of the nation. In our world, security is not to be found in vast defense establishments, which in a variety of ways often help to exacerbate the very insecurity they are meant to alleviate. Moreover, excessive preoccupation with the limited area of military security dangerously narrows the national perspective on the broader meaning of security.

The present threat to United States security arises from neglect of social justice—a result in part of defense spending—and reveals a new and tragic dimension to the problem of security, for which traditional concepts are inadequate. National security in the modern world must be supplied by international processes and institutions for arms limitation and control, for peace-keeping and peacemaking, for development, for finance, and for adjudication, rather than by immense defense establishments. Only a new understanding of national security and its integral relationship to the needs of the underdeveloped world can make international security possible.

B. A second requirement is a new approach to the use of national resources. We believe that, while national security does require the maintenance of an adequate military force, the level of armaments reached today far exceeds that needed for security and is leading us to ignore the desperate plight of many of our own citizens and of people throughout

the world. A national security that is supplied by international processes and institutions calls for a use of United States resources—money, manpower, natural resources, and expertise—commensurate with the requirements of justice and peace. The building of our own nation and the use of our resources to help others build their nations are the two primary tasks. A major shift from the objective of increasing military capabilities to the objective of sound development and nation-building is necessary to meet these tasks.

C. A third requirement is a new emphasis on human rights and values. We believe that defense policies should be, in the last analysis, for the service of human life on earth, and must be constantly revised in the light of what they are designed to defend. Otherwise it may be possible for the defense establishment to make its work an end in itself, to become overly fascinated by the tools of war and their efficiency, and to forget or even unconsciously to thwart the purpose they are to serve. That purpose is, simply, to act so that man's life on earth may have the stability required to enable it to become human.

Emphasis on the human ends of defense means also that citizens must regain a greater degree of control over the military services that seek to protect them. Defense policy has been increasingly removed from effective political processes. It is a part of our present mentality that defense problems are left to the "experts," and that largely without question the citizens pay the immense bills that result. The right and duty of citizens to debate and to express themselves in defense matters must be reawakened. They must insist that their resources be used to meet real and pressing human needs, not applied to military goals, which bear little relation to those needs. They must reject the tendency, both at home and abroad, to answer deep issues of human rights in terms of coercion or suppression. There is a need for a new establishment of priorities between the claims of military defense and the claims of human rights and values.

The foregoing context for reappraising the meaning of security suggests the preliminary necessity of acknowledging that the present policy of maintaining nuclear superiority is ultimately futile. There is no advantage to be gained by nuclear superiority, however it is computed, when each side is admittedly capable of inflicting overwhelming damage on the other, even after being attacked first. Such effective parity has been operative for some years. Any effort to achieve superiority only leads to ever-higher levels of armaments as it forces the side with the lesser capability to seek to overcome its inferiority and forces the side with the greater capability to seek to maintain its superiority. In the wake of this action-reaction phenomenon comes a decrease in both stability and security.

The political context of international relations has changed sufficiently to allow for and even encourage a movement toward a decline in the importance of nuclear weapons. That context includes positive political forces that provide opportunities to strengthen the bonds of international community and to make possible reductions in military stockpiles. Once the meaninglessness of nuclear superiority is acknowledged, those positive forces can be more widely perceived and utilized. Communism, for example, is no longer monolithic. The extreme hostility of the Cold War years has been reduced, and even in spite of Vietnam a limited but real spirit of mutual accommodation has developed.

The United States and the USSR both realize that war between them is unacceptable and that, while many differences remain, there are many areas of mutual interest. Both have critical domestic problems calling for attention. Both also are beginning to understand that cooperative efforts to help solve the problems of the developing world are necessary lest these problems one day threaten the security of both of them.

The effort to encourage a new approach to national defense and security issues, therefore, does not have to take place in an international milieu completely alien to the goals of that effort or completely unsympathetic to its requirements. That attempt can and must capitalize on the common interests and concerns already built into the present international situation. In addition to the elements of disorder, there are also elements of order present. The Christian political vocation must seek to utilize these elements as it seeks to restore defense to its proper limits and to subordinate it to the demands of justice and the work of reconciliation among peoples and nations.

IV. PROPOSALS FOR ACTION

Many years of effort to seek mutual agreements on the control and reduction of the instruments of force have netted little agreement. There have been a few successful efforts, most notably the 1963 partial test ban treaty, the outer space treaty, and the nuclear nonproliferation treaty. These have been constructive steps, and have helped to lay the foundation for more far-reaching agreements. The United States' efforts in concluding these agreements are to be commended. The nonproliferation treaty, now awaiting ratification by all nations, is an important and necessary step toward preventing the further decline in the security of all nations that would result from the proliferation of nuclear capabilities, and from the ensuing regional arms races and drain on scarce resources. But these agreements have done little to halt the nuclear arms race among the Great Powers or to allay the mutual fear and distrust, which that arms race both reflects and perpetuates. Neither have they brought about a new approach to the problems of defense and security.

In striving to achieve the objectives required for a national reorientation on issues of defense and security, what is called for in terms of next steps? The following are suggested as illustrations:

A. Arms control and arms limitation

A general prerequisite for meaningful progress in arms control efforts is a good deal more flexibility in arms control negotiations and a greater readiness to undertake such things as unilateral steps, reductions by mutual example, and relaxation of verification requirements. Such flexibility can lead to mutual accommodations that will offer a more promising prospect for major steps toward both disarmament and broader but directly related political settlements. Specifically, it seems essential that the following measures be implemented:

1. A mutual halt in the further production and deployment of strategic offensive and defensive missile systems. The 1964 United States proposal "to explore a verified freeze in the number and characteristics of strategic nuclear offensive and defensive vehicles" deserves renewed emphasis, though explorations should not be restricted to this specific formula. A halt in the production of the weapons of greatest destructiveness would reduce the fear of the development by one side of a decisive first-strike capability, thereby strengthening internal resistance on each side against pressures for more ICBM's or antiballistic missiles. A unilateral United States freeze, at least for a finite period of time, should also be considered.

A mutual halt in the deployment of missile systems, at least for an agreed period of time, would add to the security of both the United States and the USSR. Each can now assure the destruction of an unnecessarily large percentage of the other's population, regardless of enemy defense capabilities. Such a halt could be effectively monitored by existing national satellite observation capabilities. Such a halt, in either production or deployment, not only would increase security but also would open the way for reduction in strategic arms and defense spending. Any such halt should be followed by negotiations to begin actual reduction of strategic weapons.

Specifically in regard to defensive weapons, every effort should be made to resist the pressures to expand the present plan for a "limited" deployment of a United States antiballistic missile system. Some would even seek to rescind the decision to begin an ABM deployment. The decision to deploy the ABM can have serious consequences for both the world political climate and the real security of the nation, particularly if those who see it as a first step to a heavy, Soviet-oriented system are heeded.

2. Widespread support for the nonproliferation treaty. A halt in the further spread of nuclear weapons to nations which do not yet possess them is an important and necessary step in reducing the danger of nuclear war. The development and possession of such weapons by an increasing number of nations would increase the possibility that these weapons will be used, thereby threatening the peace and security of all nations. Regional rivalries could lead to arms races all over the world and the draining of scarce resources from more constructive projects. Thus the nuclear nonproliferation treaty agreed to by the United States and the USSR and awaiting the approval of all nations deserves strong support.

3. A mutual cessation of the production of fissionable material for military purposes, under IAEA-approved safeguards, and the transfer of agreed quantities to peaceful uses. Such a step would cut off the supply of an essential ingredient for the further production and testing of nuclear weapons. This would be an appropriate response to the demand of the non-nuclear powers for some step toward nuclear self-denial by the nuclear powers. Recognizing the great need in the world for new sources of energy for constructive purposes, and the great economic potential available through the peaceful uses of nuclear energy, we also urge the United States to continue to seek ways to make the peaceful services of nuclear explosives and nuclear fuel available to nonnuclear states, through appropriate international bodies and with safeguards against their use for military purposes.

4. A comprehensive test ban treaty, taking into full account available national means of detection and inspection. Further improvements in nuclear weaponry will not significantly affect the military balance. Therefore the degree of assurance against violation of a nuclear test ban can be relaxed. Technological developments have also greatly improved the nation's ability to detect and identify nuclear weapons tests, thereby making an on-site inspection provision less critical. Continued testing only acts as an incentive to the nuclear arms race.

5. A United Nations declaration forbidding nations to place weapons of mass destruction on the seabed. This is an environment not yet penetrated by nuclear weapons. Every effort to prevent the introduction of such weapons into areas that are currently nuclear-free, as has been done in the Antarctic and in outer space, is to be supported. The United States intention to adhere to the Latin American nuclear-free zone treaty is to be commended.

6. Continued study and planning in problems related to conversion from defense to nondefense production. Study and planning on conversion are essential in order to avoid serious dislocation in the economy and also to avoid any tendency to prolong wars for the sake of the economy. Adequate planning

can help to bring about a transition with a minimum disruption of the economy, can release funds for the urgent domestic needs of our nation, and can stimulate thinking about opportunities for further productive use of our resources.

7. Efforts to strengthen international measures against the production and use of chemical and bacteriological weapons. These weapons can be developed with relative ease. Every effort must therefore be made to strengthen international revulsion against the use of such weapons, to seek binding agreements not to use such weapons, and to develop effective control and verification measures to reinforce international restraints.

Some of these steps are already United States policy. Others are not. But in all cases they are first steps which will do little more than freeze the status quo. Their significance will lie primarily in the extent to which they reflect a new, dominating determination to proceed more drastically, so that further steps in the control and reduction of armaments may be achieved.

B. Defense spending and use of resources

1. Significant reduction in United States defense spending and the channeling of the funds into development projects both at home and abroad. The fiscal 1969 United States defense budget equals our total national budget of only a few years ago, surpassing the total national economies of the great majority of nations, including China, and dwarfing our expenditures for both foreign aid and our critical domestic needs. New demands for substantial increases in the already appallingly large military budget are constantly being made.

The seemingly sacrosanct nature of the defense budget, as evidenced by the limiting of calls for economy to "nondefense" spending and by the minimal critical appraisal of its size and content, must be challenged. The imperatives of the Christian faith call for support for the poor and downtrodden, justice for the oppressed, and a responsible stewardship of our wealth and resources. These demands in this case coincide with both the best traditions and the highest interests of our nation. As long as the gulf between the developed and underdeveloped segments of mankind remains and even grows wider, there can be little progress toward a more humane global order or toward reconciliation among men, either at home or abroad. Toward this end, every nation should reexamine its use of its own resources.

For the United States, only a reversal of its national priorities, as those priorities are actually reflected in our national budget, can hope to have a significant effect. A realistic, independent assessment of security needs, free from the rationalizations of dying ideologies and outdated slogans, indicates that we do not need to wait for complex agreements on balanced military budget reductions before some cuts can be made. The termination of the Vietnam war and progress in controlling the arms race could and should lead to defense budget cuts of at least $25 billion per year.

2. A radical curtailing and strict controlling of the supply of arms to other countries. The proliferation and distribution of non-nuclear weapons, as practiced by the major industrialized nations, tends to fuel regional arms races and regional wars, encourages military government and the suppression of needed social change, and drains from underdeveloped nations critically needed resources for economic development. It also works to undermine both our long-range national interests and the quest for better conditions for an effective work of reconciliation among men.

The supply of sophisticated weapons to underdeveloped nations should be halted. Arms competition with the Soviet Union should stop. The United States, as the largest supplier of conventional arms to other nations, should seek an agreement with other suppliers to form a conventional arms moratorium on certain conventional weapons, such as missiles and jet aircraft. It should also seek agreement on registration of all arms shipments with the United Nations. In the interim it should refrain from further endangering stability, especially in sensitive areas, by unilaterally curtailing its arms transfers. The long-term consequences of the uncontrolled and growing world traffic in arms outweigh any short-term advantage such as influence over military elites or an improved balance of payments. Such a method of solving the problem of international insecurity is demonstrably self-defeating.

C. Peacekeeping, peacemaking, and disarmament

1. An increase in United States efforts to strengthen the United Nations as a peacekeeping and peacemaking agency. In a nuclear age, when no amount of offensive or defensive weaponry can preclude nuclear catastrophe, there seems to be no rational or moral alternative to the development of an adequate system of international collective security under the aegis of the United Nations. An effective United Nations peacekeeping capacity will require a significant measure of Great Power cooperation. They and their principal allies must come to the understanding that unilateral and competitive peace-keeping will be more likely to magnify than to reduce the risk to national security and that a mutually acceptable and manageable way of limiting these risks would be to strengthen the peace-keeping capacity of the United Nations. This could lead to a substantially more effective United Nations, which could replace the military posturing of the worldwide Great Power confrontation and thereby help to relieve the inherent insecurity of nations which are now prisoners of their mutual distrust.

As examples of appropriate efforts we recommend that:

(a) Member nations of the United Nations train and maintain in readiness special forces that would be available for use in United Nations peace-keeping operations. Countries now maintaining forces for United Nations use for peace-keeping operations should be encouraged to make bilateral agreements with the United Nations Security Council, under Article 43 of the Charter, to specify conditions, including financing, for the use of these forces. Other countries should be encouraged to make similar agreements, thus putting on a more permanent basis the availability of national forces to the United Nations.

(b) The United States accept the compulsory jurisdiction of the International Court of Justice. The Congress is urged to repeal the Connally Amendment, which declares that United States acceptance of such jurisdiction does not apply to matters within United States domestic jurisdiction as that is defined by the United States.

(c) All nations be encouraged to seek a nonintervention treaty designed to keep the Great Powers out of local disputes, to provide for United Nations observation machinery in such instances, and to allow for an automatic United Nations investigating force for use in nations that claim they are being subverted. Peace-keeping, if it is not to become war-making, is a task that must be performed collectively.

2. A major and sustained effort by the United States, in conjunction with other nations, for substantial and rapid progress toward arms control and general disarmament. This has been a goal of United States policy since 1961, and since 1962 the United States has participated in continuing international disarmament negotiations with limited but significant success. There must be a constant awareness of the necessity not to treat disarmament in isolation from the political conditions that cause international tensions or from the total peace-building process—a process that must include measures to enable the United Nations to become an effective agency for keeping the peace. Within such a context, progressive disarmament through international agreement can release the resources and manpower of many nations, thereby making a substantial contribution to the welfare of humanity.

The defense postures and strategies of the major powers both reflect and to some extent perpetuate the distrust and alienation that characterize the fractured international community. In seeking a just and peaceful international order, Christians must first seek to ameliorate the conditions that set men against each other and to create conditions in which reconciliation can take place. In doing this, much of the actual work will of necessity take the form of ground-clearing and obstacle-removing, clearing the way for a new approach to the issues of defense and security.

Present policies call into question our stewardship of our God-given resources, our national sense of priorities, and our wisdom in the management of power. A serious examination of the assumptions behind these policies, and their actual effect on real security in our revolutionary world, could greatly improve the chances of at least a limited Great Power accommodation so necessary for a just peace and a stable international order. It is in such accommodation and the "technical" measures of arms control that will result, as much as it is in zealous advocacy of peace in general terms, that our hope lies for avoiding disaster and for improving the conditions for reconciliation among nations.

But in order to achieve these measures it is necessary to stop thinking in obsolete terms. There must be a new context for looking at defense matters, requiring on the part of churchmen and all citizens a change of concepts, disposition, will, and determination. Such a reorientation can bring the United States to use its power in the years ahead to secure the development of nations and peoples, including its own, and to establish the international structures necessary for world order, justice, and peace. Only such a reordering of priorities can lead us toward real security.

Today's colloquy on ABM has generally concentrated on the external forces which have led to the initial deployment decision. I recognize that external pressures hold a key place in the ABM controversy. I would again want to emphasize that we must not be deluded from recognizing that internal factors have played a dangerous and leading role in the push for ABM.

Ever since the Vietnam war escalations, policymakers here in Washington have acted as if all national priorities were predicated upon the direction of events in Southeast Asia. That is, domestic policy was secondary to foreign policy. The result has been a festering of the ills of our cities and a decreasing of hopes and aspirations for a better life by millions of poor Americans while we continue to pour billions of dollars into a wasteful war. Very few persons have gained from such a ranking of priorities, and, many—both at home and abroad—suffered greatly.

Today, with whatever chances we have of peace in Southeast Asia beginning to brighten slightly, policymakers again are faced with making hard choices. Where we go from here can be dictated

by a commitment to some rational sense of priorities, or we can be thrown back into the morass of frustration once more.

Our decision on ABM will be pivotal. If we bow to the superhawks, to the scare-merchants, to the profiteers, we will only be enhancing the arms race. In the end, relatively few will gain—if any at all—and perhaps the whole world will suffer.

In conclusion, Mr. Speaker, I would just like to say that I hope we can devote more time to an analysis of the profound implications of this issue which, despite the very excellent debate this afternoon, we have only begun to touch upon in terms of all of the various things that need to be brought into this discussion. I would be very, very unhappy if I thought that we were progressing on a tragic course as a result of political decisions made in 1967, for which there is no longer any validity, and that we do not have the guts here in this Congress to rise up and to question whether or not the basic security of this country is going to be furthered or hindered as a result of actions which we take.

Again I thank the gentleman for yielding me this time.

Mr. GIAIMO. Mr. Speaker, will the gentleman yield?

Mr. REUSS. I yield to the gentleman from Connecticut.

Mr. GIAIMO. Mr. Speaker, I thank the gentleman for yielding.

I want to commend the gentleman from Indiana who posed several questions that I believe bring this debate and discussion into real perspective, and I am delighted that the gentleman did so, because to me it indicates the very essense of what we are discussing here, and what we are trying to accomplish here, and that is a full-scale review of whether we should continue along the lines we have already adopted through authorization and appropriation for the Sentinel system.

But the gentleman from Indiana raised a question which is significant, wherein he stated that he was concerned by the fact that some statements were made here today that indicate that if we did not spend the money for defense items such as the ABM system, we would have this money available for expenditures on some of our other needs, particularly the needs of a domestic and urban nature.

I agree with the gentleman from Indiana that this should not be an "either-or" proposition, or a guns-or-butter proposition, because I certainly feel that the highest priority that we as a nation can have is our defense and our safety, as a nation.

Our defense capability, therefore, must be adequate to assure this, because if we do not have this we will not exist as a nation, and will not be able to do any of the things which must be resolved in the cities.

Certainly we should not put this debate on the plane that if we save the money in defense, or ABM systems, we would then have this money available to use in our cities.

I believe that would be an ill-advised argument on whether or not to go ahead with the ABM system. I believe the ABM system must stand on its own feet as to whether or not it is an effective weapon in our arsenal of defense.

The other question that was raised then was: Why, then, if there is so much opposition to it does the military feel disposed to proceeding and going ahead with it?

It has been obvious for quite a few years there has been opposition to the development of an ABM system. Former Defense Secretary Mr. McNamara was opposed to it until he decided otherwise at a later date. Former Presidents have been opposed to it. I understand that President Eisenhower was opposed to it and that President Kennedy was not disposed toward deploying an ABM system. The same is true so far as President Johnson is concerned and President Nixon at this very date wants a full-scale study into this matter to decide whether or not to proceed.

Of course, the military has been in favor of it. I have the highest regard for the military. They are our experts in this area.

But it is up to us as civilians to tell them when to put the brakes on because they would otherwise have us proceeding with all forms of weapons expenditures as they did in the case of the B–70 or in the case of the Skybolt and perhaps in the case of the F–111.

But we have responsibilities as civilians after being given the facts by our military experts to determine whether or not we should proceed in this area.

I suspect the reason we have so much opposition by the former administration to the deployment of the ABM system and then subsequently were told that it was in our best interest to proceed with an anti-ballistic missile system last year—I suspect the reason for that change in position was not so much that it was not scientific and not based on whether or not it would work effectively as a defense weapon, but in fact that it was a political decision—political in the international sense. Because of the fact the Russians had deployed a system around Moscow and Leningrad and because we were planning to negotiate and to talk with the Russians on the reduction of nuclear weapons and nonproliferation and armaments in general.

I believe it became a political weapon—that we would be in a better bargaining position with the Russians if we were to deploy an ABM system.

My answer to that is that we are not in a better bargaining position if we deploy an ABM system which will not be effective. The greatest weapon that we have in any discussion with the Russians and the greatest argument we have with them is—you do not have a first strike capability against us and we do not have one against you.

To assure that we do not lose out on our side insofar as any nuclear deterrent is concerned, we must rely, as has been said time and again on this floor—we must rely on our offensive weapons that the Russians know about and are aware of. If they realize and recognize the strength of our offensive weapons and they do not have a first strike capability against us, then this is the greatest weapon that we could have in any forthcoming discussion with the Russians to reduce armaments and to reduce the threat of nuclear war.

I think this is the reason why there was a change of position by the former administration when it suggested to the Congress to change our position and that now we should go ahead with the deployment of an ABM system. I think it is faulty and I do not think it will really give us an edge with the Russians. I think we will be expending billions of dollars and not be coming up with an adequate defense system. We will, in fact, have accomplished nothing but increased the escalation in nuclear power both in our own arsenal and in the Russian arsenal.

Mr. LEGGETT. Mr. Speaker, will the gentleman yield?

Mr. REUSS. I yield to the gentleman.

(Mr. LEGGETT asked and was given permission to revise and extend his remarks and include extraneous matter.)

Mr. LEGGETT. Mr. Speaker, I thank the gentleman from Wisconsin for yielding.

Mr. Speaker, I think the debate today led by the gentlemen from California and Wisconsin and by the gentleman from Illinois who I understand will follow shortly—this discussion of the ABM system is probably the most important thing that we will do in this House perhaps this year.

I was concerned last year when the Senate—I think a third of the Senate was exercised enough to vote against this system and still we had a very difficult time in bringing this body up to speed with respect to these problems of deployment of this ABM system.

About 7 months ago the question of anti-ballistic-missile deployment was debated on this floor. At that time with others I made a number of objections to the deployment program. Since that original debate, there has been a mounting escalation of criticism by both the public and the scientific community, as well as by many of my distinguished colleagues on this floor and in the Senate. There is good reason for this growing disenchantment with the proposed deployment of the Sentinel ABM system. This program was conceived as the ultimate deterrent to enemy nuclear aggression, yet the best scientific advice agrees that the defensive shield it is supposed to afford is but a sieve that can be easily penetrated by over-targeting the defended area with enough missiles to exhaust the system, or by the use of semisophisticated decoy or screening devices. I made these arguments last year, and I restate them again today. The arguments were valid 7 months ago, and there has been no indication that the technical situation has changed. The proposed system is still a "maginot line."

A very readable and excellent summation of the technical deficiencies in the Sentinel system was published in the March 1968 issue of Scientific American by Nobel laureate, Hans Bethe, and Prof. Richard L. Garwin. I would again commend this article to my colleagues.

The arguments presented in this article

have not been successfully contested, but have in fact been buttressed by the leading members of the scientific community, including all the past scientific advisers to the Presidents—inarguably, a distinguished group.

In September of 1967, this ABM program got off the ground with a speech by the then Secretary of Defense McNamara. In this speech, the Secretary proposed the establishment of the system, but qualified his endorsement of the concept very strongly. These qualifications stand out as prophetic and bear repeating again today. Here I quote:

> There is a kind of mad momentum intrinsic to the development of all new nuclear weaponry. If a weapon system works—and works well—there is strong pressure from many directions to procure and deploy the weapon out of all proportion to the prudent level required.
>
> The danger in deploying this relatively light and reliable Chinese-oriented ABM system is going to be that pressures will develop to expand it into a heavy Soviet-oriented ABM system.
>
> We must resist that temptation firmly—not because we can for a moment afford to relax our vigilance against a possible Soviet first strike—but precisely because our greatest deterrent against such a strike is not a massive, costly, but highly penetrable ABM shield, but rather a fully credible offensive assured destruction capability.

I would say that we are not just a group of unilateral disarmorors here today, those that are making some remonstrance with the expenditure for the ABM system. I think the reason for it is the fact that the Department of Defense has not made out their prima facie case. When they came before my House Armed Services Committee, they indicated that this was going to be a $5 billion system, that it had been reasonably thought out, that the costs were reasonably within control. However, they admitted that the system would not be good as to a cruise missile, it would not be good as to a fractional orbiting missile, it would not be good as to multiple missiles, and it would not be good as to the MIRV or the independent reentry vehicle.

A few moments ago the gentleman from Indiana said, "Well, wouldn't you be cut short, you folks, if the Chinese lobbed a missile over in your direction in about 3 years and you did not have a defensive system?"

Well, the point is that in about 3 years this system will not have been completed. We are going to spend $2 billion this year, and we are not going to have any defense this year. We are not going to have any defense in 1970, we are not going to have any defense in 1971, 1972, or 1973—maybe in 1974 or 1975 if these ideal conditions arise, where we build our system and the Chinese have developed a very unsophisticated system of about 30 missiles, according to the best scientific advice that we have today. We will be able to knock out about 80 percent of those missiles, and that will be good for maybe 1974 and 1975. But then in 1976, 1977, and 1978, when the Chinese develop a capability of 40, 50, or 60 missiles, then our defensive capability with our current technology devolves from about 80 percent down to about 15 percent. Then what we suspect is that the Department of Defense is really engaged in the most fallacious and speculative investment ever known to mankind, because what they want to do is not to spend the $5 billion that they said they wanted to spend last year, but to spend the $9 billion that they have said they want to spend this year to build the system, and perhaps another $40 billion in trying to keep pace wtih the State of the art and with the developments of the Chinese.

We know—and an article was published the other day on this subject—that when you are trying to build a system based on a high-risk development, the costs are generally 250 percent of your minimum estimate. The minimum estimate of a fixed system to handle a complex Russian system is $50 billion—250 percent of that amount is a good figure. For those of you who think that we are going to be disarmed if we do not build this system, keep in mind where we are. My colleague from southern California mentioned a moment ago that perhaps we cannot afford this system. I think he is dead right. I think we should keep in mind that in spite of the fact that we have toned down the war over the past 4 months, our defense budget is $2 billion more than last year and at about $83 billion. We still have an obligation of $6 billion to cover the cost of past wars and benefits for veterans. That brings the amount to $89 billion. We have $2 billion from space fallout for defense; we have $1 billion cost of atomic energy in fallout for defense, and a $16 billion interest share of our national debt, which is the cost of past wars.

I think we are paying about $107 billion in expenditures for defense, directly, and indirectly, and we are trying to live off an administrative budget income this year of, I think, about $135 billion.

But we have got a lot of things on the shelf we are moving ahead with. There is the thing called VFX. We are hearing a lot about that. We think it is good. It is a $2 billion system. There is a new fighter aircraft for the Navy. They did not like the F-111-B program. There is another program which is a new fighter for the Air Force, which is a multi-billion-dollar program. We have a lousy antisubmarine warfare program, so we are going ahead with a VFX program. We have an intermediate interceptor program that we have to move ahead with because it is essential for defense of our coast. That is a billion-dollar program. We want to move ahead with advanced manned supersonic attack aircraft, which is essential for our defense.

I do not say this to burlesque these points at all. The vast majority of our defense-oriented committees believe these programs are essential for our future military posture. We are moving ahead with an MOL program and we have $6 million in that this year.

What I have described is about $17 billion of new defense programs.

The reason we are against this program is the fact that to date it just does not make any sense.

Why did the Department of Defense move ahead with it a year ago? I think one of the reasons was the fact that, as explained by my colleague from southern California (Mr. BROWN) we did not want an anti-ballistic-missile gap to evolve for the elections. Second, we were caught about a year and a half or 2 years ago, when we discovered, as appeared in the newspapers, that our national intelligence estimates were 25 to 30 percent off base with respect to anticipated capability of the Soviets. We got nervous and decided to employ a light Chinese system.

Mr. McNamara, our great former Secretary of Defense, stated the case for the light ABM system, as was specified by the gentlewoman from Hawaii, but he said:

> Do not get this mixed up with defense against the Soviet Union. We do not have a capability to handle the Soviet Union.

Why did he say that? It was not to confound necessarily the missile abatement talks, but for the simple reason that we are worse off against a sophisticated country like the Soviet Union with a poor ABM system if we say the purpose of this missile system is to defend against a sophisticated system.

Why is that? Because today Moscow is worse off because of the Galosh system than before they developed the Galosh ABM system. Why? Because we changed a few settings on our computers to make sure we do the job in Moscow. What is going to happen now, if we develop this system, to Boston or to San Francisco?

The computers are already set. All we had to do was to say what the President said a few days ago, and I think it bears repeating. Of course, Secretary McNamara warned against expanding the system and against expanding the reason why we are putting in the system.

But that is exactly what is happening. First we are asked to approve a highly debatable Chinese-oriented system. When the criticism mounted as to the effectiveness of this Chinese system, the President on February 7 of this year at a press conference fielded the following question:

> Mr. President, you know the ABM system was planned originally to protect us against the threat of a nuclear attack by Red China early in the 1970's. Does your information indicate that there is any lessening of this threat, or greater, or just where do we stand?

The President answered:

> First, I do not buy the assumption that the ABM system, the thin Sentinel system, as it has been described, was simply for the purpose of protecting ourselves against attack from Communist China.
>
> This system, as are the systems that the Soviet Union has already deployed, adds to our overall defense capability. I would further say that, as far as the threat is concerned, we do not see any change in that threat, and we are examining, therefore, all of our defense systems and all of our defense postures to see how we can best make them consistent with our other responsibilities.

I say when he said that we blew the ball game. Unless the Department of Defense can come before our House Armed Services Committee this year and show us they can make out a prima facie case for a reasonable expenditure against the

Soviet Union, the better part of sanity for us is to go slow on this program.

Of course, Bob McNamara said that if we had deployed the Nike-Zeus system at the time a lot of people wanted to deploy it, then we would have totally wasted about $2 billion to $3 billion, because the next state of the art came forward with the Sentinel system here, about 2 years ago, and we would have had to change it. We have had to do this on a number of occasions.

This change in emphasis from Chinese defense to Soviet defense is exactly what Secretary McNamara warned against, and the new reasoning is absolutely fallacious. We have a system which is marginal even against a simple but concerted Chinese attack, and yet when this system is questioned, the answer is that it is actually destined to be a defense against a far more deadly Soviet attack. I ask again, how can a weapon marginal against a mouse be useful against a bear?

This is exactly what is happening with the current ABM system. We had $1 billion in the budget as of last summer. I hesitate to imagine how much of that $1 billion has been spent.

Now that the opposition to the ABM is growing, confusion reigns among the ranks of the committed. Last year in the Armed Services Committee we were treated to a well-organized argument clearly designed to prove the efficacy of the proposed ABM system. Now when concern has been expressed across the board, the proponents of the system are treating us to an array of contradictory statements and opinions that indicate only one thing—no one seems to know where the program is going. The original plan envisioned a system of city defense against a light Chinese attack. The President states that the system may actually be directed toward a Soviet attack. The Pentagon indicates that possibly a "thinner than thin" system is advisable—one that will protect the hard site missile bases only. Mr. RIVERS, my chairman of the Armed Services Committee, indicates that the whole concept of missile defense must be gone over with a view to looking at the options of entirely new systems, perhaps possible seaborne or airborne. I think he is right.

The proponents argue that we must have the system in the deployment stage before we enter into talks with the Soviet Union, so as to use the deployment as a bargaining point with the Russians. On this question, I can see no conceivable reason to spend billions of dollars on a highly speculative system just to use it as a bargaining position in talks that have not been scheduled with a country that has already experimented with an ABM system of its own, and which according to the best intelligence estimates is not going forward to completion because of serious doubts as to its effectiveness. How can we seriously confront the Soviet Union with an ABM system in negotiations when the Soviets themselves know it is useless against a concerted attack? Moscow is admittedly worse off today because of our overtargeting response to the ballistic system.

Secretary of State Rogers on the other hand feels that such missile talks should precede deployment of the system.

I agree with him.

Out of this confusion one thing is clear—there is considerable confusion on the part of the administration and the proponents of the present ABM program on both the direction the program should take and the goals that should be sought. The opponents of the system are disaffected with the whole idea and are confounded on every turn by the contradictory replies.

The only sensible action that has been taken on ABM has been the recent halt in site acquisition and deployment. It is eminently clear that this halt should be continued until a full scale hearing is held in which all members of the scientific community are able to state their views on the value of this multi-billion-dollar boondoggle. I, for one, am not willing to continually accept the assurances of the military that all counter arguments have been fully explored and their presentation is the culmination of a totally objective indepth study. Experience has too often shown that the military does not come totally clean with us.

Last year I had the opportunity to question General Starbird, manager of the Sentinel system, in committee hearings. After a detailed and articulate presentation of the Sentinel program, the General during questioning indicated that the price guidelines could be pretty closely adhered to. Yet now, we read that the original $5 billion figure for the Chinese-oriented system is reaching up to $9 billion.

I was unhappy with the responses to my questions last year, and I am not any happier now.

There is absolutely no sense in authorizing and appropriating funds at the rate of over $1 billion a year for a program that could easily be a gigantic mistake. We must settle down and figure out the direction we are taking before we put one more dollar into the hardware for this program.

[From the New York Times]

PENTAGON CONCEDES SENTINEL WOULD COST MORE THAN ESTIMATE

(By John W. Finney)

WASHINGTON, February 11.—The Defense Department said today that the $5.5-billion cost estimated for the Sentinel missile defense system represented but the first installment on an effective defense against the Chinese missile threat.

Just how much height the cost of the Sentinel system might go, the Pentagon was not prepared to say. But a spokesman, in response to inquiries, acknowledged that additional sums would be needed as Communist China developed more sophisticated intercontinental missiles carrying decoys to confuse a defense system.

In Congressional testimony made public today, the Defense Department explained that the Sentinel missile bases were being located in urban areas to provide an eventual defense against a "sophisticated" Chinese missile attack.

In its initial deployment, the Sentinel system is designed to deal with the relatively simple missiles with single warheads that Communist China might be able to fire at the United States by the mid-seventies. But as the Chinese develop their missile technology, the presumption is that within a few years they could add decoys to the warheads and otherwise make interception more difficult.

The Pentagon also pointed out that nuclear warheads for Nike-Hercules antiaircraft missiles had been stored in certain urban areas since 1958 without any adverse public reaction. It acknowledged, however, that the public had never been informed which of the missiles were armed with nuclear warheads and which were not.

Between the rising costs of the Sentinel system and the Army's decision to locate the nuclear missile bases in populated areas, the Defense Department is finding itself caught in a rising crossfire of Congressional opposition to deployment of the Sentinel system.

When deployment was authorized last year, Congress was led to believe that the missile defense bases would be located some distance from population centers.

The impression was also conveyed by the Defense Department and its spokesmen in Congress that the $5.5-billion figure represented the best estimate of the cost of establishing a "thin" defense against the Chinese missile threat.

What was not made clear last year in Congressional testimony or debate was that the Defense Department viewed the initial $5.5-billion system as but a start in a system that would grow and become more complex as Communist China improved its missile force.

As initially presented to Congress, the Sentinel system was to provide "area defense" for the entire United States through a complex of radar and missile bases firing the Spartan missile. With its two-megaton warhead (equal to two million tons of TNT) the Spartan is designed to intercept and destroy an incoming ballistic missile warhead from 400 to 500 miles away.

In the controversy developing over the selection of Sentinel bases, it is now coming out that the Army is designing and building the system so that it can be enlarged to fire short-range Sprint missiles. With their 10-kiloton warheads (equal to 10,000 tons of TNT) the Sprint missiles are designed to provide close-in defense against warheads that penetrate the "area defenses" of the Spartan missiles.

SHORT RANGE A FACTOR

In an attempt to meet some of the Congressional criticism, Lieut. Gen. Alfred D. Starbird, Pentagon manager of the Sentinel system, was called before the House Appropriations Committee in mid-January for a secret hearing.

In his testimony, made public today, General Starbird explained that missile bases near urban centers were being chosen so that the Sentinel system would eventually be capable of defending against a Chinese missile attack using decoying warheads.

To meet this "more sophisticated threat," he said, Sprint missiles will have to be added to the Sentinel system. Because of their relatively short range of around 50 miles, however, the Sprint missiles would be ineffective in defending a population center unless the bases were situated nearby, he explained.

The Pentagon said the cost of adding the Sprint missiles was not included in the $5.5-billion estimate presented to Congress. A Pentagon spokesman said that even a rough estimate of the cost of adding the Sprint missiles could not be made available.

Senator Stuart Symington, Democrat of Missouri, a senior member of the Senate Armed Services Committee, estimated last week that the Sentinel system would cost $9.4-billion. This higher cost estimate, according to a Symington aide, was based on the normal cost escalation encountered in new weapons systems and did not include the addition of the Sprint missiles.

If the Symington estimate is correct—and there is reason to believe he obtained his es-

timate from Pentagon sources—the cost of deploying an anti-Chinese missile defense system could substantially exceed $10-billion once the Sprint missiles were added.

In his heavily censored testimony, General Starbird said the principal criterion for Sentinel base sites was that they be "tactfully effective . . . both now and for a long range future if and when the Red Chinese may have penetration aids."

"There is no indication as yet," the general said, that Communist China is developing penetration aids, such as metallic chaff, light balloons or decoys designed to confuse the defensive radar so that it cannot pick out the actual warhead.

But he made clear that the Pentagon was proceeding on the assumption that Communist China could and would add such penetration aids to its intercontinental ballistic missiles. And once they are added, he continued, the Spartan missiles would have "only limited capability" in protecting populated areas.

The reason, he explained, is that the threatening warhead would not be picked out by the radar until shortly before it reached its target, thus making it impossible to commit the Spartan to a long-range interception.

As an example of the long-range need for locating Sentinel bases near cities, General Starbird cited the selection of Libertyville, Ill., some 25 miles northwest of Chicago, as one of the sites. He made it clear that, while there was "no current plan" for installing Sprint missiles at Libertyville, the site was selected with that in mind.

[From the New York Times, Feb. 24, 1969]

THE SENTINEL AND THE TREATY

In his questioning of Secretary of State Rogers on the nuclear nonproliferation treaty, Senator Albert Gore has exposed a fundamental inconsistency in the Administration's apparent resolve to push ahead with some sort of Sentinel antiballistic missile system—a resolve made more explicit last week by Secretary of Defense Laird. Mr. Gore noted that under Article VI of the treaty the nuclear powers undertake "to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament."

The Sentinel program provides a critical test of how seriously the United States views its obligations under that article. If there is a "good faith" interest in nuclear disarmament, then the logical step would be to postpone deployment of the Sentinel system while the United States enters into negotiations with the Soviet Union to limit offensive and defensive strategic missiles. If, instead, the Administration decides to proceed with Sentinel deployment on the distorted logic that accelerating the atomic arms race somehow leads to nuclear disarmament, then it will be apparent that the United States regards Article VI as little more than a pious statement imposing no obligations upon the nuclear powers.

Something far more important is at stake, however, than just this country's interpretation of Article VI. At issue is the whole future of the treaty, a matter that is likely to come up in President Nixon's European discussions this week.

So far as the non-nuclear states are concerned, the article was one of the more important concessions made by the two major nuclear powers in drafting the treaty. If the United States and the Soviet Union now indicate that they do not feel bound in any way by the article, then some of the more important non-nuclear states, such as Japan, Israel and India, can ask with good reason why they should take the treaty vow of complete nuclear abstinence.

By proceeding with the Sentinel system, therefore, the United States can jeopardize the nuclear nonproliferation treaty. Even if the military utility of the system were much less dubious than it is, this would be a bad risk to run. In the long run, the spread of nuclear weapons undoubtedly presents a far greater danger than the still non-existent nuclear missiles in Communist China or the unproved usefulness of Sentinel as a bargaining counter in arms talks with Moscow.

[From the Washington (D.C.) Post, Feb. 17, 1969]

THE BIG ABM BRAINWASH

There is more, obviously, to the Great Debate over the Sentinel ABM System than has hitherto met the eye, judging from a report on the front page of this newspaper yesterday. The report told of two memoranda to former Secretary of Defense Clifford last fall. One was from the present Secretary of the Army, Mr. Stanley R. Resor, and the other, a supporting document from the manager of the project to build the Sentinel System, Lt. Gen. Alfred D. Starbird. Together they spelled out in breathtaking detail a complex and comprehensive public relations—not to say propaganda—campaign to convince the American public, and Congressional critics, and wayward scientists and the citizens residing in or around prospective Sentinel sites that in every way these weapons are good for you.

A perfectly respectable case can be made that, within reason and suitable limits, they are; something must have recommended the project to two successive Defense Secretaries in the Johnson Administration. And if the Sentinel is not in fact as essential to our security as it is said to be, there would still be nothing wrong about the Army arguing the point. We pay our military men to tell us what we need for our safety, and we expect their civilian leaders and the Congress to weigh the merits of the military arguments, and cast them up against our other priorities, and make a judgment that takes more than the military view of things into account.

So there is no quarrel here with the right of military men to make their pitch and there was very little in the Resor and Starbird memoranda that added anything new to the Army's argument. What the Army was proposing to say about the Sentinel, in short, was not the startling thing about these memoranda to Mr. Clifford. What was astonishing and disturbing—the part that had not met the eye—was the way the pitch was to be made, the sweep and intensity of the Army's intended campaign. That, and the plain evidence that an important part of the whole operation was clearly calculated *not* to meet the eye; the Army's hand was not supposed to be visible. That's what is genuinely unsettling—the suggestion, for example, of clandestine complicity with the contractors for the Sentinel program in carefully coordinated public relations undertakings to tout the virtues of this weapons system; the unabashed intention to plant or inspire favorable magazine articles by scientists who are proponents in direct response to opponents of the program within the scientific community.

"Several highly placed and reputable U.S. scientists have spoken out in print against the Sentinel missile system," Mr. Resor wrote to Mr. Clifford, and after naming a few of them (Hans Bethe, George Kistiakowsky, Jerome Wiesner) and complaining of the difficulty of replying without disclosing secrets, he went on to say:

"It is essential that all possible questions raised by these opponents be answered, preferably by nongovernment scientists.

"We will be in contact shortly with scientists who are familiar with the Sentinel program and who may see fit to write articles for publication supporting the technical feasibility and operational effectiveness of the Sentinel system.

"We shall extend to these scientists all possible assistance."

So there it is, and what are we to make now of the next learned dissertation published by a scientist in favor of the Sentinel? Will it be his handiwork, or General Starbird's? And what are we to make of some of the other aspects of this campaign—the instructions proposed by the General, for example, that "personnel affiliated with the Sentinel Public Affairs Program will cooperate and coordinate with industry on public relations efforts by industries involved in the Sentinel Program"? Will Army officers write the advertising copy, or merely furnish the photographs of successful missile shots?

There is less to be said against some of the other, more conventional plans, for a heavy round of visiting with Congressmen and Governors and Mayors and community leaders and editors and publishers, for example, except that you do have to ask what all this is going to cost: the junketing, the mobile displays, the preparation of information kits and a library of useful quotations, the film clips and taped interviews and all the rest.

But mostly you wonder whether this isn't too much—too covert, too all-pervasive, too overpowering. For if this is standard operating procedure, as they say, for the Army, and for all its works, it presumably is standard for other services, too. And this adds up, in our view, to a good deal too much brainwashing of the American public and a good deal too much intrusion by the military into American political life.

If this is what's going on, it is too much. In any case we'd like to know. The Sentinel is too serious an issue to be settled by an Army propaganda campaign, on the one hand, or by a counter-reaction to such a campaign, on the other, by the antipathy to the idea of the citizens in one community, or by anything other than the merits of the matter and a balanced reckoning of where our national interest lies. That the Army should embark on so massive a public relations campaign, so far in advance of Congressional approval of the project, and by the use of such dubious methods, is a thing apart, though no less important on that account, and one which we would hope the Congress would also like to know a good deal more about.

THE ABM SYSTEM

The SPEAKER pro tempore (Mr. STRATTON). Under a previous order of the House, the gentleman from Illinois (Mr. YATES) is recognized for 30 minutes.

Mr. PIKE. Mr. Speaker, will the gentleman yield?

Mr. YATES. I yield to the gentleman from New York.

Mr. PIKE. First I want to thank the gentleman from Illinois and the gentlemen who have taken the time previously for discussion of this very important matter. It is one of those rare days on the floor, when discussing a military situation, I find almost nothing with which I can disagree.

There is one item which we might consider, in talking about this. When we get into all the technology involved in the ABM system, let us assume that we could build a system which could technologically intercept everything the Chinese threw at us. We still would get involved in a situation which we have seen entirely too frequently in the last few years, and that is the command and

control problem, the business of making the decision to utilize this system.

We had a situation with a ship called the *Liberty* and the messages which did not get through. We have had situations with other ships. We have had other kinds of situations.

Assuming the very best in this system, that we detect the launch of an enemy missile immediately upon launching, from that time we have roughly 30 minutes to make the decision to launch the ABM's against it. I question very seriously, even assuming all of the technological know-how in the world, that we are geared in the command and control area to utilize all of these billions of dollars that we are going to spend.

I have tremendous respect for our technological capabilities, but there are always human elements involved. I have opposed the deployment of this particular system for some 2 years now.

Mr. Speaker, 2 years ago, when the House Armed Services Committee reported favorably on the Defense procurement authorization, only two members of that committee, the gentleman from Michigan (Mr. NEDZI) and I spoke out against the inclusion of an anti-ballistic-missile system in that procurement. Then it was called the Nike X, and I quote part of our minority statement at that time:

At the present time the United States and the Soviet Union are engaged in extremely complicated and sensitive negotiations seeking to limit in some meaningful and responsible manner a major new round in the continuing cycle of increased armaments and increased spending for armaments. The Joint Chiefs of Staff have endorsed these efforts and so do we.

The committee report states that regardless of the outcome of these negotiations "the committee strongly believes that the thin deployment would be a useful first step toward meeting the defense needs of the Nation in protecting against ballistic missile attack from any hostile nation."

First, the report clearly shows that the so-called thin deployment which they recommend (costing $4 billion) is capable only of protecting us from an unsophisticated attack by the Red Chinese in the 1970's ($3.5 billion) plus a defense of our own strategic offensive forces ($500 million). Everything in the report, however, looks toward moving from the "thin" defense to the so-called posture A deployment, optimistically estimated at $9.9 billion and accurately described in the report as "a light defense against a Soviet missile attack on our cities." In the language of the majority, it's like "learning to walk before trying to run."

From there, the next logical step would be to advance to posture B, optimistically estimated to cost $19.4 billion and accurately described as a heavier defense also designed against a Soviet attack on our cities—some of our cities, but obviously not all of them. The Secretary of Defense has estimated the cost of a missile defense would grow to $40 billion over a 10-year period. Whether we stay with the "thin" defense, or move to posture A or posture B, the main thing is to get on with it, says the majority.

We believe that if we as a nation are serious about trying to prevent a new arms race with the Soviets, the Armed Services Committee has a responsibility beyond that of advocating just such a new arms race.

Regardless of whether it costs the $19.4 billion that the military predicts, or the $40 billion that the Secretary of Defense predicts—regardless of whether the Soviets do not react at all (thereby reducing American fatalities from 120 million in an all-out exchange to 'only' 30 million dead) or whether they react the same way we are reacting (thereby leaving American fatalities at 120 million), we would embark upon such a deployment reluctantly, not wtih a feeling of joy in our military achievement, but of sorrow in our human failure.

With a minor change here and there the same statement could be made with the same validity today. The gentleman from Michigan and I note that similar doubts as to the need for this system have arisen in the committee itself, in the press, in the scientific community, and, I assume, in the White House itself.

I have promised my district that my highest priority in this Congress will be an effort to find areas in which we can cut down on our massive arms budget without jeopardizing our national defense posture, and because of that promise, and my continuing doubts as to the necessity and usefulness for this system, I must protest again today against deploying it.

Mr. YATES. Mr. Speaker, a few days ago the press carried the story that a massive public relations campaign had been launched by the Pentagon to sell the Sentinel ABM to the American people. It was revealed that every propaganda resource at the Army's command was to be hurled into the effort to convince the public that this highly questionable exotic system was vitally essential to our national security. Army officers, men, and machines were to be used, of course, but this was only the beginning. The defense contractor corporations were to be enlisted, newspapers, TV, radio, veterans' organizations, ladies' clubs—the whole works were to be employed, all stops pulled. The orders came directly from the Secretary of the Army himself. This could well be the military-industrial complex's finest hour—a real triumph. And the interesting and amazing part of the campaign was that it was to proceed even though the question of continued deployment of the Sentinel was presumably under scrutiny and review.

You will recall, Mr. Speaker, how some weeks ago with much fanfare the new Secretary of Defense, our old friend Mel Laird, announced he was going to make a complete review of the Sentinel. The Congress and the country thought it was to be a full, fair, and impartial reassessment, and those of us who oppose the system were confident that such a review would result in suspending its further deployment. But it is now apparent that no such review was planned or contemplated and that in fact the heralded review will be no review at all. With each passing day the new Secretary makes statements which indicate that his mind was made up from the beginning, that he is not reappraising the question as to whether or not the Sentinel should be deployed, but rather, how it is to be deployed, that he never intended to question the worth or validity of Sentinel, but only to find a deployment of the missile sites which would be more acceptable to the public and which would serve to abate the rising storm of public protest.

The arguments he has presented add little of merit to the inadequate justification previously advanced for deployment of the Sentinel. In great measure they serve only to cloud the issue, for he has engaged in what can only be described as a spurious numbers game, in which he presents comparative Soviet and American military expenditures to sustain his position. The Russians, he says, have spent $3.7 on defensive strategic weapons for every dollar we have spent on such systems. In the area of offensive strategic weapons, they are outspending us $3 to $2.

Assuming that what he says is true, one is tempted to reply. "So what?" The real question is, Are their military capabilities greater than ours as a result? Is our national security in jeopardy? We are not engaged in a spending contest as such with the Soviet Union, except insofar as spending is necessary to achieve our goals. It surely is not the task of the Department of Defense to guarantee that no nation spends more on weaponry than the United States. Rather, it is its responsibility to provide for the military security of the Nation in the most economical and effective manner.

If the Soviet Union wants to squander its rubles on defensive ABM systems that do not increase its security, then let the Soviet Union do it. But we are certainly under no obligation to match those mistakes—or to match the money it expends for that purpose.

And, Mr. Speaker, in spite of Russian expenditures, it is clear that the Soviet ABM cannot withstand the might of the U.S. offensive missile capability. That is clearly stated in hearing after hearing by all our experts. It is difficult to understand, therefore, why proponents of the Sentinel ABM point with such trepidation to the meager effort of the Russians in building their Moscow missile sites, and why they foster the illusion that an effective ABM system is presently possible.

Mr. COHELAN. Mr. Speaker, will the gentleman yield?

Mr. YATES. I yield to the gentleman from California.

Mr. COHELAN. I thank the gentleman from Illinois for yielding.

I think it would be appropriate at this time to get this into the RECORD. I am quoting from a very reliable paper in which there is given the United States and Soviet intercontinental strategic nuclear forces, and I shall also supply this for the RECORD. But, briefly, it shows that as of October 1968 we have 1,054 missiles as compared to the Russians' 900. As far as the sea-launched ballistic missiles are concerned we have 656 as compared to the Russians' 75 or 80. The total intercontinental missile launchers are 1,710 on our side and about 980 on the Russian side. Our bomber force consists of 646 to 155, and that is the top of the range. We have a total force loadings, the approximate number of deliverable warheads, of 4,206 on our side as of October 1968 according to this estimate

and 1,200 on the Russian side. It is overwhelming.

Mr. Speaker, I ask unanimous consent to insert the table to which I refer at this point in the RECORD.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from California?

There was no objection.

The table referred to follows:

TABLE I.—UNITED STATES VERSUS SOVIET INTERCONTINENTAL STRATEGIC NUCLEAR FORCES

	United States,[1] October 1968	U.S.S.R. October 1967	U.S.S.R. October 1968
ICBM launchers [2]	1,054	720	900
SLBM (Sea-launched ballistic missiles) launchers [3]	656	30	75–80
Total intercontinental missile launchers	1,710	750	975–980
Intercontinental bombers [4]	646	155	150–155
Total force loadings, approximate number of deliverable warheads	4,206	1,000	1,200

[1] The size of the U.S. strategic force has not changed significantly since mid-1967.

[2] Excludes ICBM test range launchers which could have some operational capability against the United States. The Soviets also have medium range ballistic missiles (MRBM's) and intermediate range ballistic missiles (IRBM's) which are capable of striking Eurasian targets.

[3] In addition to the SLBM's on nuclear-powered submarines, the Soviets also have SLBM's on diesel-powered submarines, whose primary targets are believed to be strategic land targets in Eurasia. The Soviets also have submarine-launched cruise missiles, whose primary targets are believed to be naval and merchant vessels.

[4] In addition to the intercontinental bombers, the Soviets also have a force of medium bomber/tankers capable of striking Eurasian targets.

Source: Department of Defense, Secretary of Defense Robert S. McNamara, "Approach to the Fiscal Year 1969–73"; program and fiscal year 1969 budget, in U.S. House of Representatives (90th Cong., 2d sess.), Department of Defense appropriations for 1969, hearings before a Subcommittee on Appropriations, pt. I (Feb. 14, 1968), p. 147. Some of the figures are based on a statement by Secretary of Defense Clark M. Clifford, Oct. 25, 1968: (See New York Times, Oct. 26, 1968.)

Mr. YATES. I thank the gentleman from California for his contribution and I was going to address myself to that point.

Mr. BROWN of California. Mr. Speaker, will the gentleman yield?

Mr. YATES. I yield to the gentleman from California.

Mr. BROWN of California. As long as we are making comparisons in expenditures, the latest study of the U.S. Arms Control Disarmament Agency on world military expenditures is very revealing, because it reveals that the United States continues to outspend Russia by a substantial margin. But, interestingly enough, it also has a column labeled "Special Education Expenditures." In going down that column we find that the Soviets expend twice the amount on education as does the United States. I have never heard a word said that we are losing the special education race with the Soviet Union. Therefore, this may have a very vital bearing upon our defense posture.

As the gentleman has pointed out, the only safety defense against missiles is likely to be in some now unknown field such as the field of education or the application of labor or something of that sort.

I suspect that the amount of money in scientific education has a great bearing upon how soon you make breakthroughs. Therefore, our security, even in pure power—which is the type of defense generally supported in this body—could be substantially harmed by our concentration upon military weaponry.

Mr. YATES. I thank the gentleman and I think he makes a very positive contribution.

Last week before the Senate Foreign Relations Committee the statement was made that the Soviet Union now has in being and under construction more ICBM's than we do. That should come as no great surprise to anyone who has read the posture statements by Secretary Clifford and Secretary McNamara. But in the context in which Secretary Laird made the statement, one would think that this was somehow evidence that we were falling behind in the missile race and that we had better, therefore, put an automatic stamp of approval on any recommendation by the Defense Department.

The fallacy of all that is that a comparison of raw numbers of ICBM's actually tells almost nothing about our strategic position relative to the Soviet Union. Most of the Soviet ICBM's are so primitive as to be unworthy of comparison with our sophisticated, solid-fueled Minutemen. Moreover, to compare numbers of ICBM's without reference to the overall strategic capabilities of both sides is misleading in the extreme. The fact is that our bomber forces, our IRBM's around the U.S.S.R., and especially our submarine-launched missiles provide us with an overall strategic advantage over the Soviet Union that will endure for the foreseeable future. Our own defense experts have testified to that effect. We must certainly exercise vigilance to assure that we maintain our present position. What is needed for that task is a reasoned, straightforward evaluation of our defense needs.

What is not needed, and cannot be excused, is the quoting of figures out of context in order to exert political leverage for deployment of an ABM system that has so many technical, strategic, and political liabilities that it cannot be promoted on its own merits and which does not contribute significantly to our national security.

The Sentinel system will not add significantly to our national security. It will not protect against a sophisticated Russian nuclear missile threat, or for that matter, a sophisticated Red Chinese missile threat. Our national security still rests upon our offensive power. As Dr. John Foster, Director of the Division of Research and Development of the Department of Defense stated in last year's appropriations hearings:

> The cornerstone objective of our strategic forces remains assured destruction, to deter a nuclear attack on the United States we rely upon a conservatively calculated secure ability to retaliate and destroy the society of any attacker under any circumstances.

And he points out in the same testimony that the Soviet ABM deployment does not affect our assured destruction capability of strategic targets in their country, including Moscow.

By the same token, our deployment of the Sentinel ABM system would not deny the Soviet assured capability to destroy the United States as a functioning society. As long as both sides maintain an assured destruction capability, as they are doing, any discussion of damage limitation is quite meaningless. In an overkill situation such as that which characterizes the strategic confrontation between the United States and the Soviet Union, an ABM system at the present state of the art confers virtually no advantages to either nation. The future may bring an ABM worthy of deployment, but that is for the future. The Sentinel is not that system.

The rationale for the system is supposed to be the protection it would offer from a primitive Red Chinese attack. No one has explained, Mr. Speaker, why the same awesome power to retaliate which is designed to keep all our enemies at bay is not applicable to deter the Red Chinese from attacking us.

Mr. COHELAN. Mr. Speaker, will the gentleman yield?

Mr. YATES. I yield to the gentleman from California.

Mr. COHELAN. I thank the gentleman for yielding.

I wonder if the gentleman would respond to the question: Supposing that the Russians agreed to negotiate, would we continue to have a Chinese thin missile defense system?

Mr. YATES. I would hope that the negotiations would proceed, and I would be afraid that the Sentinel system would be a deterrent to it because under the discussions that I have had with members of the Committee on Armed Services, and with others, they state that the so-called thin system is the underlying layer for a much larger system which is really aimed at the Soviet Union.

Mr. COHELAN. But my point is that even in the negotiation theory this is an expendable system, is it not?

Mr. YATES. I would think so; yes, I would say to the gentleman.

Mr. BROWN of California. Mr. Speaker, will the gentleman yield?

Mr. YATES. I yield to the gentleman from California.

Mr. BROWN of California. Mr. Speaker, I believe the point made by the distinguished gentleman from California is significant as revealing in part the inconsistency with regard to the justification for this system. We cannot simultaneously argue that we need the protection as against the Chinese, and then hope to bargain it away with the Russians.

But, there is an even more serious objection to this Chinese idea, because we are arguing that a thin system will deter the Chinese threat, at least when they have 30 such weapons, but we agree it will not deter such a threat when they get to the point of having 100 or 200—or whatever the magic number is.

So we are caught in the position of denying the effectiveness of the deterrent, as the gentleman in the well has so well stated, or saying that because it is not the deterrent for the end effect, we need this for a period of x years until we get beyond that point and then the deterrent will not be there.

The whole thing is completely ridiculous and is, of course, founded or justified on the theory that the Chinese are irrational and that they would not object to having their country totally destroyed in order to send over two or three missiles to knock out some of our cities.

The Chinese are not quite that irrational. If they were, then they would have attacked Formosa, for example, because I doubt if we would retaliate with a nuclear attack for an attack on Formosa—even though it would be a highly irrational action.

But the point is, the Chinese have not taken any actions that were this irrational, at least in the field of their own defense. It is highly unlikely that they are going to deviate from that practice for a period of 2 or 3 years—in which time we will possibly have a system which might deter that irrational tactic.

Mr. YATES. I agree with the gentleman. I think it is completely naive to suspect that. The Chinese have shown already that they have a great capability because they have already exploded a hydrogen bomb. I think it is completely naive to expect Red China to develop a system so primitive knowing that the United States has this Sentinel ABM system with the capability of thwarting a simple attack. They would know too that in the event they were to launch a missile attack on the United States, the retaliation would be awesome and terrible in its intensity from planes and from submarines ranging near their shores and from missile bases in our country.

I do not understand this irrationality argument at all.

Mr. NEDZI. Mr. Speaker, will the gentleman yield?

Mr. YATES. I yield to the gentleman from Michigan.

Mr. NEDZI. I want to express my appreciation to those Members who organized this debate today on this very important subject.

I think at the present moment in the discussion we are really reaching the crucial assumption upon which the ABM system is based and the rationale for it; namely, the irrationality of the Chinese.

I do not know what makes anybody assume that the Chinese are going to be willing to have their nation obliterated in exchange for dropping a few missiles on the United States.

It is reasonable to assume that their threat is going to continue upsophisticated—and for how long is this lack of sophistication going to continue? I think as soon as we deploy a thin system which has the capability of knocking down unsophisticated Chinese missiles, the Chinese are not going to proceed in constructing and developing an unsophisticated missile system. They are going immediately to devote their resources to have something that is going to be able to meet this thing and they are not going to be building clay pigeons for us to knock down with our ABM and thereby render our ABM system totally obsolete at its inception.

Our President is in Europe at the present time, and talking of a possible discussion with the Soviet Union and looking forward to consulting with our allies in Europe—as he indicated in his inaugural address—in order to lessen the burden of arms. I am certain it is going to be one of the topics that is going to be discussed at these discussions.

Then, too, I would like to see some effort brought forth, rather than the deployment of the ABM, which may well undermine all these discussions before they begin.

Mr. YATES. I thank the gentleman for his very fine contribution.

Why must we build an admittedly inadequate defensive system to protect us against a prospective primitive missile threat when we are willing to accept our offensive strength as suitable to deter the Soviets who have an enormously powerful missile threat?

The fact is that many of those who favor the Sentinel acknowledge that the anti-Chinese rationale is at best a weak reed, and say, knowingly, that the system is really directed against the Soviets. President Nixon has declared that it would be a part of our overall defense posture which would include the Soviet Union. If this is true, we are talking not about the $5 billion thin system, but a thick system the cost of which will exceed $50 billion.

It is not likely that such a vast expenditure would be undertaken for an untested system. A thick system, then, would require in the minds of many that we conduct an extensive testing program to see if the system would work. In turn this might very well bring pressure to suspend the nuclear test ban now in being until the ABM tests were concluded, at least. The international political fallout of such a move would cast serious doubts throughout the world on our good faith in seeking to bring the nuclear arms race under control.

It is also generally accepted that a thick system, with batteries of terminal defense missiles at all of our major cities, would only make sense if it were accompanied by an extensive air raid shelter program. As Secretary McNamara pointed out, an ABM system without a shelter program will lose at least 30 percent of its effectiveness. Without such a shelter program the nuclear detonation of our own defensive missiles would threaten the city below with blast effects and fallout. The costs of a shelter program are astronomical. When such a system was suggested in the early 60s, the American people made it clear they wanted no part of it. The ABM system must inevitably bring with it serious consideration of the need for such shelters.

Moreover, the deployment of a heavy system, or the Sentinel system for that matter, would mean the proliferation of nuclear weapons all across the Nation. While the chances of an accidental disaster are admittedly extremely slim, they will increase with every warhead that is stationed near population centers. Deployment of a thick shield would mean that thousands of nuclear warheads would be installed around the perimeters of our Nation's cities. As it is, the Sentinel system would locate large yield nuclear warheads around 15 to 20 major cities, such as Chicago, New York, and Boston.

What we are faced with, if the decision to go ahead with the Sentinel system is approved, is the possibility that within the next several years the United States will become a nation of cities whose undersides are honeycombed with shelters and whose perimeters are dotted with nuclear installations. The proponents of the ABM have scarcely addressed themselves to this question. We must ask ourselves whether or not we are willing to accept the further pollution of our physical and psychological environment as the price for deploying a system as faulty as the ABM. It seems to me that our money could be better spent rebuilding the slums, rather than building shelters underneath them and surrounding them with nuclear hardware. I am not saying that if we go ahead with the Sentinel system, the thick shield and the shelter program are inevitable, but they would certainly be much more likely. The first step will have been taken—the major step. We ought not to make a judgment on one without understanding the implications of the other.

Last, but certainly not least, we must examine the implications of the Sentinel system on the strategic arms race. The dynamics of the arms race are very complicated, and it is difficult to predict with much accuracy what would happen if we went ahead with the ABM. But if history is any guide at all, it seems likely that our construction of the Sentinel system would signal the beginning of a new round in the arms race and have a destabilizing effect on the existing nuclear balance.

Mr. Speaker, it is true that our national security requires a posture of military strength, but we must realize that sophisticated scientific technology and unbridled weapons exploitation has made war a threat to the very existence of man on this earth. This is a time for restraint and for concern for future generations, for deescalation rather than destructive buildups. The Sentinel ABM deployment will not contribute to greater understanding and peace. It should be discontinued.

Mr. MIKVA. Mr. Speaker, will the gentleman yield?

Mr. YATES. I yield to the gentleman from Illinois.

Mr. MIKVA. I thank the gentleman. I want to call his attention to something that he knows well. I asked a speaker who was representing the Army the meaning of the term "essentially nil." The closest I came to an answer was that it is some new mathematical term more than a zero but less than infinity and cannot be defined any closer. It strikes me that when the assurance that the military have about the term "essentially nil" is transposed into the effectiveness of the Sentinel system, according to Mr. Acheson and some of the other experts, in effect, I worry that "essentially nil" may mean a lot more than zero even though, in fact, it may be less than infinity.

I am struck, when I read some of the figures and when they talk about the effectiveness of the system and the assurance that they have about it being safe, that they are sort of like the

prognosticator who said he was 95 percent right 12 percent of the time.

I am glad the gentleman from Illinois has brough forth this concern about the safety of the system.

Mr. YATES. I thank the gentleman.

Mr. BROWN of California. Mr. Speaker, will the gentleman yield?

Mr. YATES. I yield to the gentleman from California.

Mr. BROWN of California. I wish to compliment the gentleman on his excellent statement. I think it is a great contribution to this debate. I remember particularly the previous work he has done in connection with the hearings concerning the Chicago site. I recall the discussion in those hearings with regard to the safety factor.

I would like to say further, on the safety factor, I know of no way of contradicting the fact that the safety of a deployed nuclear system is going to depend directly or even arithmetically or geometrically on the number of nuclear warheads that are deployed. What we are talking about with this defense system is deployment of at least another 1,000 nuclear warheads and probably the deployment of equal numbers by our opponents to counteract the ones we deploy, so the total population of nuclear warheads in the world is going up by a factor of 3 or 4, and the danger of nuclear action is probably going to increase by the square of that, so even if this danger of accident is "essentially nil," when we are finished with this deployment it is going to be probably 10 times essentially nil and maybe more than that.

(Mr. YATES asked and was given permission to revise and extend his remarks and include extraneous matter.)

Mr. YATES. Mr. Speaker, I also include the following material in connection with the subject of my special order:

STATEMENT BY REPRESENTATIVE SIDNEY R. YATES, DEMOCRAT OF ILLINOIS, AT A PUBLIC HEARING ON THE SENTINEL ANTI-BALLISTIC-MISSILE SYSTEM, THE FEDERAL BUILDING, CHICAGO, JANUARY 13, 1969

I am grateful to Secretary of Defense Clark Clifford for his cooperation in making possible this public hearing today, and to Colonel Robert C. Marshall and his associates for coming here to answer questions about the proposed Sentinel ABM site near Libertyville. The matter under consideration is a most important one. Public officials in this area and a great many people are concerned with the prospects and the risks of having to live and raise their families close to high-yield nuclear weapons.

I want to make it clear from the outset that I have opposed the Sentinel antiballistic missile system for some time now and I shall continue to oppose it. In my judgment the proposed system is of such questionable usefulness that its deployment at this time would constitute an unfortunate waste of vitally needed resources. Moreover, this initial step could signal the beginning of a new round in the arms race that would have serious consequences for our economy, the domestic climate of our country, and our national security. The missile site question I raise here today is only one of several objections I have to the deployment of the system at this time, but it is the question under immediate consideration.

While only a corollary to the larger questions involved in missile defense, it is an important corollary. The possibility of an accidental nuclear disaster though quite remote is nevertheless real and must be taken into account before these sites are installed around the perimeters of the nation's cities, raising the possibility that the cure is worse than the disease. There are many questions which should be answered in order that the public may know what is involved in the deployment of the Sentinel system.

I have been urging the Department of Defense to agree to this public meeting since last November when I learned to my great surprise that the Army was going to select a suburb near Chicago to build a Sentinel ABM site. This was contrary to what the Congress had been told. In the words of Congressman Sikes of Florida, who was in charge of the ABM appropriations bill, "such installations would be away from centers of population."

The Army contends that it had announced in November, 1967, that Chicago would be selected. Nothing could be more indefinite than the Army's announcement. Let me read it. It says:

"The Department of Defense today identified the first ten geographical areas to be surveyed as possible site locations for the Sentinel system, the Communist-Chinese oriented anti-ballistic missile system recently approved for deployment. . . ."

"The potential areas which will be studied now are among those which will probably provide optimum locations for the area-defense weapons and their radars. It should be emphasized that those areas are not final choices and that this list is not complete. In some cases, even the preliminary potential areas have not yet been determined."

However, I think the point is unimportant, for even had the announcement been specific and precise, it was superseded by what happened in the Congress subsequently. Congressman Sikes' statement and the Department of Defense Appropriations Subcommittees' hearings both clearly indicate Spartan missile sites need not be constructed near our great cities.

My view was reinforced a week ago Friday when I spoke to Congressman Sikes in the House. He said again there was no need to place a Spartan site near centers of population, and that he intended to look into the matter. This he has done. Last Friday I was called and asked to testify on this matter before his Subcommittee on Military Construction of the House Committee on Appropriations next Wednesday morning in Washington, which I will do.

The House Committee on Armed Services will look into this question, too, later this month or in February.

I think that many members of Congress might well have come to another conclusion had they been told the Sentinel missile sites were to be placed at the threshold of the most populated areas in this country. That is why I have invited all members of Congress and elected local officials from this area to this meeting, for this is not a question only for the congressman in whose district the installation is to be made. The possibility of an inadvertent explosion of the nuclear warhead of the Spartan missile either in or above its silo affects all our districts.

The Army argues there is no danger of an explosion at the site. Lieutenant General Alfred Starbird, who is the head of Sentinel Systems Command, stated categorically at a meeting in Waukegan a few weeks ago, "There *cannot* be an accidental nuclear explosion." In this, General Starbird departed from the position previously taken by the Army, for in the non-classified materials being distributed for public consumption by the Department of Defense the question is asked, "What are the safety implications of living in an area where nuclear weapons are stored?"

The response given is: "U.S. nuclear weapons are designed with a series of safety devices so that the likelihood of any nuclear yield in case of an accident is essentially nil." I repeat, "essentially nil." General Starbird's statement is absolute. The D.O.D. is not willing to go that far. The chance of accident, it says, is most remote, but it is not impossible.

In order to substantiate its claim that an accidental nuclear detonation could not occur at one of the Sentinel sites, the Department of Defense cites 20 years of accident-free handling of nuclear weapons. I agree that so far the Department of Defense has built a record in handling nuclear weapons that we can all admire. But I do not think it makes sense to suggest, as they do, that since there has never been an accidental detonation there can never be one.

General Starbird's statement is also at odds with the handbook prepared by the Department of Defense and published by the Atomic Energy Commission in 1962. In Appendix A, it states:

"Nuclear weapons are designed with great care to explode only when deliberately armed and fired. Nevertheless, there is always a possibility that, as a result of accidental circumstances, an explosion will take place inadvertently. Although all conceivable precautions are taken to prevent them, such accidents might occur in areas where the weapons are assembled and stored, during the course of loading and transportation on the ground, or when actually in the delivery vehicle, e.g., an airplane or a missile."

There have already been a considerable number of accidents involving nuclear weapons. The crashes at Palomares, Spain, and Goldsboro, North Carolina, come readily to mind. Of the Goldsboro incident Ralph Lapp, a nuclear scientist, says in his book, *Kill and Overkill*, that at the scene of the accident Air Force experts found that five of the six safety interlocks had been triggered by the fall.

When he was asked at the Waukegan meeting about Lapp's statement that all but one of the safety devices on the bomb which fell at Goldsboro had been triggered. General Starbird took issue with the statement. I thought, therefore, it would be well to check the matter further, so I asked the staff of the Appropriations Committee to obtain an authoritative answer. The Air Force gave me this answer: that instead of only one safety device remaining intact, two remained untriggered.

The deployment of the Sentinel ABM system is justified in part on the ground that it will catch accidentally launched ICBM missiles from other countries. If an ICBM can be accidentally launched, why cannot a Spartan be accidentally launched?

If a Spartan missile can be launched accidentally, what happens to its megaton range nuclear warhead? Is there any possibility that it will be exploded in the atmosphere rather than in the target area above the atmosphere? Is it possible for a Spartan missile located at a site in a southern state to re-enter the atmosphere and threaten northern populations?

I realize that a mechanically perfect Spartan will not explode until it is above the atmosphere where its nuclear yield will do no damage to this earth or its people. But we are talking about a less than perfect Spartan missile which through mechanical or human failure has been launched. Can its nuclear mechanism arm itself prematurely and explode its nuclear charge before it leaves the atmosphere?

The point is that the safety devices are not infallible—the fact that weapons are designed not to malfunction does not mean that they cannot. Nuclear accidents have been occurring at the rate of approximately one per year since the advent of the atomic age more than 20 years ago. As weapons proliferate throughout our states, we can expect the incidence of accidents to increase.

The possibility of an accident at the missile site cannot be discounted. Let me read

to you from a Washington Post story of May 23, 1958, describing an accidental missile launch that occurred in Middletown, N.J.:

"Eight powerful Ajax missiles" reports the Post "exploded at a New Jersey Nike launching base today, killing nine men, injuring three and showering 24 live but non-atomic warheads over a wide area.

"A tenth man was missing and presumed dead.

"The Army said one of the missiles went off at about 1:20 p.m. while a crew of five civilian technicians and six army personnel was installing a new type of arming mechanism to insure greater accuracy. Four minutes later, seven other missiles on the launching pad blew up at once with an earthshaking roar that could be heard ten miles away. Windows were shattered within a one-mile radius.

"Army demolition crews scoured the countryside for the 24 warheads that were sent hurtling over the area."

Fortunately the accident was non-nuclear, but I think the remarks of the Mayor of Middletown is relevant. He said, "The Army assured me nothing like this would ever happen. Now we have missiles flying all over the place, landing on schools, in the streets and on our houses. The Army assured me that their things were not armed and never would be fired unless there was an enemy attack."

I have great respect for General Starbird as a distinguished and able officer. But despite the best intentions and assurances of able generals and despite their extensive and intensive precautionary measures with men and materials, accidents have occurred—and they will continue to happen. Mechanical equipment breaks down and men are not infallible. One has only to read the article by Dr. Paul Eggertsen in the August issue of Psychiatry Magazine entitled "The Dilemma of Human Reliability" to appreciate the incredible difficulties facing the leaders of our military forces in seeking to eradicate human failure in dealing with the complicated weapons used in today's armed forces.

Dr. Eggertsen tells of the work of the human resources committee of which he was a member and of the task given it by the U.S. high command. "Our bombs," read his assignment, "are increasingly numerous, they are deployed widely because of the cold war, and they have quick reaction times because of the short warning times that obtain in the cold war. We begin to perceive they may not always be in safe hands. You know about people. How can we make sure that only 'safe' people get control of weapons?"

The discussion ended, says Dr. Eggertsen, in the committee's answer that neither this nor any other group could insure that only 'safe' people could deal with nuclear weapons.

From all this the conclusion seems obvious that if it is possible to place nuclear missile sites away from centers of population without unduly diminishing whatever effectiveness the Spartan missile may have, in the interest of public safety that ought to be done. In this instance, distance from the city is important.

Particularly is this true when the public is required to live with a defense of such limited capability as the Sentinel. It is one thing for our people to have to live with nuclear weapons that are part of a defense system that provides maximum protection. It is quite another thing to ask them to assume such risks for a system which will not protect against the Soviet missile threat, which will not protect against nuclear warheads fired from enemy planes or submarines, which will not protect against a Red Chinese threat if it carries a missile which is not quite primitive in effectiveness.

Does it not seem naive to expect the Communist Chinese to develop and attack the United States with a missile system so unsophisticated that it could be thwarted by the Sentinel system, especially when the Chinese would know that our retaliation would be swift, certain and utterly devastating from nuclear warheads fired from bombers and submarines ranging near China's shores and from missile bases in this country?

I have voted for ABM research and development funds over the years because I believe that as long as nuclear weapons exist in other countries, we have no choice except to develop the best antimissile defense we can. But as yet, the Sentinel system should not be leaving the drawing board and the laboratory. As former Secretary of Defense McNamara said to Congress: "None of the ABM systems at the present or foreseeable state of the art would provide an impenetrable shield over the United States. . . . Let me make it clear that the cost in itself is not the problem; the penetrability of the shield is the problem."

There is a time for research and there is a time for deployment. The first stage must be completed before the second is undertaken. As Dr. Hans Bethe states it so well in his article in the March issue of the Scientific American:

". . . One must distinguish clearly between the possibility of development and the development itself, and similarly between development and actual operation. One must refrain from attributing to a specific defense system, such as Sentinel, those capabilities that might be obtained by further development of a different system."

It follows that the Sentinel light ABM system, to be built now and to be operational in the early 1970's against a possible Chinese intercontinental ballistic missile threat, will have to reckon with a missile force unlike either the Russian or the American force, both of which were, after all, built when there was no ballistic-missile defense. The Chinese will probably build even their first operational intercontinental ballistic missiles so that they will have a chance to penetrate. Moreover, we believe it is well within China's capabilities to do a good job at this without intensive testing or tremendous sacrifice in payload.

One remembers the recommendation of the Army in 1959 to deploy the Nike-Zeus ABM system, which was a predecessor to the Sentinel. President Eisenhower turned down the Army's request. Had he complied with the Army's recommendation and Nike-Zeus deployed at an estimated cost of $14 billion, in the words of former Undersecretary of Defense Cyrus Vance: "It would have had to be torn out and replaced almost before it had become operational."

Yet, "the illusion is being nourished," says Dr. Bethe, "that an effective system against ballistic missiles is possible." And the Army is contributing to that illusion. Many people—I should say most people—believe the Sentinel system is a sure defense against all incoming enemy missiles. They do not receive full information about it. For this hearing the propaganda machine of the Department of Defense was busy. Friday's Chicago *Daily News* showed drawings obviously obtained from the Department of Defense. The descriptive material says: "These drawings, based on a conference with Army officials, show how Sentinel missiles would be launched and guided and how they would stop enemy missiles."

To the average reader, this is a picture of a fool-proof defense. How could anyone, it suggests, be opposed to this scientific marvel which renders us impervious to enemy missile attack? The average reader would not know that enemy missile attacks do not come from individually lobbed firings, but in a salvo. The Sentinel would be inundated in a true attack. Should not the public know this?

From the Army's standard presentation we learn that in 1962 in a test at Kwajalein atoll a Nike-X missile intercepted one of our ICBM's launched from our west coast. Thereafter, it continues, various major improvements were made in the radar and interceptors available so that those components when fitted together into a system could meet a sizable number of attackers.

How many attackers can it meet? I realize I am nearing the realm of classified material and I would not want such data made public. But the department's own experts concede that it could not withstand a Soviet attack. What is its capability? How much can the public be told?

Will the Spartan installation proposed for Libertyville protect Chicago from a missile attack if the attacker uses decoys?

Will that Spartan installation protect Chicago if the attacker creates a Beta-patch blackout?

The specter of nuclear accidents remains. Each new ABM site will increase the chances for a nuclear accident. Those of us who represent constituencies close to missile emplacements have a responsibility to make a judgment as to whether or not we are willing to vote to take the risks implicit in this deployment. I, for one, am not willing to jeopardize the well-being of millions of citizens in the Chicago area for the sake of a system so questionable as the Sentinel ABM.

The citizens of the Chicago area are concerned, especially those who live near the Libertyville site. I receive mail and phone calls in my office daily from concerned citizens who want no part of the Sentinel system. Numbers of people and groups wanted to give statements at this hearing today. I told them time did not permit it because of the great number of requests.

I have tried to cover some of the questions that have troubled me and the many people who have written to me. I don't envy the Army its task. The threat of enemy weaponry is serious enough without introducing into the picture new anxieties concerning our own weapons. I do it reluctantly and only because I consider the decision we face with the Sentinel system and the location of its sites so serious. I hope and pray the decision we reach may be the right one.

(Mr. KASTENMEIER asked and was given permission to extend his remarks at this point in the RECORD.)

Mr. KASTENMEIER. Mr. Speaker, I would like to add my voice to those of my colleagues in opposing the deployment of the anti-ballistic-missile system. While the question has been dramatically debated by both the proponents and the opponents of the ABM, I think we would do well to consider not only the technical arguments that can be made against the system, but also the arguments which focus on that subtle and neglected position that deployment of an ABM system would tend not to stabilize the situation vis-a-vis the Soviet Union, but rather to heighten the instability of an already dangerous situation.

It is often said that an ABM would not upset the balance of terror because it would simply strengthen our ability to absorb a first strike and still be able to inflict unacceptable losses upon the Soviet Union. However, this argument is generally based on the supposition that the Soviets will not build up their offensive might in response to the deployment of the ABM. I believe this supposition to be wholly unrealistic and dangerous. The Soviets are as interested in main-

taining an assured destruction capability as we are. If we deploy our ABM, the Soviet Union can be expected to upgrade their offensive forces to the point that they can cope with a highly sophisticated and accurate ABM system. In short, the Soviets must plan their offensive forces in such a way that they will be able to overcome a 95-percent effective ABM system if they want to maintain their end of the balance of terror. This mad rush for more and better weapons on their part would certainly force us to move in a similar direction. Can we honestly call this a stable situation, a situation conducive to frank discussions with the Soviets, conducive to a secure world in which we can live out decent lives.

Furthermore, I would like to add a note of warning to all those persons, ordinary citizens and leaders alike, who might believe that because we have an ABM there is some guarantee against destruction. Even if we should have an ABM which is 90-percent effective, there is no protection against annihilation in the event of a heavy attack. If 10 percent of the warheads in a large-scale attack get through, this is enough to crush our society and spell the doom of millions of our people. The grave danger is that someone might allow himself to be led into the fantasy that there is some protection after all. I shudder to think what would happen if we deploy this system and someone then thinks that it is effective enough to allow us to take a few more risks in pursuing our national goals.

Is it not true that in this case it is better to be truly afraid of the real danger of annihilation than to be lulled into a false security by unfounded promises about the effectiveness of an untested ABM system. Let us admit the fact that it is impossible to defend ourselves against destruction once the war begins and abandon now the ABM system. Perhaps then our realistic fear will drive us to seek more creative and productive means of building a secure and peaceful world in which we can live in safety with the Russians as well as the Chinese.

LONG BEACH, CALIF.: PROGRESSIVE RECREATION

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from California (Mr. HOSMER) is recognized for 5 minutes.

Mr. HOSMER. Mr. Speaker, the city of Long Beach deservedly enjoys a nationwide reputation for imagination and leadership in education and municipal services. Part of this reputation stems from a very wise decision on the part of the citizens of Long Beach 40 years ago when they voted to establish a recreation commission.

That vote was 40 years ago today, and it resulted in a coordination between the municipal recreation department and the school recreation program. It has long since become one of the outstanding such plans in the Nation.

This coordination under the recreation council has enabled Long Beach to get maximum benefit from its recreation dollars, which now have numbered more than 66 million since 1945. The benefits of this plan are many and varied. The city and the school system do not duplicate each other's facilities. Schools may use city parks, baseball diamonds, and camping facilities, while the city recreation program has full access to school gymnasiums, swimming pools, and athletic fields. All this has been a major benefit to the city's taxpayers.

I would like to take this opportunity to commend the Long Beach Recreation Council for its progressive leadership and dedicated service to the needs of the people of Long Beach. The council is headed by Mr. Milton B. Arthur, president, and Mrs. Charles F. Reed, vice president. Members are Mrs. Maurice W. Johnson, Mr. John Mansell, Dr. Dwight C. Sigworth, Mr. Charles A. Stevens, Councilman Emmet M. Sullivan, Mrs. Gus A. Walker, and Mr. W. Odie Wright.

The director of physical education and municipal and school recreation. Mr. Alvin D. Hoskin, recently addressed a civic group and highlighted the significance and accomplishments of Long Beach's outstanding recreational plan. Mr. Hoskin's remarks follow:

COORDINATION UNEXCELLED

Sound in its concept, effective in its service to the children, youth and adults of the community, and diversified in its scope, the Long Beach Coordinated Municipal and School Recreation program has become nationally and internationally acclaimed. The development of this corporate image did not just happen; it became a reality because of the dedication and sincere desire of leading citizens of this community, Recreation Commission members and recreation employees striving to provide for the needs of the community and diligently working for a quality type recreation service for its citizens. Most of us today accept the concept of coordination between the school district and the City of Long Beach, but few of us are aware of the basis for the present inter-agency coordination.

Let us go back a half century to the year 1917 when Eugene Tincher, now a prominent local attorney, was elected Commissioner of Public Affairs. Among his responsibilities was the administration of the parks and playground. It was during a four-year term that Mr. Tincher developed cooperative relationships between the municipality and the school district in the operation of the playgrounds and recreation programs. With the help of the school authorities in providing and lighting two schools, the PTA and the Public Affairs Department provided the personnel and the municipality provided the facilities necessary. During the latter part of this period $1,000 was appropriated for the operation of the summer playground project. Leaders were paid from these funds and the program was operated at five school playgrounds. Supplies were furnished by the PTA of each school. In 1920 a Community Service Committee headed by Josephine Randall, National Recreation Association recreation specialist, made a study of recreation in Long Beach.

In 1923 another survey of recreation in Long Beach was made by Mildred Wiley. Following this a meeting of the College Women's Club, now University Women's Club, was held, at which time a report was given which included the following statement:

"The visitor in Long Beach during the summer finds these eight supervised and equipped playgrounds in full swing. He returns in September and looks again. No playgrounds. No leaders. A few children about after school for an hour or two. Are not the play needs of the summer still existent, or is play a bad thing for children in the fall, winter, and spring?"

The survey report also stated:

"No good reason can be seen for the existence of two separate administrations for the playgrounds of the City of Long Beach. On the other hand, there is reason for unifying the command. The purpose of all the public playgrounds is identical, namely to furnish play for the children in the daytime and the adults in the evening. Because certain sites happen to come under the jurisdiction of the Department of Recreation, and others happen to be school grounds under the authority of the Board of Education, is no reason why one central head should not be responsible for the administration of all."

Additional efforts were made to establish cooperation and coordination between the City and the School District in providing recreational opportunities. In 1928, Charles H. Hunt, high school supervisor of physical education, was convinced that a greater use of the school facilities could be made for recreation. He suggested a plan to Superintendent of Schools W. L. Stephens, to open all playgrounds, gymnasiums and swimming pools for after school, Saturday, and vacation use. The Board of Education supported the plan by appropriating necessary funds.

Later, Mrs. W. J. Kimball, President of Washington Gladden Club of the Congregational Church, came to Mr. Hunt and urged that some plan be developed that would incorporate the parks, beaches and other city areas with the schools. Subsequently, this Club invited several hundred community leaders to the Church for a meeting and Mr. Hunt addressed the group, outlining a possible plan of coordination and suggesting that a survey committee composed of school and community leaders be formed to study the situation and make recommendations. The Press-Telegram published and supported the idea. The PTA under Mrs. Stephen G. Skinner, President, called a meeting at which time a Public Recreation Survey Committee was formed with Clyde Doyle, attorney and later Congressman, as chairman.

The survey Committee met regularly for nearly a year and involved many prominent local citizens and organizations as well as State and national consultants. It is interesting to read a portion of one of Mr. Doyle's reports:

"By mail and personal interviews with representatives of other cities, documentary material, visitations, and all other available methods and means, this group sought out the experiences of dozens of other American cities in this matter, both municipal and school, relating to parks, playgrounds, school gymnasiums, athletic field, physical education programs, use of public buildings, grounds and facilities under the Civic Center Act of the State of California and otherwise, having in mind at all times the desirability of Long Beach profiting by the experiences and mistakes of other cities. At the time the study commenced, the municipality of Long Beach was conducting virtually no recreation or playground program, but the Board of Education was financing and conducting one which appeared highly efficient and desirable."

Following the completion of the study, City officials requested that legal provisions to coordinate municipal and school recreation be prepared for submission to the electorate. Mr. Hunt prepared the original documents which were refined into legal terminology by Mr. Doyle. The PTA was the major community organization supporting the concept and encouraging voters to approve the Charter Amendments which they did in 1929.

The City Charter amendments of 1929 provided for the establishment of a Recreation Commission consisting of nine members. Four of the nine members serve because of their positions within the governmental structure of the community. The additional

five members are lay citizens who serve terms of five years with one term expiring each year.

The Superintendent of Schools and the City Manager by Charter provision are members of the Recreation Commission. The Board of Education selects one of its members to represent it on the Recreation Commission and the City Council selects one of its members to represent the City Council on the Commission. The Charter provides that no more than six of the nine members may be of the same sex, thereby assuring that at least three women are represented on the Commission.

The Recreation Commission is charged with the responsibility of establishing policies governing the joint operation of school and municipal recreation.

Close working relationships with the other city commissions and departments are essential for the coordination of recreation. A Coordinating Committee consisting of the president of the Park, Planning and Recreation commissions, the director of each of the three departments, and representatives from the City Engineer's Office, City Manager's Office, and Marina Advisory Committee, meet regularly to consider plans for major facilities or developments relating to recreation. Recommendations of the Coordinating Committee are referred to the respective commissions. After approval of the Coordinating Committee's recommendations by the commissions, the City Manager's Office is informed and the recommendation to the City Council is forthcoming. Upon approval by the City Council, the implementation of the recommendations occurs.

The City Charter further provides that the Director of Health and Physical Education of the School District shall be the Director of Recreation for the City and that he shall manage and supervise the public recreation program. The Director is also the secretary of the Recreation Commission and has the responsibility of coordinating the recreation program of the schools and of the city.

It has been the concept under the coordinated plan from the beginning that both school and municipal facilities may be used for the recreation of the citizens. The City may use the gymnasiums, swimming pools, athletic fields, etc. when these are not needed for the educational program. The schools in turn may use the recreation facilities, parks, baseball diamonds and have use of camping facilities provided by the City. These reciprocal uses of facilities are coordinated through the office of the Director of Municipal and School Recreation.

One of the major advantages of the Coordinated Program of School and Municipal Recreation is the economy of the joint use of facilities. The City does not duplicate the construction of gymnasiums, pools, athletic fields of the schools but builds structures such as social hall clubhouses and youth club facilities that are used for the activities not normally conducted in the school plant. Such coordinated use enables the tax payers of the community to save a great deal on the construction of facilities as well as provide a much greater utilization of both school and city recreation facilities.

Recreational services are coordinated at the Commission level, administration level, supervision level, and the recreation leadership level. The fact that both agencies of the coordinated program are represented at the policy making level, is essential to the successful administration of the total program. The recreation administrators of both the school and city agencies meet weekly, and at other times when essential, to discuss and reach decisions relating to current problems, programs, implementation of Recreation Commission policies, personnel matters and planning directions for programs and future developments.

Once a month members of the Supervisory Council, representing both city and school recreation, meet around the table to discuss matters appropriate to this group. Generally, discussion items include program planning, evaluations, inservice education and major projects such as buildings and park improvements for use in the recreation program.

General meetings of employees of both school and city recreation departments are held several times a year. The basic purpose of these meetings is to disseminate information, clarify policies and procedures of the coordinated program, improve communications among personnel and various facets of the total program, to recognize employees for loyal service, and to provide inspiration for continued progress in providing the best all around recreation service possible.

Further coordination of the program in the area of sports is handled through the issuance of permits to community groups for the use of recreation facilities by coordinating all permit requests for school and city facilities for junior baseball, softball and baseball through the Municipal Sports Supervisor.

A number of services are jointly provided by the two agencies. These include a year around program of swimming instruction, recreation swimming and competitive swimming in the five high school pools and one city college pool, programs for handicapped children, youth groups and Saturday Sports for junior high youth. In all of these examples the leaders work side by side.

Implementing the concept of cooperation and coordination of recreation by employees, whether paid from city funds or school funds or assigned to a municipal area or a school area, is essential for the success of the total operation. Although competition exists between teams or groups representing various municipal and school areas or programs, such competition should always be held in true perspective to the total program and the basic concept of cooperation and coordination. I am very proud to say that we have a most enviable record in this regard.

In forty years of operation in the Long Beach community, the coordinated program has provided for excellent cooperation between the involved agencies, the promotion of consistency of program services, better use of staff services, more effective use of facilities, the elimination of costly duplication of services and facilities, and enrichment opportunities for all ages unexcelled in any community in the nation.

PUBLIC LANDS AND PUBLIC TRUST

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from Pennsylvania (Mr. SAYLOR) is recognized for 60 minutes.

Mr. SAYLOR. Mr. Speaker, our public lands constitute one of the most varied and most valuable resources of this Nation. Intelligently and purposefully managed, these lands can provide benefits to all segments of the population—recreation, hunting and fishing, timber production, fresh water, and forage.

Generally, those who share this bounty are willing to make fair payment for what they receive. Others contribute to the management and protection of these lands through their Federal taxes but never receive any direct personal benefit. Despite the vast majority who are paying their way there are still those who feel that a free ride is their right.

In particular, many ranchers who graze livestock on public lands and national forests are violently opposing the move to insure that they pay an equitable cost for what they receive. So frightening to some ranchers is that idea, one livestock group has called the proposal to collect fair market values for grazing privileges on the public lands shocking in the extreme. While I am fully aware of the course of historical development of the American West, I am somewhat disturbed by the failure of some of its developers and their descendents to recognize that the days of the free range are long past. While grazers have been paying fees for running their stock on the national forests since 1906 and on the public lands since 1936 and would thus deny the free range allegation, the fact remains that they are not paying the full value for grazing permits, thus receiving part of their range without charge.

Let us look for a moment at the background of the grazing fee proposal which we are told by some ranchers will, "cripple a great segment of the United States" and eventually make of consumers, "losers through enforced higher prices of beef."

All Government user charges are presumably based on guidelines established and set forth by Congress in the Independent Offices Appropriation Act of 1952. Further guidance, originating in the executive branch, has come from the Bureau of the Budget in its 1959 Circular No. A–25. Central to both of these guidelines is the premise that Federal user charges should generate revenues in line with the fair market value of the resource being used.

Due to differences in legislative foundations and missions, the Forest Service and the Bureau of Land Management, which administer the public lands, have evolved differing grazing fee schedules. Currently a mature cow is permitted to graze for a month on BLM rangeland at a cost of 33 cents. This same cow grazing on a national forest would incur a month's board of from 19 cents to $1.64. This inequitable situation has led to requests for studies and rectification. Such studies were begun in 1961 and were capped by a comprehensive survey in 1966 which covered 98 national forests, 19 national grasslands, 48 BLM districts, and 10,000 individuals.

Analysis of the data generated by the 1966 survey confirmed not only wide differences in grazing fee charges within Federal agencies, but revealed that these fees were considerably lower than those charged for the use of private or State grazing lands. The following table shows that BLM receipts per acre for grazing permits are far below the returns from State grazing lands.

COMPARISON OF BLM AND STATE GRAZING RATES

State	Average receipts per acre		BLM receipts as a percentage of State receipts per acre
	State	BLM	
Colorado	$0.370	$0.027	7
Wyoming	.195	.034	17
Oregon	.105	.024	23
Arizona	.070	.019	27
Idaho	.100	.029	29
Montana	.185	.053	29
New Mexico	.110	.043	39
California	.055	.026	47
Utah	.042	.021	50

A technical committee was established to analyze the data, consisting of representatives of the Statistical Reporting Service, Economic Research Service, and Forest Service, all in the Department of Agriculture, the Bureau of Land Management in the Interior Department, and ex officio representation by the Budget Bureau.

The committee's determination was that $1.26 per animal-unit-month was the best available base fee for cattle grazing. Further analysis resulted in this figure being lowered to $1.23/AUM.

On November 15, 1968, Secretaries Freeman and Udall announced proposed changes in the grazing fee schedules, designed to reach the recommended base price of $1.23 in 10 years. This stretch-out in achieving the base price is intended to minimize the economic impact of the proposed fee change on ranchers.

It is reasonable to expect a businessman to resist any increase in his cost of doing business, but one expects him to offer arguments considerably less specious than those we have heard from the livestock people.

On the one hand we have been told that production costs of livestock operations increased "by more than 100 percent" since 1950. Although the fee adjustment proposal next year would increase fractionally, a factor which represents only about 6 to 8 percent at most of the total cost of production, we are told it would force many ranchers out of business.

We are also told that the consumer will have to pay higher prices for meat. Given the astronomical increase in meat prices in the last few years, this is an argument which will frighten few people, as meat has already been essentially priced out of the market for many of them. Further, only a small portion of the livestock which eventually reach the marketplace have been grazed on public rangelands. One organization estimates the figure as low as 2 percent, while the industry claims "as much as 20 percent of the total U.S. cow-herd would be in jeopardy."

The industry has argued extensively about the relationship between grazing costs and the market price of meat, claiming a direct relationship. If, as the industry claims, first, 20 percent of the cow herd would be affected by the increased fees, and second, private grazing land costs less in many cases, then it follows that we should now be able to choose at a meat counter between higher priced meat from public lands or less expensive meat which was raised on private lands. Lacking such a two-tier price structure for beef we must assume:

First. That 80 percent of the meat sold has been inflated in price to match that set for public land grazing animals; or

Second. Owners of animals run on public lands find it possible to market their product at the same price as owners of cattle raised on private lands.

If the former is true, then the public has been cheated, meat prices should drop immediately, and the excess profits realized by the industry can be used to offset any financial difficulties experienced by operators under the revised fee schedule.

If the second instance represents the situation as it exists, then it follows that stockmen on public lands are operating at or near a loss, in which case they would not be acting as "prudent men" which is one of the criteria used in validating claims to the public lands through mineral entry laws. This same test should certainly be applied for grazing permits.

Another claim of the cattlemen is that they are not being credited with the cost of buying a grazing permit when computations of total production cost are made.

I would point out that the more expensive of these purchases are made from other permit holders, not from the Federal Government. Since grazers are willing to pay a premium for a permit it is obvious that the value of the forage received is greater than the fee paid to the Government.

There simply is no sound reason why a public asset of this nature should be realized by a private individual at the expense of the general public. The full value of the resource used should be realized by the true owners—the people of the United States.

One other argument frequently dragged forth and propped up by not only the cattlemen, but by all the would be saviors of the status quo in resource management, is that the Public Land Law Review Commission is now carrying out its review of all aspects of land use legislation, hence we should make no changes, take no action until they have finished their deliberations. Some of the heel-draggers would even give the impression that such inaction is required by the legislation which established the PLLRC.

Mr. Speaker, as a member of the Public Land Law Review Commission, I can assure my colleagues that operations of that body in no way require or condone the abrogation of congressional or executive responsibility to carry on the management of the Nation's land resources.

The review being conducted by the Commission is a complex and trying task. We have had to extend the life of the Commission already so as to allow it to finish its work. We now expect completion of the review by 1970. I must confess great weariness with the myriad special interest groups who would have us hold off from making obvious and needed changes in any resource policy or procedure until sometime after 1970.

One other point needs to be made. There will be a small number of livestock operators who will actually be disadvantaged by this increase in the cost of grazing. These men are being done a gross injustice by the brash propaganda efforts of those associations which claim to represent the interests of all who graze animals on the public lands.

In reality, it is the administering agencies which show the greatest real concern with the social and economic well-being of the permit holders. The proposed fee schedule is flexible, subject to readjustment on the basis of changes in the relative costs of grazing on private and public lands. Hence, we are not seeing the creation of rigid, unrealistic price scales, but rather guidelines toward the ultimate establishment of standard, current fees.

The agencies now issue exempt—no charge—grazing permits for limited numbers of stock associated with the operation of ranches and farms. In the Forest Service alone, there are currently about 40,000 such permits. This practice will continue.

Additionally, and perhaps most importantly, the Agriculture Department proposal seeks to minimize the effect of the increase in a compassionate manner by a number of means, including reduced fees to selected individuals upon proof of need.

Thus, I submit that what has been proposed is a laudatory attempt to manage a public resource in the public interest—a task entrusted to the competence of administrative agencies, and the conscience of Congress.

I am incorporating as a part of my remarks a study of the history of grazing fees established by the Secretaries of Agriculture and the Interior as prepared by George H. Siehl of the Natural Resources Division of the Library of Congress. The study follows:

HISTORY OF GRAZING FEES—THE FREE RANGE

The early history of the Western cattle industry and associated range utilization was described by George Stewart, a Forest Service ecologist, in *The Western Range*.[1] These excerpts provide some idea of the rapid and expansive deterioration that occurred when the range was used indiscriminately, rather than managed:

"The first era of intensive use of western range by livestock coincided with the great boom in range cattle, which was on the upswing in 1880. By 1881 the price recovery from the 1873 depression generated in the grazing industry a tide of expansion which became a veritable flood in 1883. That year, in Wyoming alone, 20 mammoth cattle companies were organized with a total capitalization of more than $12,000,000.

". . . In a few short years practically all ranges were under use and in many cases depletion had commenced on a scale in keeping with the size of the herds.

"Outfits owning 5,000 to 100,000 cattle were common on the Plains and in the Southwest, and properties of small owners were often consolidated by purchase or by incorporation.

* * * * *

"The buffalo, deer, elk, mountain sheep, antelope, and other forms of wildlife, large and small, that were the first users of the range had little or no discernible effect upon it in terms of depletion. Heavy use by vast roaming or migrating herds of buffalo was common, and around strategic watering places, salt licks, and on favorite breeding grounds range forage would be so fully grazed that little or no feed remained. Yet in every instance seasonal migrations of the herds permitted recovery of the vegetation between grazing periods.

"In all other instances of temporary exhaustion of the range resource, such as overuse by huge colonies of prairie dogs, or utter destruction of forage by locusts or crickets, sufficient periods of recuperation occurred to maintain the productive power of the original range. No evidence remains to us from those times of such persistent overuse as came when the white man began to pasture his cattle year after year on the same range, without affording any opportunity for restoring plant vigor.

"With the discovery of gold in the Rocky

[1] U.S. Congress. Senate. 74th Congress, 2nd Session. Document No. 199. The Western Range. Letter from the Secretary of Agriculture, 620 p. April 24, 1936.

Mountains during the sixties, cattle were taken from Utah and California into Colorado, Montana, Idaho, and Nevada. The strong markets of the late seventies and early eighties carried grazing onto most of the accessible ranges in the mountain region. Here, however, development of the country was slower and more substantial, since it came in connection with homes and farms. Wild hay and irrigated alfalfa produced abundantly and from the first lent stability to range use on a community basis.

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"The tremendous growth in range cattle, however, carried with it a weakness that in the end proved fatal. It was based on a husbandry transplanted from Mexico, which brought to English-speaking people for the first time in history the practice of rearing cattle in great droves without fences, corrals, or feed. The lariat, the type of saddle, chaps, and the sombrero came along with the manner of conducting the business. The very newness of it all as well as the immensity of the outfits left the Americans without guide or standard by which to gage either the security of the cattle as they roamed at large or the ability of the forages to stand up under continual intense utilization. It is little wonder, therefore, that cattle instead of grass came to be regarded as the raw resource and that the neglected forages began to give way before the heavy and unmanaged use to which they were subjected.

"This almost explosive expansion of cattle grazing was based on a great natural resource which the stockmen obtained with little cost. Grass was the magnet and living bonanza that irresistibly drew cattle and cattlemen to this range El Dorado.

* * * * *

"The expectation of fortunes to be made in a few years led to gambling in futures and caused overexpansion both in investments and in range use. In this process the accumulated forage of several years was mined, overuse taking not only the current growth but sapping as well the vigor of the forage plants. The better stockmen recognized the danger but warnings in a minor key during a boom get no hearing, and exploitation raced on.

"This constant drain, without allowing any chance for recuperation, caused the forage 'mine' to peter out. In 1898 Bentley reported that some stockmen considered that in parts of Texas 'the injury has gone almost past the point where redemption is possible.' Ranges that should have carried a cow on every 40 acres had one on every 10 acres."

An extremely severe winter in 1885–1886 was followed by a summer drought and another bad winter. This killed large number of cattle, in places as much as 85% of the herd, and abruptly deflated the speculative balloon.

"So weak had the boom structure been and so severe the shock of its fall that only a wreck of the range-cattle industry remained. Range use had been so concentrated and relentless that the best coulees were hopelessly trampled, and the back slopes weakened in productive power. Herds were broken and scattered; confidence was wiped out; and forced sales for liquidation of debts pressed down the already broken prices.

* * * * *

"While the range was used recklessly by most ranchers, the necessity for providing a dependable forage supply was felt, even before the ruinous winter of 1886–87, by a few stockmen who had purchased land in an effort to prevent summer use of range suitable for winter grazing. Others, realizing that controlled ranges had advantages, were willing to relinquish their 'rights' and persuaded the national convention of Cattle Growers to recommend Federal leases on the public range. Before the boom, in 1881, stockmen of both Montana and Wyoming fought against enacting the law suggested by Powell for enlarged 'arid homesteads', and urged that all proposals to lease land be rejected; but after the boom they felt differently about the situation.

"No action on this recommendation was taken by the Federal Government and the cattlemen then attempted to acquire ownership of as much land as possible. Cowboys were hired to enter land and for a small sum turn it over to their employer. Lands along streams where cattle could water and where wild hay could be grown were acquired first, and later more and more upland range."

A major new threat to the economy of the cattle industry and the ecology of the battered range appeared—the sheep.

"Just when security in the ownership of cattle was becoming established and the West was being taught the necessity of welding land to livestock to insure dependable forage supplies and range use, a tremendous and rapid increase in sheep again stirred up the struggle for range.

"Sheep numbers quickly rose from a comparatively small figure to veritable hordes. This increase came at different times in different States, but maximum numbers were reached in most States between 1880 and 1910. . . .

"Vast numbers of sheep appearing almost without warning on fully used cattle ranges not only aroused a deep resentment but had a dire effect in causing even further exhaustion of the range forage. Compact herds left the range plants shaved to the ground and the soil exposed to wind and water erosion."

Stewart credits the institution of public land control with restoring essential stability to the deteriorating conditions on the range.

"The creation of the national forests . . . greatly stabilized range use and livestock production. An effort was made to administer grazing on the national forests for the benefit both of the permanent stockmen and of the adjacent agricultural communities. Having a definite range allotment with 3 to 5 months of dependable summer feed of high quality helped the stockmen to make the adjustments necessary to supply feed for the remainder of the year."

FOREST SERVICE FEES

The first regulated use of the forest reserves was set by the act of June 4, 1897. Regulations under this act allowed continued grazing of cattle in forest reservations as long as no harm was done to the forest. Sheep, however, were prohibited except in the Washington and Oregon reservations where it was thought that the abundant rainfall would allow for quick regeneration of vegetation. No fees were charged at this time.

Administration of the forest reserves was by the General Land Office in the Department of Interior until transferred to the Department of Agriculture by the act of February 1, 1905.

The first grazing fees were imposed by regulation on January 1, 1906. The minimum fees for summer grazing were set at 5 to 8 cents per head for sheep and, for the summer season, 20 to 35 cents per head for cattle and horses. The annual rate was 35 to 50 cents per head. The regulations further provided that, as the condition of the range improved and the demand for permits increased, the grazing charges would gradually be increased.

The imposition of fees was strongly resisted by stockmen. Clawson writes in *The Federal Lands*,[2] "The authority to control grazing on the forest reserves was challenged successfully in the courts until as late as the period of 1908–11. For many years the authority to charge grazing and other fees was disputed."

A Forest Service view on grazing charges stated:

"The collection of a reasonable fee for the use of national-forest range is nothing more or less than the recognition of the common business principle of paying for values received. The intrinsic worth of the forage and the stability afforded the livestock agriculturist in the use of the range have definite values. Not to collect fees from the range users would result in a subsidy to this group as compared to the producer who operates on privately owned or leased range or farm land. The collection of fees is also justified as a means of offsetting the cost of administration and the construction of improvements on the range by the Government, both of which directly benefit the range user. Nevertheless, almost continuous pressure has been brought by the livestock interests using the range to keep the fees as low as possible."

THE PUBLIC DOMAIN LANDS

From the turn of the century until the 1930's there were numerous efforts to pass legislation which would provide some form of control and management of the public domain rangelands. These efforts are detailed by Foss in his book, *Politics and Grass*.[3]

In the absence of successful legislative action the public domain remained open to all on an unmanaged, first-come first-served basis. The severe grazing paralleled the early practices on forest ranges described by Stewart, and led inevitably to the same result. The 1936 Agriculture Department report[4] said:

"Approximately 162 million acres of unreserved unappropriated public domain remained in the United States on June 30, 1934—practically all of it in the 11 Western States. This is the last 'picked over' remnant of the once vast acreage of free public land, which except for 65 million acres now being organized for administration under the Grazing Act is a no man's land so far as conservation and orderly use of its resources are concerned.

* * * * *

"The forage resources on this land . . . have been depleted approximately 66 percent as compared to virgin condition and the soil and watershed values have been greatly impaired. The use of the land for wildlife conservation has been greatly reduced. The lack of regulation has led to serious social and economic maladjustments.

"Although the need for regulation to conserve and wisely use these resources has been recognized for many years and efforts to obtain action have been aggressively urged since late in the last century, nothing was done about it until recently. In June 1934 the Grazing Act was passed, but only after oppositon which forced amendments that greatly lessened its value as an instrument for the solution of one of the Nation's major conservation problems."

Passage of the Taylor Grazing Act granted the Interior Secretary authority to establish reasonable fees for grazing permits. The first fees, set in consultation with an advisory board of stockmen, were to become effective in 1936. Cows and horses were to be grazed at a rate of five cents per animal unit month, and sheep at one cent per A.U.M.

One point stressed while the bill was under consideration was that revenues should cover the cost of administration. This was reemphasized again when Interior Secretary Krug had cattleman Rex Nicholson study the question of grazing fees late in the 1940's. "Nicholson's proposal side-stepped any consideration of fees based on the value of forage or any other criterion. It assumed that grazing fees should cover only the cost of administering the program."[5]

UNIFORMITY AND FAIR RETURN

The Taylor Grazing Act was an important step in implementing a policy of insuring a

[2] Clawson, Marion, and Burnell Held. The Federal Lands: Their Use and Management. Johns Hopkins Press, Baltimore. 1957. 501 p.

[3] Foss, Philip O. Politics and Grass. University of Washington Press, Seattle. 1960. 236 p.

[4] *Op. cit.* The Western Range.

[5] *Op. cit.* Politics and Grass.

fair return to the Federal Treasury for the use of public resources. The first fees set for grazing on the public domain were far lower than those charged on National Forests—a disparity which, despite criticism, continues today.

The two elements of the grazing fee system sought by many—uniformity and fair return—are already present inasmuch as the Bureau of Land Management fees are uniform, and the Forest Service fees come closest to yielding a fair return. The problem has been to combine the best features of both systems.

Attempts to bring the BLM fees more nearly in line with those charged by the Forest Service date almost to the establishment of the former fees in 1936. The Congress set forth guidelines in the Independent Offices Appropriations Act of 1952 for establishment of user-charges. The Bureau of the Budget issued Circular No. A-25 in 1959, which provided further guidance. Numerous authors have chronicled the effective resistance to fee increases by the stockmen and their organizations. A comprehensive review of this conflict is contained in the chapter on administration of public grazing lands in *History of Public Land Law Development.*[6]

In late 1968, as a result of a joint two-year study by the Departments of Agriculture, Interior and Defense, a proposal to revise the fee schedules was published in the Federal Register. The proposal would result in a common base fee of $1.23/A.U.M. being reached in ten years by a series of equal increments.

A period of 45 days was provided for comment from interested parties, during which time conservation organizations generally lined up in support of the measure and stockmens' associations vigorously criticized it. Both sides presented what has become the standard arguments as used previously when fee increases were proposed.

THE GRAZING FEE RECORD

The fees charged by the Interior Department since 1936 are summarized in the following table:

Year	Rate per AUM	
	Cattle	Sheep
1935		
1936–46	$0.05	$0.01
1947–50	.08	.016
1951–54	.12	.024
1955–57	.15	.03
1958	.19	.034
1959–60	.22	.042
1961–62	.19	.034
1963–65	.30	.06
1966–68	.33	.066

The record is not nearly as simple for the Forest Service fee schedules. Dutton[7] has summarized the early history of these grazing charges.

"From 1906 until 1910 there was little change in the fees, except that a few adjustments were made between forests and regions in order to assure like fees for like ranges. The regulations in 1910 provided for the establishment of cattle fees from 35 cents to 60 cents, raising the maximum limit 10 cents per head per annum, and of sheep fees from 10 cents to 18 cents yearlong.

"In 1915 the regulation was again amended and the per annum fees were established at 40 cents to $1.50 per head per annum for cattle, and the rates for sheep at 25 percent of the rates for cattle.

". . . the Secretary of Agriculture, under date of November 3, 1916, issued an order increasing the grazing fees from 12 to 20 cents per head for 1917 with the same amount of increase for each of the succeeding years of 1918 and 1919, provided no single increase or series of increases resulted in a fee in excess of $1.50 per annum. A minimum rate of 60 cents per annum was established. These were flat rate fees and the examples are on a cattle basis."

A major study was undertaken in 1920 to determine a fair basis of compensation for grazing on the National Forest rangelands. A new fee schedule was drawn and presented to 9,000 permittees. While 1,700 accepted the increases:

"The great majority of the remaining 7,300 permittees agreed to the fairness of the method but, as a business proposition, were almost unanimous in opposing any increase at that time."

A review of the situation was ordered by the Agriculture Secretary.

"Mr. Dan D. Casement, Kansas livestock breeder and leader in the industry, was selected to make the review with the understanding that the 1919 fee rate would continue through 1925 and 1926, except where the appraisal had shown the 1919 rates to be in excess of the value of the forage."

Casement recommended an average reduction of 25% of the proposed new schedule, and the use after 1930 of the price of beef and lamb in setting fees. The new fees were approved in January 1927.

"Increases called for by the final adjusted fees were applied in installments of 25 percent each during the years of 1928, 1929, 1930 and 1931, the full increase being effective in 1931. Under this schedule the average fee per head per month for cattle was increased from 10.4 cents to approximately 14.5 cents; for sheep from 2.9 to about 4.5 cents. Fees by Regions, Forests, and grazing allotments of course varied considerably above or below the average."

The use of the market price formula suggested by Casement was approved and applied in 1933. "It recognized that prices received by the producer year by year are indices to the ability to pay for a given commodity." This guideline was adopted by the BLM in 1963.

The following table shows the average National Forest grazing fees by years in cents per Animal Unit Months.

Year	Fee per AUM	
	Cattle	Sheep
1933	9.05	2.05
1934	7.51	2.38
1935	8.04	2.71
1936	13.05	3.36
1937	12.55	3.66
1938	14.98	4.24
1939	13.4	3.3
1940	14.89	3.68
1941	15.97	3.85
1942	18.9	4.6
1943	23.0	5.5
1944	26.0	6.25
1945	24.8	6.03
1946	27.0	6.25
1947	31.0	7.5
1948	40.0	10.0
1949	49.0	11.0
1950	42.0	10.75
1951	51.0	12.25
1952	64.0	15.25
1953	54.0	11.75
1954	35.0	9.00
1955	37.0	9.00
1956	35.0	8.75
1957	34.0	9.00
1958	39.0	9.75
1959	50.0	10.25
1960	51.0	9.25
1961	46.0	8.75
1962	46.0	7.75
1963	49.0	9.00
1964	46.0	9.00
1965	42.0	9.75
1966	46.0	11.25
1967	51.0	11.50
1968	51.0	11.00

[6] Gates, Paul W. History of Public Land Law Development. GPO, Washington. 1968. 828 p.

[7] Dutton, W. L. History of Forest Service Grazing Fees. Journal of Range Management, Vol. 6, No. 6, November 1953. p. 393–98.

ESTONIAN INDEPENDENCE DAY

(Mr. McCORMACK (at the request of Mr. COHELAN) was granted permission to extend his remarks at this point in the RECORD.)

Mr. McCORMACK. Mr. Speaker, Estonia is a small country in northeastern Europe, one of the three Baltic States. With an area of about 17,000 square miles and with 1,300,000 inhabitants, it has always been among the smallest of European countries. Though quite small in numbers, the Estonians have always faced their far more numerous and powerful foes with courage and firm determination, convinced that theirs is a righteous and sacred cause. Even in defeat they have earned the respect of their foes. In the course of their modern history, when it became impossible for them to maintain their national independence, even then they refused to bend their knees to their overpowering overlords. For more than two centuries they were subjected to cruel treatment in the hands of the czars' callous agents. They were fiercely prosecuted for some of the beliefs they held. Still they clung to these beliefs until the time came for their liberation. In 1917 when the czarist regime in Russia was overthrown, they saw their chance, seized upon it and proclaimed their national independence on February 24th of 1918.

Thenceforth the Estonian people lived and worked happily in their homeland for about two decades. But world-shaking events since late 1930's have brought tragedy to the Estonians. In mid-1940 the country was overrun and then annexed to the Soviet Union. Since then unhappy Estonians have not known freedom in their homeland. For nearly three decades they have been suffering under cruel foreign tyrants. Their overlords have treated them as prisoners, and they are being forced to work under abominable conditions. They have little freedom of movement within the country, and are forbidden to leave the country except in rare cases and under very rigid conditions. But the people have not stopped their fight for freedom, and they carry it on quietly and clandestinely with all the means at their disposal. They pray for the end of their enslavement by Communist tyrants and anxiously look forward to their deliverance from totalitarian tyranny. On the 51st anniversary observance of their independence day we all hope that these sturdy and stouthearted people will attain their national goal and live in peace in their homeland.

SPECIAL ORDERS GRANTED

By unanimous consent, permission to address the House, following the legislative program and any special orders heretofore entered, was granted to:

(The following Members (at the request of Mr. COUGHLIN) to revise and extend their remarks and include extraneous matter:)

Mr. MINSHALL, for 45 minutes, today.

Mr. HOSMER, for 5 minutes, today.

Mr. SAYLOR, for 60 minutes, today.

EXTENSIONS OF REMARKS

By unanimous consent, permission to extend remarks was granted to:

Mr. PODELL to extend his remarks during the special order today on the antiballistic-missile program.

Mr. MICHEL in two instances and to in-

clude an address by the Honorable John Gardner and several editorials.

Mr. DON H. CLAUSEN and to include extraneous matter.

Mr. ALBERT and to include extraneous matter.

Mr. HAGAN (at the request of Mr. ALBERT) in two instances.

(The following Members (at the request of Mr. COUGHLIN) and to include extraneous matter:)

Mr. ASHBROOK.
Mr. ROUDEBUSH.
Mr. BOB WILSON in two instances.
Mr. WHALEN.
Mr. WIDNALL in two instances.
Mr. LATTA.
Mr. MCKNEALLY.
Mr. HARVEY.
Mr. SAYLOR.
Mr. CRAMER.
Mr. FREY.
Mr. HUNT in three instances.
Mr. SCHWENGEL in two instances.
Mr. O'KONSKI.
Mr. SCHERLE.
Mr. KUYKENDALL.
Mr. PRICE of Texas.
Mr. DERWINSKI in two instances.
Mr. SKUBITZ in three instances.
Mr. ZWACH.
Mr. ROBISON.
Mr. WYMAN in two instances.
Mr. FINDLEY.
Mr. REID of New York.

(The following Members (at the request of Mr. COHELAN) and to include extraneous matter:)

Mr. DENT.
Mr. GONZALEZ in three instances.
Mr. LONG of Maryland in three instances.
Mr. BOLLING in two instances.
Mr. TEAGUE of Texas in six instances.
Mr. JOHNSON of California.
Mr. EVINS of Tennessee.
Mr. HOLIFIELD.
Mr. OLSEN in three instances.
Mr. GILBERT in two instances.
Mr. PODELL in two instances.
Mr. GALLAGHER in two instances.
Mr. FULTON of Tennessee in four instances.
Mr. ST GERMAIN.
Mr. PICKLE.
Mr. KYROS.
Mr. ROSENTHAL in three instances.
Mr. THOMPSON of New Jersey in two instances.
Mr. O'NEILL of Massachusetts in two instances.
Mr. MURPHY of New York.
Mr. DINGELL in two instances.
Mr. RARICK in four instances.
Mr. PATTEN.
Mr. RYAN in three instances.
Mr. KOCH in four instances.
Mr. FRASER in two instances.
Mr. BEVILL.
Mr. BIAGGI in two instances.
Mr. MOLLOHAN in five instances.
Mr. FASCELL in two instances.
Mr. ANNUNZIO.

ADJOURNMENT

Mr. COHELAN. Mr. Speaker, I move that the House do now adjourn.

The motion was agreed to; accordingly (at 3 o'clock and 23 minutes p.m.) the House adjourned until tomorrow, Thursday, February 27, 1969, at 12 o'clock noon.

EXECUTIVE COMMUNICATIONS, ETC.

Under clause 2 of rule XXIV, executive communications were taken from the Speaker's table and referred as follows:

538. A letter from the Comptroller General of the United States, transmitting a report of audit of Federal Savings and Loan Insurance Corporation supervised by Federal Home Loan Bank Board for the year ended December 31, 1967 (H. Doc. No. 91–82); to the Committee on Government Operations and ordered to be printed.

539. A letter from the director, legislative commission, the American Legion, transmitting a report of the proceedings of the 50th Annual National Convention of the American Legion held in New Orleans, La., September 10–12, 1968, pursuant to law (H. Doc. No. 91–83); to the Committee on Veterans' Affairs and ordered to be printed with illustrations.

540. A letter from the Architect of the Capitol, transmitting a report of expenditures during the period July 1–December 31, 1968, pursuant to section 105(b) of Public Law 88–454; to the Committee on Appropriations.

541. A letter from the assistant to the president of the American Academy of Arts and Letters, transmitting, the report of the academy for the year 1968, pursuant to the provisions of section 4 of their charter; to the Committee on House Administration.

542. A letter from the Under Secretary of the Interior, transmitting the annual report on the anthracite mine water control and mine sealing and filling program, pursuant to the provisions of 69 Stat. 352, as amended by 76 Stat. 934; to the Committee on Interior and Insular Affairs.

PUBLIC BILLS AND RESOLUTIONS

Under clause 4 of rule XXII, public bills and resolutions were introduced and severally referred as follows:

By Mr. ABBITT:

H.R. 7692. A bill to provide specific and additional penalties for the use or carrying of firearms in the commission of crimes; to the Committee on the Judiciary.

By Mr. ADDABBO:

H.R. 7693. A bill to amend the Urban Mass Transportation Act of 1964 to authorize certain grants to assure adequate commuter service in urban areas, and for other purposes; to the Committee on Banking and Currency.

By Mr. BERRY:

H.R. 7694. A bill to increase from $600 to $750 the personal income tax exemptions of a taxpayer (including the exemption for a spouse, the exemption for a dependent, and the additional exemption for old age and blindness); to the Committee on Ways and Means.

By Mr. BINGHAM:

H.R. 7695. A bill to amend title IV of the Social Security Act to repeal the provisions limiting the number of children with respect to whom Federal payments may be made under the program of aid to families with dependent children; to the Committee on Ways and Means.

By Mr. BURKE of Massachusetts (for himself, Mr. BATES, Mr. BOLAND, Mr. CLEVELAND, Mr. CONTE, Mr. DONOHUE, Mr. HALL, Mr. HATHAWAY, Mr. HULL, Mr. KEITH, Mr. KYROS, Mr. MCKNEALLY, Mr. MORSE, Mr. O'NEILL of Massachusetts, Mr. PIRNIE, Mr. PRICE of Illinois, Mr. ST GERMAIN, Mr. SCHNEEBELI, Mr. TIERNAN, and Mr. WYMAN):

H.R. 7696. A bill to provide for orderly trade in footwear; to the Committee on Ways and Means.

By Mr. CAHILL:

H.R. 7697. A bill to provide Federal assistance for special projects to demonstrate the effectiveness of programs to provide emergency care for heart attack victims by trained persons in specially equipped ambulances; to the Committee on Interstate and Foreign Commerce.

H.R. 7698. A bill to prevent vessels built or rebuilt outside the United States or documented under foreign registry from carrying cargoes restricted to vessels of the United States; to the Committee on Merchant Marine and Fisheries.

By Mr. CELLER:

H.R. 7699. A bill to incorporate into title 28, United States Code, "Judiciary and Judicial Procedure," certain existing laws relating to admiralty and maritime judicial matters; to the Committee on the Judiciary.

By DON H. CLAUSEN:

H.R. 7700. A bill to amend title 10, United States Code, to equalize the retirement pay of members of the uniformed services of equal rank and years of service, and for other purposes; to the Committee on Armed Services.

H.R. 7701. A bill to provide for engineering investigations on earthquakes, seismic waves, and related phenomena, and for other purposes; to the Committee on Public Works.

H.R. 7702. A bill to amend title 38, United States Code, to provide survivor benefits for military career personnel; to the Committee on Veterans' Affairs.

By Mr. CONYERS (for himself, Mr. ANNUNZIO, Mr. BELL of California, Mr. BINGHAM, Mr. BOLLING, Mr. BRADEMAS, Mr. BROWN of California, Mrs. CHISHOLM, Mr. CLAY, Mr. CULVER, Mr. DIGGS, Mr. EDWARDS of California, Mr. FRASER, Mr. HALPERN, Mr. JOELSON, Mr. KOCH, Mr. LOWENSTEIN, Mr. MIKVA, Mrs. MINK, Mr. OTTINGER, Mr. REID of New York, Mr. REUSS, Mr. ROSENTHAL, Mr. RYAN, and Mr. STOKES.

H.R. 7703. A bill to designate the birthday of Martin Luther King, Jr., as a legal public holiday; to the Committee on the Judiciary.

By Mr. CONYERS (for himself and Mr. WILLIAM D. FORD):

H.R. 7704. A bill to assure to every American a full opportunity to have adequate employment, housing, and education, free from any discrimination on account of race, color, religion, or national origin, and for other purposes; to the Committee on Education and Labor.

By Mr. DIGGS:

H.R. 7705. A bill to authorize realistic, economic, and modern building heights and bulk in the District of Columbia, to provide new housing and employment opportunities for all, to expand the tax base, to stimulate and assist efforts to break the poverty cycle and strengthen the economy, to provide parking, to rebuild and renew blighted, slum, burned-out, and underdeveloped areas, to conserve and make the best, and maximum, use of land, to achieve the best design, to save tax funds, and for other purposes; to the Committee on the District of Columbia.

By Mr. DULSKI:

H.R. 7706. A bill to amend the Federal Aviation Act of 1958 in order to establish certain requirements with respect to air traffic controllers; to the Committee on Interstate and Foreign Commerce.

H.R. 7707. A bill to amend the Federal Food, Drug, and Cosmetic Act to include a definition of food supplements, and for other purposes; to the Committee on Interstate and Foreign Commerce.

H.R. 7708. A bill for the relief of certain nonprofit medical research institutions; to the Committee on the Judiciary.

By Mr. DUNCAN:

H.R. 7709. A bill to provide for the renewal and extension of certain sections of the Appalachian Regional Development Act of 1965; to the Committee on Public Works.

H.R. 7710. A bill to provide for the renewal and extension of certain sections of the Public Works and Economic Development Act of 1965; to the Committee on Public Works.

H.R. 7711. A bill to amend title 38 of the

United States Code so as to make presumptions relating to certain diseases applicable to veterans who served during the period between the end of World War II and the beginning of the Korean conflict; to the Committee on Veterans' Affairs.

By Mr. ESCH:

H.R. 7712. A bill to extend the executive reorganization provisions of title 5, United States Code, for an additional 2 years, and for other purposes; to the Committee on Government Operations.

By Mr. ESHLEMAN:

H.R. 7713. A bill to provide for the election of President and Vice President as required by the article of amendment to the Constitution proposed by House Joint Resolution 362 of the 91st Congress; to the Committee on House Administration.

By Mr. FULTON of Pennsylvania:

H.R. 7714. A bill to provide for the issuance of a special postage stamp in commemoration of the golden anniversary of the National Federation of Business and Professional Women's Clubs, Inc., on July 16, 1969; to the Committee on Post Office and Civil Service.

By Mr. FULTON of Tennessee:

H.R. 7715. A bill to prohibit the dissemination through interstate commerce or the mails of materials harmful to persons under the age of 18 years, and to restrict the exhibition of movies or other presentations harmful to such persons; to the Committee on the Judiciary.

By Mr. GILBERT:

H.R. 7716. A bill to amend certain provisions of existing law relative to low- and moderate-income housing; to the Committee on Banking and Currency.

By Mr. HALEY:

H.R. 7717. A bill to amend the Federal Reserve Act to place insured nonmember banks on a parity with other insured banks in respect of their eligibility as depositories for member banks; to the Committee on Banking and Currency.

By Mr. HANNA (for himself, Mr. LANGEN, Mr. BROWN of California, Mr. CORMAN, Mr. SMITH of Iowa, Mr. PETTIS, Mr. CARTER, Mr. WALDIE, Mr. BLANTON, and Mr. WATKINS):

H.R. 7718. A bill to amend the Communications Act of 1934 in order to prohibit the broadcasting of any advertising of alcoholic beverages; to the Committee on Interstate and Foreign Commerce.

By Mr. HARSHA:

H.R. 7719. A bill to amend the Internal Revenue Code of 1954 to increase from $600 to $1,200 the personal income tax exemptions of a taxpayer (including the exemption for a spouse, the exemptions for a dependent, and the additional exemptions for old age and blindness); to the Committee on Ways and Means.

By Mr. HELSTOSKI:

H.R. 7720. A bill to amend title II of the Social Security Act so as to liberalize the conditions governing eligibility of blind persons to receive disability insurance benefits thereunder; to the Committee on Ways and Means.

By Mr. HORTON:

H.R. 7721. A bill to amend the Federal Hazardous Substances Act to protect children from toys or other articles intended for use by children which present any electrical, mechanical, or thermal hazard; to the Committee on Interstate and Foreign Commerce.

H.R. 7722. A bill to amend the Railroad Retirement Act of 1937 to provide for standard-of-living increases in the annuities and pensions (and lump-sum payments) which are payable thereunder; to the Committee on Interstate and Foreign Commerce.

H.R. 7723. A bill to amend chapter 2 of the Internal Revenue Code of 1954 to reduce (to the level of the tax imposed on employees and employers) the rates of tax imposed on self-employment income for purposes of old-age, survivors', and disability insurance; to the Committee on Ways and Means.

H.R. 7724. A bill to amend title II of the Social Security Act to provide for standard-of-living increases in the benefits payable thereunder; to the Committee on Ways and Means.

H.R. 7725. A bill to amend title II of the Social Security Act to provide a substantial liberalization in the retirement test; to the Committee on Ways and Means.

H.R. 7726. A bill to amend title II of the Social Security Act to increase widow's and widower's insurance benefits; to the Committee on Ways and Means.

H.R. 7727. A bill to amend section 228 of the Social Security Act to eliminate the existing reduction in benefits thereunder on account of other governmental pensions, and in lieu thereof to prohibit the payment of such benefits to any individual whose annual income from all sources exceeds $2,500 (or $3,750 in the case of a couple); to the Committee on Ways and Means.

H.R. 7728. A bill to amend title II of the Social Security Act to eliminate the 6-month waiting period for disability insurance benefits in cases of blindness or loss of limb and in certain other cases where the severity of the impairment is immediately determinable; to the Committee on Ways and Means.

By Mr. HUNT:

H.R. 7729. A bill to amend the Internal Revenue Code of 1954 to increase, for 1970 and 1971, the personal income tax exemptions of a taxpayer from $600 to $800, and to provide that for taxable years beginning after 1971 such exemptions shall be $1,000; to the Committee on Ways and Means.

By Mr. KING:

H.R. 7730. A bill to retrocede a portion of the District of Columbia to the State of Maryland; to the Committee on the District of Columbia.

By Mr. JOELSON:

H.R. 7731. A bill to amend the Federal Hazardous Substances Act to protect children from toys and other articles intended for use by children which are hazardous due to the presence of electrical, mechanical, or thermal hazards, and for other purposes; to the Committee on Interstate and Foreign Commerce.

H.R. 7732. A bill to amend the Internal Revenue Code of 1954 with respect to the definition of commuter fare revenue; to the Committee on Ways and Means.

By Mr. LATTA:

H.R. 7733. A bill to amend title II of the Social Security Act so as to remove the limitation upon the amount of outside income which an individual may earn while receiving benefits thereunder; to the Committee on Ways and Means.

By Mr. McCARTHY (for himself, Mr. ADAMS, Mr. ADDABBO, Mr. ANDERSON of California, Mr. BINGHAM, Mr. BLATNIK, Mr. CONYERS, Mr. DULSKI, Mr. EDWARDS of California, Mr. FARBSTEIN, Mr. HALPERN, and Mr. HASTINGS):

H.R. 7734. A bill to amend the Federal Water Pollution Control Act, as amended, and for other purposes; to the Committee on Public Works.

By Mr. McCLURE:

H.R. 7735. A bill to amend title 38 of the United States Code to restore entitlement to benefits on termination of a widow's remarriage; to the Committee on Veterans' Affairs.

By Mr. McFALL:

H.R. 7736. A bill to regulate imports of milk and dairy products, and for other purposes; to the Committee on Ways and Means.

By Mr. MACDONALD of Massachusetts:

H.R. 7737. A bill to amend the Communications Act of 1934 by extending the provisions thereof relating to grants for construction of educational television or radio broadcasting facilities and the provisions relating to support of the Corporation for Public Broadcasting; to the Committee on Interstate and Foreign Commerce.

By Mr. MATHIAS:

H.R. 7738. A bill to amend section 2312 of title 18, United States Code, to permit a person enforcing that section to stop a motor vehicle to inspect the serial number of its body and motor if he has reason to suspect that the motor vehicle has been stolen; to the Committee on the Judiciary.

H.R. 7739. A bill to amend title 28 of the United States Code to provide that any judge or justice of the United States appointed to hold office during good behavior shall retire from regular active service upon attaining the age of 70 years; to the Committee on the Judiciary.

By Mr. MEEDS:

H.R. 7740. A bill to exempt from the antitrust laws certain joint newspaper operating arrangements; to the Committee on the Judiciary.

H.R. 7741. A bill to provide for improved employee-management relations in the postal service, and for other purposes; to the Committee on Post Office and Civil Service.

By Mr. MINSHALL:

H.R. 7742. A bill to require mailing list brokers to register with the Postmaster General, and suppliers and buyers of mailing lists to furnish information to the Postmaster General with respect to their identity and transactions involving the sale or exchange of mailing lists, and for other purposes; to the Committee on Post Office and Civil Service.

By Mr. MONAGAN:

H.R. 7743. A bill to strengthen the penalty provisions of the Gun Control Act of 1968; to the Committee on the Judiciary.

H.R. 7744. A bill to impose a minimum income tax on certain individuals and corporations with substantial income; to the Committee on Ways and Means.

By Mr. NIX:

H.R. 7745. A bill to make Dr. Martin Luther King's birthday a legal public holiday; to the Committee on the Judiciary.

By Mr. O'NEAL of Georgia:

H.R. 7746. A bill to prohibit the dissemination through interstate commerce or the mails of materials harmful to persons under the age of 18 years, and to restrict the exhibition of movies or other presentations harmful to such persons; to the Committee on the Judiciary.

By Mr. PERKINS (for himself, Mr. SAYLOR, Mr. SKUBITZ, Mr. STAGGERS, Mr. DENT, Mr. BRAY, Mr. SLACK, Mr. KEE, Mr. MOLLOHAN, Mr. WAMPLER, Mr. MORGAN, Mr. OLSEN, Mr. FLOOD, Mr. CLARK, Mr. MOORHEAD, Mr. YATRON, Mr. GRAY, Mr. PRICE of Illinois, Mr. ROONEY of Pennsylvania, Mr. HAYS, Mr. CARTER, and Mr. POLLOCK):

H.R. 7747. A bill to improve the safety conditions of persons working in the coal mining industry of the United States; to the Committee on Education and Labor.

By Mr. PICKLE:

H.R. 7748. A bill to improve the financial management of Federal assistance programs, to facilitate the consolidation of such programs, to provide temporary authority to expedite the processing of project applications drawing upon more than one Federal assistance program, to strengthen further congressional review of Federal grants-in-aid, and to extend and amend the law relating to intergovernmental cooperation; to the Committee on Government Operations.

By Mr. PODELL:

H.R. 7749. A bill to amend the Internal Revenue Code of 1954 to allow a credit against income tax to employers for the expenses of providing job-training programs; to the Committee on Ways and Means.

By Mr. QUIE:

H.R. 7750. A bill to establish a community self-determination program to aid the peo-

ple of urban and rural communities in securing gainful employment, achieving the ownership and control of the resources of their community, expanding opportunity, stability, and self-determination, and making their maximum contribution to the strength and well-being of the Nation; to the Committee on Ways and Means.

H.R. 7751. A bill to amend the Internal Revenue Code of 1954 to allow a credit against income tax to employers for the expenses of providing job-training programs; to the Committee on Ways and Means.

By Mr. RARICK:

H.R. 7752. A bill to require judges of courts of the United States to file confidential statements with the Comptroller General of the United States, and for other purposes; to the Committee on the Judiciary.

H.R. 7753. A bill to abolish the Commission on Executive, Legislative, and Judicial Salaries established by section 225 of the Federal Salary Act of 1967, and for other purposes; to the Committee on Post Office and Civil Service.

H.R. 7754. A bill to amend section 138 of the Legislative Reorganization Act of 1946 so as to provide for the reduction of the public debt by at least 10 percent of the estimated overall Federal receipts for each fiscal year; to the Committee on Rules.

H.R. 7755. A bill to amend the Internal Revenue Code of 1954 to require each tax-exempt organization to file an annual information return showing each source (including governmental sources) of its income and other receipts, and to provide for a loss of tax exemption in the case of willful failure to file, or fraudulent statements made in connection with, such return; to the Committee on Ways and Means.

H.R. 7756. A bill to amend the Internal Revenue Code of 1954 to add social security benefits to the annuity and pension payments which are exempt from levy thereunder; to the Committee on Ways and Means.

By Mr. RIVERS:

H.R.7757. A bill to authorize appropriations during the fiscal year 1969 for procurement of aircraft for the Armed Forces, and for other purposes; to the Committee on Armed Services.

By Mr. ROSENTHAL:

H.R. 7758. A bill to amend the Foreign Assistance Act of 1962, as amended; to the Committee on Foreign Affairs.

By Mr. ROYBAL:

H.R. 7759. A bill to establish the Interagency Committee on Mexican-American Affairs, and for other purposes; to the Committee on Foreign Affairs.

By Mr. RYAN (for himself, Mr. ADDABBO, Mr. BRASCO, Mr. BROWN of California, Mr. BURTON of California, Mr. CONYERS, Mr. DADDARIO, Mr. EDWARDS of California, Mr. FARBSTEIN, Mr. FRASER, Mr. GILBERT, Mr. GONZALEZ, Mr. HALPERN, Mr. HELSTOSKI, Mr. HOWARD, Mr. KOCH, Mr. LOWENSTEIN, Mr. MATSUNAGA, Mr. MIKVA, Mr. O'NEILL of Massachusetts, and Mr. OTTINGER):

H.R. 7760. A bill to provide supplemental appropriations to fully fund programs to build 300,000 units of low- and moderate-income housing for the fiscal year 1969, and for other purposes, including jobs in housing; to the Committee on Appropriations.

By Mr. RYAN (for himself, Mr. PEPPER, Mr. PODELL, Mr. POLLOCK, Mr. POWELL, Mr. REES, Mr. REID of New York, Mr. ROGERS of Colorado, Mr. ROSENTHAL, and Mr. SCHEUER):

H.R. 7761. A bill to provide supplemental appropriations to fully fund programs to build 300,000 units of low- and moderate-income housing for the fiscal year 1969, and for other purposes, including jobs in housing; to the Committee on Appropriations.

By Mr. ST GERMAIN:

H.R. 7762. A bill to amend the Internal Revenue Code of 1954 to provide a deduction for amounts expended by State policemen for meals which they are required to eat while on duty; to the Committee on Ways and Means.

By Mr. ST. ONGE:

H.R. 7763. A bill to amend chapter 83, title 5, United States Code, to eliminate the reduction in the annuities of employees or Members who elected reduced annuities in order to provide a survivor annuity if predeceased by the person named as survivor and permit a retired employee or Member to designate a new spouse as survivor if predeceased by the person named as survivor at the time of retirement; to the Committee on Post Office and Civil Service.

H.R. 7764. A bill to provide increased annuities under the Civil Service Retirement Act; to the Committee on Post Office and Civil Service.

By Mr. SAYLOR:

H.R. 7765. A bill to rescind the pay increases for Members of Congress and other Federal officials pursuant to Presidential recommendation to Congress in the budget for the 1970 fiscal year, to abolish the quadrennial Commission on Executive, Legislative, and Judicial Salaries, and for other purposes; to the Committee on Post Office and Civil Service.

By Mr. SCHADEBERG:

H.R. 7766. A bill to provide for equitable acquisition practices, fair compensation, and effective relocation assistance in real property acquisitions for Federal and federally assisted programs; to the Committee on Public Works.

H.R. 7767. A bill to modify the reporting requirement and establish additional income exclusions relating to pension for veterans and their widows, to liberalize the bar to payment of benefits to remarried widows of veterans, to liberalize the oath requirement for hospitalization of veterans, and for other purposes; to the Committee on Veterans' Affairs.

By Mr. SCHEUER (for himself, Mr. HECHLER of West Virginia, Mr. HELSTOSKI, Mr. HOWARD, Mr. JONES of Alabama, Mr. KLUCZYNSKI, Mr. MCKNEALLY, Mr. MIKVA, Mr. OTTINGER, Mr. REID of New York, Mr. REUSS, Mr. ROSENTHAL, and Mr. WOLFF):

H.R. 7768. A bill to amend the Federal Water Pollution Control Act, as amended, and for other purposes; to the Committee on Public Works.

By Mr. SCHWENGEL:

H.R. 7769. A bill to modify the decrease in Federal group life insurance at age 65 or after retirement; to the Committee on Post Office and Civil Service.

H.R. 7770. A bill to provide increased annuities under the Civil Service Retirement Act; to the Committee on Post Office and Civil Service.

H.R. 7771. A bill to amend the Civil Service Retirement Act, as amended, to provide minimum annuities for employee annuitants and spouse survivor annuitants; to the Committee on Post Office and Civil Service.

H.R. 7772. A bill to equalize civil service retirement annuities, and for other purposes; to the Committee on Post Office and Civil Service.

H.R. 7773. A bill to amend chapter 83, title 5, United States Code, to eliminate the reduction in the annuities of employees or Members who elected reduced annuities in order to provide a survivor annuity if predeceased by the person named as survivor and permit a retired employee or Member to designate a new spouse as survivor if predeceased by the person named as survivor at the time of retirement; to the Committee on Post Office and Civil Service.

H.R. 7774. A bill to amend part B of title XVIII of the Social Security Act to include prescribed drugs among the items and services covered under the supplementary medical insurance program for the aged; to the Committee on Ways and Means.

H.R. 7775. A bill to amend the Internal Revenue Code of 1954 to provide that the first $5,000 received as civil service retirement annuity from the United States or any agency thereof shall be excluded from gross income; to the Committee on Ways and Means.

H.R. 7776. A bill to amend the Internal Revenue Code of 1954 to restore to individuals who have attained the age of 65 the right to deduct all expenses for their medical care, and for other purposes; to the Committee on Ways and Means.

By Mr. SKUBITZ:

H.R. 7777. A bill for the elimination of health dangers to coal miners resulting from the inhalation of coal dust; to the Committee on Education and Labor.

By Mr. SNYDER:

H.R. 7778. A bill to rescind the pay increases for Members of Congress and other Federal officials pursuant to Presidential recommendation to Congress in the budget for the 1970 fiscal year, to abolish the quadrennial Commission on Executive, Legislative, and Judicial Salaries, and for other purposes; to the Committee on Post Office and Civil Service.

By Mr. STRATTON:

H.R. 7779. A bill to amend the Military Selective Service Act of 1967 to provide for a prime selection group subject to a period of vulnerability of 1 year from age 19 to age 20 and to provide for a random system of selection of inductees; to the Committee on Armed Services.

By Mr. TAYLOR:

H.R. 7780. A bill to rescind the Presidential pay increases for Members of Congress pursuant to recommendations in the budget for the fiscal year ending June 30, 1970, and for other purposes; to the Committee on Post Office and Civil Service.

By Mr. THOMPSON of Georgia:

H.R. 7781. A bill to amend section 2312 of title 18, United States Code, to permit a person enforcing that section to stop a motor vehicle to inspect the serial number of its body and motor if he has reason to suspect that the motor vehicle has been stolen; to the Committee on the Judiciary.

H.R. 7782. A bill to amend title 29 of the United States Code to provide that any judge or justice of the United States appointed to hold office during good behavior shall retire from regular active service upon attaining the age of 70 years; to the Committee on the Judiciary.

H.R. 7783. A bill to amend title II of the Social Security Act to increase the number of years which may be dropped out in computing the benefit of an individual who is forced by a Federal agency (or under Federal, State, or local law) to retire at age 60 or earlier; to the Committee on Ways and Means.

By Mr. THOMPSON of New Jersey (for himself, Mr. ADAMS, Mr. BOLAND, Mr. GILBERT, Mr. HATHAWAY, Mr. HOWARD, Mrs. MINK, Mr. MOORHEAD, Mr. MOSS, Mr. NIX, Mr. OTTINGER, Mr. REID of New York, Mr. REUSS, Mr. ROSENTHAL, Mr. SCHEUER, and Mr. UDALL):

H.R. 7784. A bill to amend the Military Selective Service Act of 1967 to provide for a fair and random system of selecting persons for induction into military service, to provide for the uniform application of selective service policies, to raise the incidence of volunteers in military service, and for other purposes; to the Committee on Armed Services.

By Mr. TIERNAN:

H.R. 7785. A bill to provide for the crediting of certain past employment by certain persons subject to the National Guard Technicians Act of 1968; to the Committee on Armed Services.

H.R. 7786. A bill to amend the International Travel Act of 1961 to provide for Federal regulation of the travel agency industry; to the Committee on Interstate and Foreign Commerce.

By Mr. UTT:

H.R. 7787. A bill to amend Public Law 874, 81st Congress, to include federally connected children living in institutions; to the Committee on Education and Labor.

By Mr. VANDER JAGT:

H.R. 7789. A bill to amend the Internal Revenue Code of 1954 so as to limit the amount cent maximum credit against the Federal estate tax for estate taxes paid to States; to the Commitee on Ways and Means.

H.R. 7789. A bill to amend the Internal Revenue Code of 1954 so as to limit the amount of deductions attributable to the business of farming which may be used to offset nonfarm income; to the Committee on Ways and Means.

By Mr. WAMPLER:

H.R. 7790. A bill to prohibit the Administrator of Veterans' Affairs from requiring an annual income statement from certain pensioners who are 72 years of age or older; to the Committee on Veterans' Affairs.

By Mr. WHALEN:

H.R. 7791. A bill to amend the Military Selective Service Act of 1967; to the Committee on Armed Services.

By Mr. WHALLEY:

H.R. 7792. A bill to amend the Internal Revenue Code of 1954 to extend the head-of-household benefits to unremarried widows and widowers, and individuals who have attained age 35 and who have never been married or who have been separated or divorced for 3 years or more, who maintain their own households; to the Committee on Ways and Means.

By Mr. WIGGINS:

H.R. 7793. A bill to designate the Okefenokee National Wildlife Refuge as the "Okefenokee Wilderness"; to the Committee on Interior and Insular Affairs.

By Mr. ZWACH (for himself, Mr. HANSEN of Idaho, Mr. NELSEN, Mr. QUIE, and Mr. WOLD):

H.R. 7794. A bill to amend section 22 of the Agricultural Adjustment Act of 1933, as amended; to the Committee on Ways and Means.

By Mr. DON H. CLAUSEN:

H.J. Res. 490. Joint resolution proposing an amendment to the Constitution of the United States relative to equal rights for men and women; to the Committee on the Judiciary.

By Mr. FISHER:

H.J. Res. 491. Joint resolution proposing an amendment to the Constitution of the United States relative to equal rights for men and women; to the Committee on the Judiciary.

By Mr. JACOBS:

H.J. Res. 492. Joint Resolution proposing an amendment to the Constitution of the United States with respect to the compelling of testimony from a defendant in a criminal case in open court, and with respect to the right of a defendant in a criminal case to be informed of the evidence against him; to the Committee on the Judiciary.

By Mr. PODELL:

H.J. Res. 493. Joint resolution to provide for a study and evaluation of scientific research in medicine in the United States; to the Committee on Interstate and Foreign Commerce.

By Mr. UTT:

H.J. Res. 494. Joint resolution to request the President to negotiate with the Mexican Government for the purpose of setting up a Joint United States-Mexican Commission to investigate the flow of marihuana, narcotic drugs, and dangerous drugs between the United States and Mexico; to the Committee on Foreign Affairs.

By Mr. LANDGREBE (for himself, Mr. MADDEN, Mr. BRADEMAS, Mr. ADAIR, Mr. ROUDEBUSH, Mr. BRAY, Mr. MYERS, Mr. ZION, Mr. HAMILTON, Mr. DENNIS, and Mr. JACOBS):

H. Con. Res. 150. Concurrent resolution honoring the 1969 centennial of Purdue University at West Lafayette, Ind., and the contributions by the university to the welfare of the American people; to the Committee on the Judiciary.

By Mr. OLSEN (for himself and Mr. MIKVA):

H. Con. Res. 151. Concurrent resolution expressing the sense of the Congress with respect to reduced air fares for children, youth, and members of the Armed Forces of the United States; to the Committee on Interstate and Foreign Commerce.

By Mr. WATSON:

H. Con. Res. 152. Concurrent resolution expressing the sense of the Congress that "freedom of choice" plans are the most equitable, legal, and feasible method of facilitating title VI of the Civil Rights Act of 1964; to the Committee on the Judiciary.

By Mr. WYLIE (for himself, Mr. LUKENS, Mr. HUNT, and Mr. SCHERLE):

H. Con. Res. 153. Concurrent resolution expressing the sense of the Congress with respect to reduced air fares for children, youth, and members of the Armed Forces of the United States; to the Committee on Interstate and Foreign Commerce.

By Mr. GALLAGHER:

H. Res. 278. Resolution, U.S. aid for Iraqi Jews; to the Committee on Foreign Affairs.

By Mr. MARTIN:

H. Res. 279. Resolution to authorize the Committee on Banking and Currency to conduct an investigation and study of prices of lumber and plywood; to the Committee on Rules.

By Mr. PODELL:

H. Res. 280. Resolution, United Nations Conventions on Human Rights; to the Committee on Foreign Affairs.

By Mr. ROONEY of Pennsylvania:

H. Res. 281. Resolution authorizing and directing the Committee on Interstate and Foreign Commerce to conduct a study and investigation of magazine sales promotion practices; to the Committee on Rules.

By Mr. SISK:

H. Res. 282. Resolution to create a select committee to regulate parking on the House side of the Capitol; to the Committee on Rules.

H. Res. 283. Resolution creating a select committee to establish a plaque to commemorate Lyndon Baines Johnson's service, as a young man, as doorman at an entrance to the Hall of the House; to the Committee on Rules.

MEMORIALS

Under clause 4 of rule XXII, memorials were presented and referred as follows:

28. By Mr. OLSEN: Resolution of the Senate of the State of Montana to the Montana congressional delegation endorsing Senate bill 500, to amend the Internal Revenue Code to prohibit persons who are not bona fide farmers from using losses incurred in their farming operation as an offset to income from other sources and urging support of that bill by the Montana congressional delegation; to the Committee on Ways and Means.

29. By the SPEAKER: Memorial of the Legislature of the State of New York, relative to the Brooklyn Navy Yard; to the Committee on Armed Services.

30. Also, memorial of the Legislature of the State of New York, relative to the dissemination of pornography through the U.S. mails; to the Committee on Post Office and Civil Service.

PRIVATE BILLS AND RESOLUTIONS

Under clause 1 of rule XXII, private bills and resolutions were introduced and severally referred as follows:

By Mr. ADDABBO:

H.R. 7795. A bill for the relief of Victoria V. Bayle; to the Committee on the Judiciary.

H.R. 7796. A bill for the relief of Anthony Carrington; to the Committee on the Judiciary.

H.R. 7797. A bill for the relief of Valerie and Benjamin Franco; to the Committee on the Judiciary.

By Mr. BIAGGI:

H.R. 7798. A bill for the relief of Maria D'Acunto; to the Committee on the Judiciary.

H.R. 7799. A bill for the relief of Raffaele Dilavello; to the Committee on the Judiciary.

H.R. 7800. A bill for the relief of Dr. Elita B. Gose; to the Committee on the Judiciary.

H.R. 7801. A bill for the relief of Stefano Squitieri; to the Committee on the Judiciary.

H.R. 7802. A bill for the relief of Elderfield, Sara, and Evelyn C. Williams; to the Committee on the Judiciary.

By Mr. BINGHAM:

H.R. 7803. A bill for the relief of Ligaya L. Villazor; to the Committee on the Judiciary.

By Mr. BRADEMAS:

H.R. 7804. A bill for the relief of George C. Karachalios; to the Committee on the Judiciary.

H.R. 7805. A bill for the relief of Anastasia Chionis; to the Committee on the Judiciary.

H.R. 7806. A bill for the relief of Ioannis Vasilios Fotopoulos; to the Committee on the Judiciary.

By Mr. BRASCO:

H.R. 7807. A bill for the relief of Eva Szeman; to the Committee on the Judiciary.

H.R. 7808. A bill for the relief of Branimir Zivkovic; to the Committee on the Judiciary.

By Mr. BROYHILL of Virginia (by request):

H.R. 7809. A bill for the relief of Annamma Thomas (also known as Annamma T. Kuttikandathil); to the Committee on the Judiciary.

By Mr. BUCHANAN:

H.R. 7810. A bill for the relief of Mrs. Berjoohee Constantine; to the Committee on the Judiciary.

H.R. 7811. A bill for the relief of Mark P. Hagood; to the Committee on the Judiciary.

By Mr. CABELL:

H.R. 7812. A bill for the relief of Mr. Louis Gena; to the Committee on the Judiciary.

By Mr. CAREY:

H.R. 7813. A bill for the relief of Giuseppe D'Aguanno; to the Committee on the Judiciary.

By Mr. CELLER:

H.R. 7814. A bill for the relief of Richard E. Thorner; to the Committee on the Judiciary.

By Mr. CHAMBERLAIN:

H.R. 7815. A bill for the relief of Michiko Hirotsu; to the Committee on the Judiciary.

H.R. 7816. A bill for the relief of Tokuko Ozawa; to the Committee on the Judiciary.

By Mr. DADDARIO:

H.R. 7817. A bill for the relief of Thomasina Acierno; to the Committee on the Judiciary.

H.R. 7818. A bill for the relief of Elisabetta DiMetteo and Pietro DiMetteo; to the Committee on the Judiciary.

By Mr. DELANEY (by request):

H.R. 7819. A bill for the relief of Derli Oriovaldo Rosas, Marta Serrano Rosas, Enzo Adhemar Rosas, and Dalva Maritza Rosas; to the Committee on the Judiciary.

By Mr. DOWNING:

H.R. 7820. A bill to permit the vessel *Pious Puffin* to be documented for use in the coastwise trade; to the Committee on Merchant Marine and Fisheries.

By Mr. EILBERG:

H.R. 7821. A bill for the relief of John (Giovanni) Denaro; to the Committee on the Judiciary.

By Mr. FULTON of Pennsylvania:

H.R. 7822. A bill for the relief of Angelo

Pellegrini; to the Committee on the Judiciary.

By Mr. FULTON of Tennessee:

H.R. 7823. A bill for the relief of Dr. Sajjan Gangappa Chikkannaiah; to the Committee on the Judiciary.

By Mr. FRELINGHUYSEN:

H.R. 7824. A bill for the relief of Giovanni Bonfantino; to the Committee on the Judiciary.

By Mr. GIAIMO:

H.R. 7825. A bill for the relief of Tomasso Masella; to the Committee on the Judiciary.

By Mr. GRAY:

H.R. 7826. A bill for the relief of Patricia Gail Dennis; to the Committee on the Judiciary.

By Mr. HANLEY:

H.R. 7827. A bill for the relief of Dr. Amin Fuleihan; to the Committee on the Judiciary.

By Mr. HANSEN of Idaho:

H.R. 7828. A bill for the relief of Helle Bergh Kristensen Jonas; to the Committee on the Judiciary.

H.R. 7829. A bill for the relief of Walter M. Piccirillo, his wife, Emma Piccirillo, and their children, Mario Piccirillo and Daniel Piccirillo; to the Committee on the Judiciary.

By Mr. HARSHA:

H.R. 7830. A bill for the relief of James Howard Giffin; to the Committee on the Judiciary.

By Mr. HELSTOSKI:

H.R. 7831. A bill for the relief of Silvio De Luca; to the Committee on the Judiciary.

H.R. 7832. A bill for the relief of Yasuo Kayaba; to the Committee on the Judiciary.

H.R. 7833. A bill for the relief of Takayuki Yoshida; to the Committee on the Judiciary.

By Mr. JOELSON:

H.R. 7834. A bill for the relief of Ronald Gordon Bullen; to the Committee on the Judiciary.

By Mr. KUYKENDALL:

H.R. 7835. A bill for the relief of Diana Margaret Westley; to the Committee on the Judiciary.

By Mr. LONG of Maryland:

H.R. 7836. A bill for the relief of Mila Sabio Infante; to the Committee on the Judiciary.

By Mr. MANN:

H.R. 7837. A bill for the relief of Colie Lance Johnson, Jr.; to the Committee on the Judiciary.

By Mr. MATHIAS:

H.R. 7838. A bill for the relief of Julian Maisterrena Iturralde; to the Committee on the Judiciary.

By Mr. MORSE:

H.R. 7839. A bill for the relief of Jesus Agner; to the Committee on the Judiciary.

By Mr. PHILBIN:

H.R. 7840. A bill for the relief of Salvatore Graceffa; to the Committee on the Judiciary.

By Mr. PODELL:

H.R. 7841. A bill for the relief of Isidoro Albino and his daughter, Antonina Albino; to the Committee on the Judiciary.

H.R. 7842. A bill for the relief of Audrey Jones; to the Committee on the Judiciary.

H.R. 7843. A bill for the relief of Joseph Lala; to the Committee on the Judiciary.

H.R. 7844. A bill for the relief of Vincenzo Vindigni; to the Committee on the Judiciary.

By Mr. PUCINSKI:

H.R. 7845. A bill for the relief of Miss Marika Nicholas Vassiliadou; to the Committee on the Judiciary.

By Mr. REES:

H.R. 7846. A bill for the relief of Mr. and Mrs. Francisco Mejia-Murillo; to the Committee on the Judiciary.

By Mr. ROONEY of Pennsylvania:

H.R. 7847. A bill for the relief of Serafina Patti; to the Committee on the Judiciary.

By Mr. ROSENTHAL:

H.R. 7848. A bill for the relief of Mr. and Mrs. Haim Ribak, and their children, Amikam, Dvora, and Sara; to the Committee on the Judiciary.

By Mr. ROYBAL:

H.R. 7849. A bill for the relief of Raja Butros El-Qare; to the Committee on the Judiciary.

By Mr. ST GERMAIN:

H.R. 7850. A bill for the relief of Maria de Jesus Goncalves; to the Committee on the Judiciary.

By Mr. STEPHENS:

H.R. 7851. A bill for the relief of Dr. Romeo D. Uy; to the Committee on the Judiciary.

By Mr. TALCOTT:

H.R. 7852. A bill for the relief of Eric Declan Horgan; to the Committee on the Judiciary.

By Mr. TIERNAN:

H.R. 7853. A bill for the relief of Kam Tak Chan; to the Committee on the Judiciary.

By Mr. UTT:

H.R. 7854. A bill for the relief of Wilda M. Kilburn; to the Committee on the Judiciary.

By Mr. WEICKER:

H.R.7855. A bill for the relief of Michelina Cinotti; to the Committee on the Judiciary.

H.R. 7856. A bill for the relief of Franco Geralmo Giraudo; to the Committee on the Judiciary.

H.R. 7857. A bill for the relief of Carmelo Macauda; to the Committee on the Judiciary.

H.R. 7858. A bill for the relief of Leonardo Riccio; to the Committee on the Judiciary.

H.R. 7859. A bill for the relief of Giovanni Sari; to the Committee on the Judiciary.

H.R. 7860. A bill for the relief of Michele Sorbara; to the Committee on the Judiciary.

By Mr. WIGGINS:

H.R. 7861. A bill for the relief of Thelma M. Parong; to the Committee on the Judiciary.

H.R. 7862—A bill for the relief of Fe Fajardo Villanueva; to the Committee on the Judiciary.

PETITIONS, ETC.

Under clause 1 of rule XXII, petitions and papers were laid on the Clerk's desk and referred as follows:

64. By the SPEAKER: Petition of the Congress of Micronesia, relative to an appropriation for the support of Micronesia by the United States; to the Committee on Foreign Affairs.

65. Also, petition of Ohio Bell, Chicago, Ill., relative to redress of grievances; to the Committee on the Judiciary.

66. Also, petition of Clarence Martion, Sr., Washington, D.C., relative to redress of grievances; to the Committee on the Judiciary.

67. Also, petition of Henry Stoner, Columbus, Ohio, relative to John Brown; to the Committee on House Administration.

EXTENSIONS OF REMARKS

THE REPUBLIC OF LITHUANIA

HON. F. BRADFORD MORSE

OF MASSACHUSETTS

IN THE HOUSE OF REPRESENTATIVES

Wednesday, February 19, 1969

Mr. MORSE. Mr. Speaker, February 16 marks the anniversary of the restoration of the independence of Lithuania. This year is the 51st year after the nation-state was proclaimed in 1918. For 22 years the Republic of Lithuania flourished culturally, intellectually, and politically.

This progress was cut short, however, by forced occupation by the U.S.S.R., under whose oppressive and tyrannical domination the people of Lithuania still suffer.

It is particularly important, in view of the dedication of the United States to the right to freedom and independence, that we stand today to commemorate the day when Lithuania was a free and independent nation, to reaffirm our support for justice, and to keep alive the spirit and hope for the day when Lithuania and all captive nations will once again enjoy the exercise of the principles of liberty and self-determination.

The memorandum from the Lithuanian Christian Democratic Union Central Committee is an eloquent expression of the courage, ideals, and goals of the Lithuanian people, and it is an honor to include it here:

LITHUANIAN CHRISTIAN DEMOCRATIC UNION MEMORANDUM

To the Honorable Members of the U.S. Senate and the House of Representatives:

Today marks the Fifty-First Anniversary of the restoration of the independence of Lithuania, once an ancient civilization, whose roots reach to the second century and its kingdom to the thirteenth; that of a nation whose political, economic and social record was as distinctive as it was progressive. It is tragic therefore, that this anniversary is overshadowed by the brutal fact that Lithuania today bears the heavy yoke of Soviet imperialism.

Acting in conspiracy with the Nazi regime—see "Nazi-Soviet Relations 1939-1941", excerpts attached—the Soviet Union broke four major bilateral treaties:

1. The Treaty of Brest-Litovsk of March 3, 1918 in which the Soviet Union forever renounced all claims to Lithuania.

2. The Peace Treaty of July 12, 1920, which defined the common boundaries.

3. The Non-Aggression Pact of September 28, 1926, which was later extended to 1945.

4. The Soviet imposed Mutual Assistance Pact of October 10, 1939.

On June 15, 1940, with the above treaties in full force and effect, the military forces of Soviet Union occupied the territory of Lithuania, and two days later repeated the same attack against the Republics of Latvia and Estonia. Occupation was followed by systemmatic terror and violence. Religious and political persecutions culminated in mass executions and deportations to the Siberian wastelands. Many sources place the number of such Baltic victims at the one million mark.

Several weeks later, the Soviets staged mock elections and as the result of these, forcibly incorporated Lithuania and the other Baltic Republics into their slave empire.

On July 23, 1940, the United States denounced this aggression, and all Administrations since then have affirmed this stand and have opposed this brutal invasion and forced annexation.

It is difficult to conceive that during the present rise of many former colonies to their rightly deserved national independence, a shroud of silence is maintained about Lithuania and the other Soviet occupied countries whose traditions of statehood reach back for many centuries.

It is even more difficult to conceive that all the international crimes committed by the Soviet Union are still not rectified, nor the criminal punished. It is indeed a crime in itself that Kremlin is still permitted to indulge in international rape, as in the case