SON of Tennessee, Mr. KIRWAN, Mr. SYMINGTON, Mr. KARTH, Mr. ASHLEY, Mr. QUIE, Mr. TEAGUE of California, and Mr. CAHILL):

H.J. Res. 927. Joint resolution to supplement the joint resolution making continuing appropriations for the fiscal year 1970 in order to provide for carrying out programs and projects, and for payments to State educational agencies and local educational agencies, institutions of higher education and other educational agencies and organizations, based upon appropriation levels as provided in H.R. 13111, which passed the House of Representatives July 31, 1969, and entitled "An act making appropriations for the Departments of Labor, and Health, Education, and Welfare, and related agencies, for the fiscal year ending June 30, 1970, and for other purposes"; to the Committee on Appropriations.

By Mr. COHELAN (for himself, Mr. GONZALEZ, Mr. DADDARIO, Mr. PRICE of Texas, Mr. HOGAN, Mr. FOREMAN, Mrs. GRIFFITHS, Mr. FEIGHAN, Mr. POLLOCK, Mr. WOLFF, Mr. TAYLOR, Mr. SKUBITZ, Mr. HELSTOSKI, Mr. GARMATZ, Mr. WHITEHURST, Mr. GIBBONS, Mrs. GREEN of Oregon, Mr. DANIELS of New Jersey, Mr. FASCELL, Mr. BOLLING, Mr. BOB WILSON, Mr. BROWN of Ohio, Mr. WHITE, Mr. ZABLOCKI, and Mr. PIRNIE):

H.J. Res. 928. Joint resolution to supplement the joint resolution making continuing appropriations for the fiscal year 1970 in order to provide for carrying out programs and projects, and for payments to State educational agencies and local educational agencies, institutions of higher education and other educational agencies and organizations, based upon appropriation levels as provided in H.R. 13111, which passed the House of Representatives July 31, 1969, and entitled "An act making appropriations for the Departments of Labor, and Health, Education, and Welfare, and related agencies, for the fiscal year ending June 30, 1970, and for other purposes"; to the Committee on Appropriations.

By Mr. COHELAN (for himself, Mr. NIX, Mrs. HECKLER of Massachusetts, Mr. CHARLES H. WILSON, Mr. NEDZI, Mr. EILBERG, Mr. SIKES, Mr. STAFFORD, Mr. ADDABBO, Mr. MORSE, Mr. RODINO, Mr. BINGHAM, Mr. HUNGATE, Mr. WHALEN, Mr. VAN DEERLIN, Mr. ROYBAL, Mr. PHILBIN, Mr. YATRON, Mr. STEED, Mr. EDWARDS of California, Mr. REES, Mr. FRASER, Mr. EVANS of Colorado, Mr. EDMONDSON, and Mr. TALCOTT):

H.J. Res. 929. Joint resolution to supplement the joint resolution making continuing appropriations for the fiscal year 1970 in order to provide for carrying out programs and projects, and for payments to State educational agencies and local educational agencies, institutions of higher education and other educational agencies and organizations, based upon appropriation levels as provided in H.R. 13111, which passed the House of Representatives July 31, 1969, and entitled "An act making appropriations for the Departments of Labor, and Health, Education, and Welfare, and related agencies, for the fiscal year ending June 30, 1970, and for other purposes"; to the Committee on Appropriations.

By Mr. COHELAN (for himself, Mr. PETTIS, Mr. DULSKI, Mr. MOLLOHAN, Mr. KASTENMEIER, Mr. GALLAGHER, Mr. CLARK, Mr. RIEGLE, Mr. DORN, Mr. FARBSTEIN, Mr. PREYER of North Carolina, Mr. HENDERSON, Mr. RUPPE, Mr. BROWN of California, Mr. HANLEY, Mr. CORMAN, Mr. UDALL, Mr. ALBERT, Mr. CLAY, Mr. CONYERS, Mr. BURTON of California, Mr. HANNA, Mr. DELLENBACK, Mr. HORTON, and Mr. GRAY):

H.J. Res. 930. Joint resolution to supplement the joint resolution making continuing appropriations for the fiscal year 1970 in order to provide for carrying out programs and projects, and for payments to State educational agencies and local educational agencies, institutions of higher education and other educational agencies and organizations, based upon appropriation levels as provided in H.R. 13111, which passed the House of Representatives July 31, 1969, and entitled "An act making appropriations for the Departments of Labor, and Health, Education, and Welfare, and related agencies, for the fiscal year ending June 30, 1970, and for other purposes"; to the Committee on Appropriations.

By Mr. COHELAN (for himself, Mr. HOLIFIELD, Mr. REID of New York, Mr. OBEY, Mr. LENNON, Mr. MOSS, Mr. ROTH, Mr. MADDEN, Mr. STAGGERS, Mr. CONTE, Mr. MCDADE, Mr. YATES, Mrs. DWYER, Mr. VANIK, Mr. GILBERT, Mr. LONG of Maryland, Mr. PATTEN, and Mr. BOLAND):

H.J. Res. 931. Joint resolution to supplement the joint resolution making continuing appropriations for the fiscal year 1970 in order to provide for carrying out programs and projects, and for payment to State educational agencies and local educational agencies, institutions of higher education and other educational agencies and organizations, based upon appropriation levels as provided in H.R. 13111, which passed the House of Representatives July 31, 1969, and entitled "An act making appropriations for the Department of Labor, and Health, Education, and Welfare, and related agencies, for the fiscal year ending June 30, 1970, and for other purposes"; to the Committee on Appropriations.

By Mr. FOLEY (for himself and Mr. LOWENSTEIN):

H.J. Res. 932. Joint resolution to increase the appropriation authorization for the food stamp program for fiscal 1970 to $750 million; to the Committee on Agriculture.

By Mr. GUBSER:

H.J. Res. 933. Joint resolution authorizing the President to proclaim the period November 2 through November 8, 1969, as "National Zero Defects Week" to the Committee on the Judiciary.

By Mr. POAGE (for himself, Mr. MCMILLAN, Mr. STUBBLEFIELD, Mr. PURCELL, Mr. O'NEAL of Georgia, Mr. FOLEY, Mr. DE LA GARZA, Mr. VIGORITO, Mr. JONES of North Carolina, Mr. SISK, Mr. BURLISON of Missouri, Mr. LOWENSTEIN, Mr. JONES of Tennessee, Mr. MELCHER, Mrs. MAY, Mr. MAYNE, Mr. ZWACH, Mr. KLEPPE, Mr. SEBELIUS, Mr. MCKNEALLY, and Mr. MIZELL):

H.J. Res. 934. Joint resolution to increase the appropriation authorization for the food stamp program for fiscal 1970 to $610 million; to the Committee on Agriculture.

By Mr. SCHWENGEL:

H.J. Res. 935. Joint resolution to authorize the President to proclaim the month of January of each year as "National Blood Donor Month"; to the Committee on the Judiciary.

By Mr. SEBELIUS:

H.J. Res. 936. Joint resolution to designate Route 70 of the National System of Interstate and Defense Highways as the Eisenhower Memorial Highway; to the Committee on Public Works.

By Mr. MOSS:

H. Con. Res. 399. Concurrent resolution protesting the treatment of American servicemen held prisoner by the Government of North Vietnam and backing the administration in its efforts on behalf of these servicemen held captive by the North Vietnamese Government; to the Committee on Foreign Affairs.

By Mr. PERKINS:

H. Res. 572. Resolution amending House Resolution 200, 91st Congress; to the Committee on Rules.

PRIVATE BILLS AND RESOLUTIONS

Under clause 1 of rule XXII, private bills and resolutions were introduced and severally referred as follows:

By Mr. COLMER:

H.R. 14235. A bill for the relief of Capt. Claire E. Brou; to the Committee on the Judiciary.

By Mr. WHALEN:

H.R. 14236. A bill for the relief of the estate of Luther A. Ihrig; 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:

282. By the SPEAKER: Petition of George L. Carnage, Jr., Atlanta, Ga., relative to redress of grievances; to the Committee on the Judiciary.

283. Also, petition of Allan Feinblum, New York, N.Y., relative to the Director of the Federal Bureau of Investigation; to the Committee on the Judiciary.

SENATE—*Tuesday, October 7, 1969*

The Senate met at 12 o'clock noon and was called to order by the Acting President pro tempore (Mr. METCALF).

The Chaplain, the Reverend Edward L. R. Elson, D.D., offered the following prayer:

Eternal Father, we thank Thee for this good land, for the diverse peoples who live in it and love it, for the strength of our institutions, and for our liberty under Thy rulership.

At this midday pause in the day's duties we ask Thee to cross the inner threshold of our hearts, lay hold upon our faith, and make us equal to the demands of high office. We confess that on the lower levels of life, without Thee, we find ourselves surprised and trapped by unworthy compromises, by cowardly concessions, by weak acquiescence, by disobedience to the heavenly vision. When we would do good, evil is present with us. We need Thee, O God. Every hour we need Thee.

So wilt Thou give us steadfast hearts, resolute wills, sensitive consciences, and enduring faith that we may quit ourselves as men of that kingdom whose Builder and Maker is God. Amen.

THE JOURNAL

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the reading of the Journal of the proceedings of Monday, October 6, 1969, be dispensed with.

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

AUTHENTICATED U.S. GOVERNMENT INFORMATION GPO

LIMITATION ON STATEMENTS DURING TRANSACTION OF ROUTINE MORNING BUSINESS

Mr. MANSFIELD. Mr. President, I ask unanimous consent that statements in relation to the transaction of routine morning business be limited to 3 minutes.

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

CONVEYING TO THE CITY OF CHEYENNE, WYO., CERTAIN REAL PROPERTY OF THE UNITED STATES HERETOFORE DONATED TO THE UNITED STATES BY SUCH CITY

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of the unfinished business.

The ACTING PRESIDENT pro tempore. The bill will be stated by title for the information of the Senate.

The LEGISLATIVE CLERK. A bill (S. 1718) to provide the conveyance to the city of Cheyenne, Wyo., of certain real property of the United States heretofore donated to the United States by such city.

The ACTING PRESIDENT pro tempore. Is there objection to the present consideration of the bill?

There being no objection, the Senate proceeded to consider the bill.

Mr. HANSEN. Mr. President, I rise to urge passage of S. 1718. This bill would provide for the reconveyance to the city of Cheyenne, Wyo., of 28 acres of property which was originally donated to the U.S. Government for use as the site of our fine Veterans' Administration hospital and VA center.

This land was part of an original 600-acre tract which was donated by the city of Cheyenne back in 1932 for the Veterans' Administration facility. Then, in 1965, this 28 acres was declared surplus to the further needs of the Government.

There are no improvements at all on this land. Thus, it includes no valuable improvements constructed by the Federal Government.

This property has long been considered suitable for park and recreational purposes, and it is with this intent that the city of Cheyenne requests the land be reconveyed. The land is located close to Cheyenne's new and beautiful East High School, and would be ideal as a recreational spot. There is no question as to the need for parks and other recreation land, especially in these days of social crisis.

The suitability of this tract for an outstanding park for recreational purposes is well known in Cheyenne. I believe it is altogether suitable for this land to be donated back to Cheyenne.

The land was originally donated to the U.S. Government. The pressure on State and local governments to pay even 50 percent of the fair market value of land for park and recreational purposes—under the terms of the Morse formula—is insurmountable at times. The cost of having to purchase such land could result in its being lost to the use of Cheyenne's citizens forever. Because the city of Cheyenne originally gave the land to the Federal Government, it is altogether fitting, I believe, that the land, now surplus to the needs of the VA center, be made available to all the people of Cheyenne.

Surplus lands which cannot be purchased by State and local governments because of lack of funds might be lost forever. This appears to be a tragic waste when one considers the billions of dollars that the Federal Government is spending to improve the social fabric of the cities.

Mr. President, this bill would result in the establishment of a recreational area which will benefit the entire city of Cheyenne. I urge its favorable consideration by the Senate.

The city of Cheyenne has done an imaginative job with its parks and recreation program, not the least of which is the Sloan's Lake area near Frontier Park and Pavilion on the north side of the city. Another fine area is Holiday Park near Lincoln Way in Cheyenne.

If we pass S. 1718, the city can go forward with plans for an important park development in the eastern area of the city—an area that has experienced a great deal of growth as a new residential area. This timely action by the Senate, and subsequent action in the House, will help to provide for park areas in close proximity to where people live. This is an important consideration which will enhance the full use of the park, both now and in the future. It is a step forward for Cheyenne and Wyoming.

I am pleased to have played a small part in the legislative journey of this measure.

Mr. McGEE. Mr. President, soon the Senate will consider S. 1718 for final passage. This is a bill introduced by my colleague, Senator HANSEN, which would authorize the Administrator of the General Services Administration to convey, without consideration, certain land to the city of Cheyenne, Wyo.

Originally, the city of Cheyenne conveyed, without consideration, a tract consisting of approximately 600 acres to the Federal Government for use by the Veterans' Administration for the construction and operation of hospital facilities. Subsequently, the hospital and medical center were constructed, and it was soon realized that the acreage originally conveyed in 1932 was far in excess of VA requirements for this installation. Throughout the years a major portion of the original 600 acres has been returned to the city of Cheyenne by means of several conveyances.

Mr. President, the 30-acre tract involved in S. 1718 has been carried as surplus property to the requirements of the Veterans' Administration since 1955. It is, therefore, obvious that this land is excess to present and future requirements. I feel that the interests of all parties concerned would be served if this tract could be conveyed to the city of Cheyenne at this time. The city of Cheyenne has various alternate plans to put this property to valuable and beneficial civic uses which will benefit the residents of the area and the region; but until this land is finally reconveyed to the city of Cheyenne their plans for urban development cannot proceed in an orderly fashion. Since this is part of the land which was donated to the Federal Government originally by the city of Cheyenne, it is only fair, now that it is not needed for Federal purposes, that it should be reconveyed to the city without financial consideration. Certainly it would be inequitable for the Federal Government to require a monetary payment from the city of Cheyenne under these circumstances.

This legislation is not without a precedent. In 1965 Congress approved and President Johnson signed into law Public Law 89–345, which authorized conveyance to the city of Cheyenne a 27-acre tract of land which comprised a portion of the original 600 acres.

Mr. President, I, therefore, strongly urge that the Senate give prompt and favorable consideration to this bill so that final passage can be obtained during this session of Congress.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the amendments be considered en bloc.

The ACTING PRESIDENT pro tempore. Without objection, the amendments are considered and agreed to en bloc.

The bill is open to further amendment. If there be no further amendment to be proposed, the question is on the engrossment and the third reading of the bill.

The bill (S. 1718) was ordered to be engrossed for a third reading, was read the third time, and passed.

WATER QUALITY IMPROVEMENT ACT OF 1969

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of Calendar No. 346, S. 7, and I ask unanimous consent that it be the pending business at the conclusion of the transaction of routine morning business.

The ACTING PRESIDENT pro tempore. The bill will be stated by title.

The LEGISLATIVE CLERK. A bill (S. 7) to amend the Federal Water Pollution Control Act, as amended, and for other purposes.

The ACTING PRESIDENT pro tempore. Is there objection to the request of the Senator from Montana? The Chair hears none, and it is so ordered; and the bill will be the pending business at the conclusion of the transaction of routine morning business.

COMMITTEE MEETING DURING SENATE SESSION

Mr. MANSFIELD. Mr. President, I ask unanimous consent that all committees be authorized to meet during the session of the Senate today.

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

ORDER FOR ADJOURNMENT UNTIL 11 A.M. TOMORROW

Mr. MANSFIELD. Mr. President, I ask unanimous consent that when the Senate completes its business today, it stand in adjournment until 11 o'clock tomorrow morning.

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

(Subsequently, the Senate modified this order to provide that at the conclusion of its business today it stand in recess until 10 a.m. tomorrow.)

ORDER FOR RECOGNITION OF SENATOR HUGHES TOMORROW

Mr. MANSFIELD. Mr. President, I ask unanimous consent that, after the disposition of the Journal on tomorrow, the distinguished junior Senator from Iowa (Mr. HUGHES) be recognized for not to exceed 1 hour.

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

ORDER OF BUSINESS

Mr. HOLLINGS. Mr. President, I ask unanimous consent that I may proceed for a period of 30 minutes.

The ACTING PRESIDENT pro tempore. Is there objection? The Chair hears none and it is so ordered.

THE NOMINATION OF JUDGE HAYNSWORTH TO BE AN ASSOCIATE JUSTICE OF THE SUPREME COURT

Mr. HOLLINGS. Mr. President, I would have hoped that the most deliberative body in Government would have proceeded with the nomination of Judge Haynsworth in a more deliberate fashion. At the present moment, the hearings have not been completed and all the testimony has not been submitted, according to the Senator from Indiana. The committee record, as a result, has not been finalized or printed. The Committee on the Judiciary has not formally considered the particular nomination, and as a result the committee has yet to act.

Already, Mr. President, Senators are jumping to conclusions. Rather than the most deliberative body, I almost have the feeling that we are about the 100 fastest guns in the East, trying to get the headline, rather than trying to get to the point in substance of the Haynsworth nomination; that is, the Judge's qualifications to be an Associate Justice of the U.S. Supreme Court.

For example, in the newspaper coverage of this matter, they have rushed headlong and failed to cover many things of importance and, consequently, many things in support of this distinguished jurist. One, which I ask unanimous consent to have printed in the RECORD at the conclusion of my remarks, is the statement by Prof. William Van Alstyne, of the Duke University School of Law, who is known as a civil libertarian and an outstanding and eminent professor.

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

(See exhibit 1.)

Mr. HOLLINGS. Another example, of course, is the studied judgment and testimony of Dr. Charles Alan Wright, now with the University of Texas School of Law, who formerly was with the University of Minnesota; and, if I may, I would like to point out his qualifications:

> For more than twenty years my professional specialty has been observing closely, and teaching and writing about, the work of the federal courts. From 1950 to 1955 I was a member of the faculty at the University of Minnesota Law School and I have been at The University of Texas since that time. I was a visiting professor at the University of Pennsylvania Law School in 1959–60, at the Harvard Law School in 1964–65, and at the Yale Law School in 1968–69. I regularly teach courses in Federal Courts and in Constitutional Law, a seminar in Federal Courts, and a seminar on the Supreme Court. Since 1964 I have been a member of the Standing Committee on Rules of Practice and Procedure of the Judicial Conference of the United States and prior to that time was a member of the Advisory Committee on Civil Rules. I was Reporter for the recently-completed Study of Division of Jurisdiction between State and Federal Courts made by the American Law Institute.

His writings include a seven-volume revision of the Barron and Holtzoff Treatise on Federal Practice and Procedure, and he has taken the trouble to study every decision in which Judge Haynsworth has participated—not merely every one that he has written upon, but every one in which he has participated, which covers a span of some 12 years and 167 volumes of the Federal Reporter.

He says that with his professional interest in the Federal judiciary and with his writing commitments, he necessarily studies with care all the decisions of the Federal courts and inevitably forms judgments about the personnel of those courts. I quote Professor Wright:

> We are fortunate that federal judges are, on the whole, men of very high caliber and great ability. Among even so able a group, Clement Haynsworth stands out. Long before I ever met him, I had come to admire him from his writings as I had seen them in Federal Reporter.

Quite to the contrary of what we read in the headlines, Mr. President, where it is said Judge Haynsworth is "obscure" and he does not have the gloss and eminence that we should have on the highest court of our land.

Professor Wright concludes with the following comment:

> I cannot predict the votes of Justice Haynsworth. The cases I have reviewed in this statement demonstrate, I believe, that in the areas of criminal procedure and freedom of expression the record of Judge Haynsworth on the Fourth Circuit has been a constructive and forward-looking one. But I support his nomination, not because his views on these subjects or others are similar to mine, but because his overall record shows him to have the ability, character, temperament, and judiciousness that are needed to be an outstanding Justice of the United States Supreme Court.

Mr. President, at this point I ask unanimous consent to have printed in the RECORD at the conclusion of my remarks the two statements by Professor Wright.

The PRESIDING OFFICER (Mr. ALLEN in the chair). Without objection, it is so ordered.

(See exhibit 2.)

Mr. HOLLINGS. Mr. President, those things do not appear in the headlines and it appears that some of our brethern, some of our colleagues, are making their judgments on the headlines. If that is the test and the measure, I cannot help but wonder. That would make it pretty easy to understand if that were the test.

Mr. President, I go immediately to the Evening Star of Monday, October 6, 1969. The headline of the Washington Evening Star article of yesterday is "Haynsworth Deal Eyed." I say this with some mixed appreciation and not criticism of the substance of the article in the Evening Star. Actually, there is an editorial in the same newspaper supporting Judge Haynsworth. However, the fact of the matter is that is not what the headline implies. It intimates that: "We have a judge involved in deals, and we are eyeing the deals."

All the poor judge has said is, "I will take all my stocks and put them in trusteeship." Is that a deal? It is an offer for complete disclosure. We do not want to fault anyone for a moment for insisting on complete disclosure. When I introduced Judge Haynsworth, I included that in my introduction.

No one faults the Senator from Indiana (Mr. BAYH) for going into this matter as meticulously as he can. This is a lifetime appointment. The Senate is the responsible body. It is our duty to go into every facet possible to make certain of the qualifications of Judge Haynsworth, and every other aspect of the matter, including his personal habits, his personal character, and his ability. I do not want it to appear that I am leaning toward the school of thought that "Now that you have my good friend the judge up for confirmation, we are going to skirt over the record." In introducing the judge I asked that everything be introduced. But what happened? Rather than having it appear we have given a complete record, which is the fact, they would make it appear the contrary is true.

I would like to have awaited the action by the Committee on the Judiciary, but in the initial hearing a letter dated September 6, 1969, was presented to the committee with the complete stockholdings up until the time of the nomination.

Mr. President, I ask to have printed in the RECORD at the conclusion of my remarks that letter with the complete stockholdings.

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

(See exhibit 3.)

Mr. HOLLINGS. Mr. President, Mr. Arthur McCall, who testified, was his stockbroker. He was asked for a listing of all stock transactions of Judge Haynsworth.

Mr. President, I ask unanimous consent to have printed in the RECORD that listing of stock transactions.

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

(See exhibit 4.)

Mr. HOLLINGS. Mr. President, then, after we obtained a listing of all stockholdings—and it must be remembered that at the time he placed in the record of the Committee on the Judiciary his complete income tax returns for the years 1957 through the time of his nomination— we were then asked both orally and in writing two things by the Senator from Indiana. At that particular time, last Wednesday, before the Committee on the Judiciary, the Senator from Indiana said, we knew of five stocks where

it appears that the judge sat on particular cases while he held the stock where those parties were litigants. He was asked, "Give us the names of the five stocks and we will get a complete record." He said, "No, we will not do that. We will wait. We want the listing of all stocks. Before I tell you my five stocks, I want a listing of all stocks."

Now who is playing games with whom? We have been trying to get everything they want. It does not take just 1 or 2 hours to get a complete listing. Those other sheets were worked on for days to obtain as accurate and as complete a record as could be done in answer to the Senator's request.

On October 1, last Wednesday, the Senator from Indiana wrote to the chairman of the committee, the Senator from Mississippi (Mr. EASTLAND) as follows:

OCTOBER 1, 1969.

Hon. JAMES O. EASTLAND,
Chairman, Judiciary Committee,
U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: I appreciate your continued cooperation in our efforts to lay the Haynsworth matter to rest. In discussing what had transpired with Mr. Chrissos, I suggested that I would forthwith recount the information which I had requested. It seems to me that the following items are still of importance to conclude fully our deliberations:

(1) a chronological listing of ownership of all assets of Judge Haynsworth from the time he went on the bench to the present day.

(2) The financial records, including profit and loss statements of Carolina Vend-A-Matic from the time of its incorporation to the time of its merger with ARA.

(3) The records of Carolina Vend-A-Matic's profit sharing and pension plans.

This information, plus the tax records and Carolina Vend-a-Matic's minutes and other records presently available to the Committee, should be very helpful in enabling us to conclude our deliberation. I regret that this matter has taken so much of the Committee's time. However, I feel it is imperative that we be complete insofar as this matter is concerned.

Thank you again for your continued thoughtfulness and cooperation.

Sincerely,

BIRCH BAYH.

Mr. President, I reiterate that he has every right and duty, and we do not fault the request. What was requested was a chronological listing of all assets of the judge from the time he went on the bench. The chronological listing by years was furnished to the Committee on the Judiciary at 4 o'clock yesterday afternoon. Then, last night, from the release, it appeared some hanky-panky was going on. Somehow it was made to appear that there was a judge on the run and they could not get the information. On the contrary, there was the offer to place the stock in the hands of trustees, but these efforts are labeled "Haynsworth Deal."

In yesterday's Evening Star, Mary McGrory writes:

Senator Birch Bayh, D. Ind., retired over the week end with a new batch of financial records laboriously wrested from the Justice Department. He hopes to find in them the "just one more case" which could defeat the nomination of Judge Clement Haynsworth, Jr. to the Supreme Court.

Mr. President, I cannot help but read the next paragraph:

A number of Republicans secretly wished him good hunting.

I emphasize the words "laboriously wrested from the Justice Department." No one is trying to hide. I do not represent the Republican Department of Justice. I say only this. I checked upon reading this particular article. Yes, Judge Haynsworth has his cousin, Harry Haynsworth, helping him compile this information. He took it for what was requested in Senator BAYH's letter, a chronological listing. It appears now they want the time of every purchase and the date of every sale of every stock. Mr. Harry Haynsworth was trying to prepare the chronological listing. He could not obtain the fractional shares unless he got the information from the company, and he was working on that. He has made the compilation by getting every stock slip showing the date of sales and date of purchase, and that information is with the Committee on the Judiciary. No one is trying to hide information.

Some say he is a racist. A professor of law and associate dean of the University of Wisconsin Law School, Mr. G. W. Foster, who wrote the HEW guidelines which first appeared in 1965, said he is not. However, these things do not get into the newspapers.

Mr. President, now specifically I turn to the case of the *Brunswick Corp.* v. *J. C. Long*, 392 F. 2d 337 (1968). On November 10, 1967, the judge decided a case, in which he later bought a thousand shares of Brunswick.

Question: Did he violate the canon or the statute?

Well, obviously it was a mistake, a lapse of memory, and not a lapse of ethics. No one questions it. He is the most sensitive fellow in the world. The other day he was criticized for the way he talked on television. Everyone who knows him knows he stutters. It has been a handicap for him in his lifetime. But he is not insensitive. Everybody talks about the big profits he made, but they do not talk about the big loss of over a million dollars if he held onto the stock. In the Carolina Vend-A-Matic matter, Carolina Vend-A-Matic has never been in court. In spite of all the headlines in which that company is involved, it was not a party litigant.

Now, we are going through scenarios of a judge on the run. When he tries to do everything they want done it is said that there is a "deal." No one is having to pull teeth. All they have to do is ask me to get the information. I do not know who is in charge of this appointment. Certainly, I have not been. I would like to have been, but it is not mine.

Mr. President, I cannot fault the reaction of some of my Democratic colleagues who attack this nomination in an ethical and diplomatic way when a Republican President is out trying to get a Governor to run against you and you are running for reelection next year. Why should you view so kindly this appointment to the U.S. Supreme Court? Why should he search behind the headlines? If it appears a mess, fine business. We messed up with President Johnson and Justice Fortas. Why not help President Nixon mess up with Judge Haynsworth. That is the rule of the game. Unfortunately, rightly or wrongly, I understand that. That is exactly the way it is headed. They are looking only at the headlines. They will not listen to both sides of the case. They are trying to equate this, obviously, with the Fortas case.

I emphasize this difference.

It was said to Justice Fortas, "Well, Justice, you explain or resign," and he chose to resign.

Judge Haynsworth has chosen to explain everything there is.

Justice Fortas was charged with dealing with a person who was convicted by a Federal criminal court in America. That person we might call, crassly, a convict. I hate to be that way about it, but that is it. When asked about the deal on the $20,000 a year that Justice Fortas obtained from that particular convict family's foundation, he said, "I got the $20,000. I held it for a year. I then gave it back," but the agreement on the $20,000 was for life and then over to his wife's life all for the Justice to write about brotherhood.

Who believes that? I do not believe it to this day. I might be wrong.

But rather than explain the circumstances, Justice Fortas chose to resign.

The point is, it might look wrong or it might look questionable but each Senator has his duty to perform. There is no faulting anyone to say these things look questionable. But when we come to try to explain, do not give me this stuff that it is just like Justice Fortas' case. It was only this year that he refused to explain. He chose rather to resign.

No one is asking Judge Haynsworth to resign.

They are having a game with this case. I am getting a little worn watching them play this game, especially with the headlines.

I want to mention one particular item which does give a meritorious difference between a judge's duty and a judge's discretion, because, Mr. President, we get right down to a matter that concerns me.

They say, "We will reveal this and that—we have got some five cases. We know about the five cases but are not telling you until you give us a list." Maybe, as Mary McGrory says, they can find one more. Last night, they mentioned one on the radio.

They supposedly discovered this Grace Line case. The fact is, however, that on September 24, 1969, Irving Abramson, who is the general counsel for the IUE of the AFL–CIO, stated before the Committee on Judiciary, that Judge Haynsworth owned some stock in the Grace Line Co., and that he decided a case in *Farrow* v. *Grace Line Inc.*, 381 F. 2d 380 (1967); and that he decided this for the Grace Line. This case brings into sharp focus exactly what I have in mind.

What was the Grace Line case and what was the judge's duty?

I have tried many personal injury cases. The Grace Line case involved the doctrine of unseaworthiness and the ab-

sence of liability. How much? Farrow, the plaintiff seaman, injured his wrist when a fellow seaman dropped one end of a ladder that two men were carrying. As a result, he was put for a time on light work and while on light work he received his regular wages. He claimed that he did not want to be on light work because otherwise he would have received overtime which was additional compensation which would have been payable.

He also claimed compensation for pain in the wrist while on the light work schedule. In any event, he was denied all liability. There was a jury trial. The jury found for $15.12. Think of it—$15.12.

Now, Mr. President, Judge Haynsworth owned 300 shares out of approximately 18 million shares of the W. R. Grace and Co. which, for the record, is part of the Grace Line, Inc., a wholly owned subsidiary of the W. R. Grace and Co., and holding company of the parent company. He owned 300 of some 18 million shares.

The trial judge increased it to $50 and when appealed to the court there was a per curiam decision in which Judge Haynsworth participated.

I read as follows:

[James Lee Farrow v. Grace Lines, Inc. 381 F. 2d 380 (1967)]

PER CURIAM

We think the District Court was well within its discretionary authority in refusing to set aside the verdict of the injury on the ground of inadequacy. The amount of the verdict was small, but well within the range permitted by the testimony.

Affirmed.

That was all that was held.

Now, was it a violation, Mr. President, of law or of ethics for Judge Haynsworth to have sat on that particular case?

That is the question.

Under the particular law we, as Members of Congress, have it within our power to legislate and we give the judge discretion and put in subjective language, like the word "substantial."

I shall not read the entire statute, but it is title 28, 455 of the United States Code, which provides as follows:

Any Justice or judge of the United States shall disqualify himself in any case in which he has a substantial interest . . . or is so related to or connected with any party or his attorney as to render it improper, in his opinion, for him to sit on the trial, appeal, or other proceeding therein.

We put in there the word "substantial." And then we ask that he make a determination "in his opinion." We put that burden on the judge, with a similar burden of sitting on cases to ensure random panels in the appellate jurisdiction of the full circuit court of appeals, which is an important task for a judge.

As chief judge, Judge Haynsworth must make sure that the selection is random, so he has this duty on random panels conflicting to some extent with the other duty. He has to test each time "in his opinion" whether it is "substantial." In the Grace Line case he had a $50 case in front of him. Knowing it is going to be per curiam, he says, "It is not substantial." "I do not have any interest in it." It really does not affect the leading decision. The leading decision on a subsidiary is a California case which states:

Where a judge owns stock in a corporation which in turn owns or controls the stock of a party litigant, disqualification is not required, according to the principal case in the field. *Central Pacific Railway Co.* v. *Superior Court*, 211 Calif. 706, 296 Pacific 883 (1931).

Now, Mr. President, in fairness to the Senator from Indiana (Mr. BAYH) and his concern, there is the canon involved as well as the statute. The canon involved is contained in the Canons of Judicial Ethics of the American Bar Association. Canon 26 reads:

26. Personal Investments and Relations.

A judge should abstain from making personal investments in enterprises which are apt to be involved in litigation in the court; and, after his accession to the Bench, he should not retain such investments previously made, longer than a period sufficient to enable him to dispose of them without serious loss. It is desirable that he should, so far as reasonably possible, refrain from all relations which would normally tend to arouse the suspicion that such relations warp or bias his judgment, or prevent his impartial attitude of mind in the administration of his judicial duties.

He should not utilize information coming to him in a judicial capacity for purposes of speculation; and it detracts from the public confidence in his integrity and the soundness of his judicial judgment for him at any time to become a speculative investor upon the hazard of a margin.

But we go right down and we take that particular canon in connection with a decision or opinion of 30 years ago, in which the American Bar Association states:

A judge who is a stockholder in a corporation which is a party to litigation pending in his court may not, with propriety, perform any act in relation to such litigation involving the exercise of judicial discretion.

Is that binding or is that controlling, or is it not?

Obviously, Congress has said, "You have got to determine whether or not there is a substantial interest. You have got to determine it in your opinion, the basis of disqualification."

Let me say a word about Prof. John P. Frank. Professor Frank in his letter to the chairman of the Judiciary Committee, concerning the Carolina Vend-A-Matic matter, said:

This is my thirtieth year as a law teacher, lawyer, and author. Politically, I was a strong supporter of President Kennedy, President Johnson, and Vice President Humphrey. In the constitutional field, I believe I filed, with others including the present Solicitor General of the United States, the first brief calling for a total end to school segregation (*Sweatt v. Painter*, 339 U.S. 629 (1950)); was one of the first to advocate the rule which has become one man, one vote ("Political Questions," in *Supreme Court and Supreme Law*, 36, 41 (E. Cahn ed. 1954)); consistently advocated the right to counsel rule which culminated in *Gideon v. Wainwright*, 372 U.S. 335 (1963); and was co-counsel on the prevailing side of the confession case of *Miranda v. Arizona*, 384 U.S. 436 (1966). Numerous books and articles reflect an abiding admiration for the work of Justice Hugo L. Black, and my immediately forthcoming work on law reform is dedicated to Chief Justice Earl Warren. I know Judge Haynsworth by virtue of twice having been a guest speaker on current developments in the law of civil procedure at the Fourth Circuit Judicial Conference, over which he presides, and as a fellow member of the American Law Institute.

Mr. President, I ask unanimous consent to have printed in the RECORD the entire letter written by Professor Frank to the chairman of the committee (Mr. EASTLAND).

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

LEWIS, ROCA, BEAUCHAMP, & LINTON,
Phoenix, Ariz., September 3, 1969.

Hon. JAMES O. EASTLAND,
Senate Office Building,
Washington, D.C.

DEAR SENATOR EASTLAND: I respond to your request for an opinion as to whether Judge Clement Haynsworth might properly have disqualified himself in the case of *NLRB* v. *Darlington Mfg. Co.*, 325 F.2d 682 (4th Cir. 1963).

You make this inquiry while Judge Haynsworth's appointment to the Supreme Court is pending before your Committee because of my article, *Disqualification of Judges*, 56 *Yale L. J.* 605 (1947), which is, so far as I know, still the most comprehensive report on both law and actual practice in that field; the article includes a questionnaire survey of all federal, circuit and state supreme courts. Attached is a personal identification sheet, but a brief notation of points of view may be relevant here, and I append it in the note.[1]

I turn now to the precise matter.

QUESTION PRESENTED

Might Judge Haynsworth properly have disqualified in the *Darlington* case?

ANSWER

No; it would have been unsound practice to do so.

DISCUSSION

A. Facts

Deering Milliken Company in the early 1960's was a largely Milliken family-held textile selling house. It was also what can be loosely called a holding company, owning or dominating 17 textile manufacturers which had 27 plants. One of those plants was Darlington Manufacturing Company, in which the Deering Milliken group held a majority, but by no means all of the stock. Darlington fell into conflict with the Textile Workers Union in 1956 and went out of business. The broad legal question was whether Darlington had committed unfair labor practices, and if so, whether Deering Milliken should be held financially responsible.

Judge Haynsworth, when the matter reached his Court was a substantial stockholder in Carolina Vend-A-Matic Co., a vending machine company which sold coffee and other refreshments. This company had "locations" in many places, including three of the twenty-seven Deering Milliken affiliates. The locations were obtained by competitive bidding. Deering Milliken did not pay Vend-A-Matic to come to the premises—Vend-A-Matic paid a premium to Deering Milliken, if anything was paid. It had nothing to do with Darlington. Revenues from those plants amounted to about three per cent of the vending company's income.

When the case came before the Fourth Circuit Court of Appeals, the judges concluded that its importance warranted hearing by all of the five Circuits Judges, of whom Judge Haynsworth was one. The Court decided three to two that there was no unfair labor practice, with Judge Haynsworth in the majority. Hence, it never reached the question of whether Deering Milliken was chargeable with the cost. The Supreme Court held that there might have been an unfair labor practice, depending upon facts which were not in the record, and

Footnotes at end of article.

that the Labor Board's opinion was not comprehensive enough to cover the case. It therefore vacated the decision of the Court of Appeals with instruction to send the case back to the Labor Board for further proceedings. On this remand, the Board found unfair labor practices and the Court of Appeals, Judge Haynsworth concurring specially, enforced the order. 397 F. 2d 760 (1968).

In late 1963, the Textile Workers Union of America, on the basis of an anonymous telephone call received by it, forwarded an allegation to Judge Sobeloff, the Chief Judge of the Fourth Circuit, charging improper inducements by Deering Milliken to Judge Haynsworth. Judge Haynsworth asked for a full-scale investigation and consideration, both by the Circuit Judges and the Department of Justice. On February 6, 1964, the Union, after the investigation, withdrew its complaint with warm apologies. The Court of Appeals Judges, after independent investigation, concluded that there was "no warrant whatever" for the charge; and Attorney General Kennedy expressed his "complete confidence" in Judge Haynsworth.

B. Question

Clearly, if there were any basis whatsoever for the anonymous suggestion of improper inducement, Judge Haynsworth would not be considered for any post. But there is not, and we put the call aside as one of those unhappy prices which judges must sometimes pay for the vexation of disappointed litigants.

There remains, however, the question presented in your letter to me as to whether Judge Haynsworth should have disqualified himself in the case.

C. General principles of disqualification

Disqualification is a term generally applied to the process or result by which a judge disengages from participation in a particular case which he would otherwise hear. There is a technical distinction between disqualification or exclusion by force of law, and recusation, or withdrawal at the judge's discretion, but the latter term is now largely obsolete, and I put it aside.[2]

There are two sources of the law of disqualification. The first is the common law. The second is the statutes. But these are to some extent overlaid by the constitutional conception of due process. That is to say, some kinds of disqualification are so absolutely basic that justice would be altogether denied if a judge were allowed to participate in a case. This amounts to what might be regarded as the inner core of disqualification. Surrounding that inner core are the group of further restrictions which are not constitutional, but are simply refinements. Illustrative of the constitutional inner core is the famous case of Dr. Bonham,[3] in which Lord Coke said that not even an Act of Parliament can allow a judge to retain a fine which he levies; the case illustrates the axiom that "No man shall be a judge in his own case."[4] The Bonham principle was followed in 1927, when the Supreme Court held that a judge could not hear a case in which he received a portion of the fine which he might levy.[5] The guiding due process principle was restated by the Supreme Court when it said:

"A fair trial in a fair tribunal is a basic requirement of due process . . . To this end no man can be a judge in his own case and no man is permitted to try cases where he has an interest in the outcome."[6]

At common law, a judge could be disqualified only for interest. This has expanded by decision and statute to cover today three grounds of disqualification—interest, relationship, and bias. Speaking generally for a moment, interest is a personal involvement in the result, as if the judge had an interest in a property being foreclosed. Relationship is a family connection with a party, or perhaps an attorney. Bias is a hostility to a party, as a long personal enmity.[7]

Clearly, those are broad terms, and can take meaning only in concrete cases. Before coming directly to the federal practice, we observe in the country as a whole two conflicting currents on disqualification. In some states, disqualification is easy; in my own, *e.g.*, one may have one change of judge almost for the asking. A simple affidavit will do it. In others, disqualification is hard—one must squarely show interest, relationship, or bias or keep the judge he has.

The federal practice tends to the latter view. Originating in a period of few judges, perhaps one in a state, where disqualification might well mean long delay, casual disqualification was not much welcomed. This is reflected in the two federal statutes:

1. 28 U.S.C. § 455: "Interest of justice or judge.

"Any justice or judge of the United States shall disqualify himself in any case in which he has a substantial interest, has been of counsel, is or has been a material witness, or is so related to or connected with any party or his attorney as to render it improper, in his opinion, for him to sit on the trial, appeal, or other proceeding therein."

2. 28 U.S.C. § 144: "Bias or prejudice of judge.

"Whenever a party to any proceeding in a district court makes and files a timely and sufficient affidavit that the judge before whom the matter is pending has a personal bias or prejudice either against him or in favor of any adverse party, such judge shall proceed no further therein, but another judge shall be assigned to hear such proceeding. . . ." (Remainder immaterial).

One other important generalization. Particularly in the federal practice, the judge has an *equal* duty to disqualify when he should and to sit when he should. "It is a judges' duty to refuse to sit when he is disqualified but it is equally his duty to sit when there is no valid reason" not to; *Edwards* v. *United States*, 334 F. 2d 360, 362, n. 2 (5th Cir. 1964) a case in which the judge clearly regretted that he could not withdraw. This is the general federal view.[8]

D. This case

If Judge Haynsworth were to have disqualified in this case, it would necessarily have been for interest. That is to say, there is no conceivable question of relationship or bias, apart from interest, as those terms are used in the law.[9] We must therefore give close attention to the concept of interest as it exists in disqualification cases.

This permits a sharpening of the general question: Under what circumstances, if any, must a shareholder of a company which has business dealings with a party, disqualify from hearing a case involving that party? For the sake of brevity, we may reach the answer with a series of numbered paragraphs:

1. For our purposes, it is immaterial that Judge Haynsworth was a shareholder in the vending company rather than owner of the company in a personal proprietary capacity. The law of disqualification, in the heavy majority and clearly better view, treats a shareholder as though he individually were the concern in which he holds shares. In other words, if a judge holds shares in a corporation which is in fact a party before him, he should disqualify as much as if he himself were a party.[10] As my study shows, every state and federal court reporting agrees that if the judge has a pecuniary interest in the party, he may not sit.

2. Where the judge has an interest in a non-party, however, the rules are entirely different. This is a necessary concession both to common sense and to the practicalities of modern life. As was noted by an English court in 1572 dealing with the subject of disqualification for relationship. "All the inhabitants of the earth are descended from Adam and Eve, and so are cousins of one another," but "the further removed blood is, the more cool it is."[11] Lines must be drawn somewhere.

Thus at common law, a judge might have disqualified in a case involving taxes in an area in which he paid. But this is not the modern view.[12]

In these non-party cases, the rule of disqualification which has developed is a test of immediacy or remoteness of the interest. The interest must be direct, proximate, inherent in the instant event, and affected by the direct outcome of the particular case.[13] It must be direct, real and certain, and not incidental, remote, contingent, or possible.[14] The interest contemplated is a "pecuniary or beneficial interest" in the case,[15] with equal attention both to the benefit and to its connection with the particular case.[16]

Some cases push this to the point of saying that in order to be disqualified for interest in these third party situations, the judge must be capable of being made an actual party to the case, but this is not the better view, which is that it is sufficient if he has a proprietary interest in the actual result of the actual case.[17]

3. Coming then squarely to the problem of judges who in some manner have financial relations with a party, the question may arise when the judge is connected with a supplier, as here; or in some other fashion is or is connected with a creditor or debtor of the party. These problems have been solved as the foregoing principles clearly foreshadow. If the interest of the judge as creditor or debtor or supplier will in any way be affected by the case, then he must disqualify. Otherwise, he should not. For example, when there is a dispute over a corporate election in Corporation *A*, which in turn has a large claim against Corporation *B*, in which the judge is a shareholder, the judge was held disqualified to pass on the election because he would in effect be choosing who was to be in control of a lawsuit against him.[18] Similarly, where a judge is a stockholder in a bank which is a creditor of plaintiff for a substantial amount, and plaintiff is dependent upon a judgment in the particular case to pay the bank, the judge was disqualified. *Jones v. American Cent. Insurance Co.*, 83 Kan. 44, 109 P. 1077 (1910); and note opposite result where judge is creditor but will not be affected by the result, *Dial v. Martin*, 37 S.W. 2d 166 (Tex. Civ. App. 1931). On the other hand, where there is no direct effect in any meaningful way, the judge is not disqualified. Thus a judge who is a stockholder in a bank which is restrained as a stakeholder but will not be affected by the final outcome was not disqualified.[19]

The Supreme Court of Michigan has emphatically rejected a view that a judge who is a shareholder of a creditor of a party, even on a substantial obligation, is disqualified in the absence of a showing of some direct and precise benefit to the creditor from the case; a suggestion to the contrary is said to have "no foundation in reason."[20]

A leading case very close to the instant situation is *Webb* v. *Town of Eutaw*, 9 Ala. App. 474, 63 So. 687 (1913), in which the judge was a stockholder in a bank to which a party was indebted. The Court, in holding no disqualification, laid down the guiding rule that the mere existence of "a business relation with one of the parties to it is to be regarded as too remote or contingent to constitute a ground of disqualification." The disqualification will exist only where the corporate creditor or the judge who is a stockholder in it "has such a direct and immediate interest in the result of the suit" as to be disqualified.[21]

4. The principles just outlined are codified in the controlling federal statute, 28 U.S.C. § 455; the judge is disqualified "in any case in which he has a substantial interest." This requires a substantiality of interest in the particular case.[22]

Footnotes at end of article.

CONCLUSION

A judge with an interest in a third party which in turn has business relations with a party to a case is not disqualified for interest unless somehow the case directly affects the third party. Any contrary result would lead to impossible consequences. If, hypothetically, a judge owned stock in a major automobile company, he would be disqualified from hearing auto accident cases if a party happened to be a regular purchaser of cars manufactured by "his" concern. In the present case, the issue was a determination of an unfair labor practice involving a subsidiary of a large concern which had no connection except common ancestry with other plants with which Vend-A-Matic did business. Vend-A-Matic's locations were obtained by competitive bidding. It did its business not with Deering Milliken except as it paid for the privilege of installing machines, but with its employees. The proportion of its revenue from this source was slight. There was no issue in the case which related even in the remotest or most fanciful degree to coffee and food distribution by Vend-A-Matic. A review of all of the reported cases on disqualification in the United States shows no instance in which a judge has ever disqualified in circumstances in any way similar to those here.

In the instant case, it was necessary to have all of the judges of the Circuit participate; it was an *en banc* determination. Had Judge Haynsworth not participated, the Court would have been unable to decide the case at all. But regardless of that circumstance, since he was not disqualified, it was under the strict federal rule of duty, his plain responsibility to participate, and he would have shirked his duty if he had not done so. There is "as much obligation upon a judge not to recuse himself when there is no occasion as there is for him to do so when there is." *In re Union Leader Corp.*, 292 F. 2d 381, 391 (1st Cir. 1961), *cert. denied*, 368 U.S. 927 (1961).

Yours very truly,

JOHN P. FRANK.

FOOTNOTES

[1] This is my thirtieth year as a law teacher, lawyer, and author. Politically, I was a strong supporter of President Kennedy, President Johnson, and Vice President Humphrey. In the constitutional field, I believe I filed, with others including the present Solicitor General of the United States, the first brief calling for a total end to school segregation (*Sweatt v. Painter*, 399 U.S. 629 (1950)); was one of the first to advocate the rule which has become one man, one vote ("Political Questions," in *Supreme Court and Supreme Law* 36, 41 (E. Cahn ed. 1954)); consistently advocated the right to counsel rule which culminated in *Gideon v. Wainwright*, 372 U.S. 335 (1963); and was co-counsel on the prevailing side of the confession case of *Miranda v. Arizona*, 384 U.S. 436 (1966). Numerous books and articles reflect an abiding admiration for the work of Justice Hugo L. Black, and my immediately forthcoming work on law reform is dedicated to Chief Justice Earl Warren. I know Judge Haynsworth by virtue of twice having been a guest speaker on current developments in the law of civil procedure at the Fourth Circuit Judicial Conference, over which he presides, and as a fellow member of the American Law Institute.

[2] This was a meaningful distinction in the federal system prior to 1949, when the applicable statute applied only to district judges and not to appellate judges; the appellate judges then frequently applied the statute to themselves. The adoption of 28 U.S.C. § 455 in that year as a general disqualification statute applicable to all judges makes this term of no consequence now. For discussion of these distinctions between House Judiciary Chairman Hobbs and Chief Justice Stone, see *A. Mason, Harlan Fiske Stone* 702–03 (New York: The Viking Press, 1956).

[3] 8 Co. 107a, 77 Eng. Rep. 638 (K.B. 1608).

[4] Co. Litt. 141a.

[5] *Tumey v. Ohio*, 273 U.S. 510 (1927).

[6] *In re Murchison*, 349 U.S. 133, 136 (1955).

[7] For development of these generalizations, see my article.

[8] See *Wolfson v. Palmieri*, 396 F. 2d 121 (2d Cir. 1968); *United States v. Hoffa*, 382 F. 2d 856 (6th Cir. 1967); *In re Union Leader Corp.*, 292 F. 2d 381, 391 (1st Cir. 1961), *cert. denied*, 368 U.S. 927 (1961).

[9] We may for other reasons put side 28 U.S.C. § 144; not only does it relate only to district courts, but it requires an affidavit procedure, and it is restricted to bias.

[10] This is the heavy majority rule; see cases collected at Note, 48 A.L.R. 617, updated in a comprehensive collection at 25 A.L.R. 3d 1331. There are some refinements where the holding is very small; see *e.g., Lampert v. Hollis Music, Inc.*, 105 F. Supp. 3 (E.D.N.Y. 1952) (20 shares on 13,881,016). See also my own article at 56 *Yale L. J.* 605, 637 (1947), reporting that in 33 state and federal courts there is disqualification in such circumstances, but that 2 state and 2 federal courts reported that disqualification might be waived where the holding was very slight, and 1 federal court reported that a judge had sat where the holding was very slight. Nonetheless, the view is overwhelming. There are also refinements not necessary to be considered here when the stock is held by a member of the judge's family; see Note, 4 *Minn. L. Rev.* 301 (1920). And see illustratively, *Goodman v. Wisconsin Elec. Power Co.*, 248 Wis. 52, 20 N.W. 2d 553 (1945).

[11] *Vernon v. Manners*, 2 Plowden 425, 75 Eng. Rep. 639 (K.B. 1572).

[12] My article shows no judges disqualifying because they are taxpayers, and only two areas in which they disqualified because they would be affected by public utility rates.

[13] *Goodspeed* v. *Great Western Power Co. of California*, 19 Cal. App. 2d 435, 65 P. 2d 1342, 1345 (1937).

[14] See cases collected at 48 *C.J.S. Judges* at 1048.

[15] *United States* v. *Bell*, 351 F. 2d 868, 878 (6th Cir. 1965); *Edwardson* v. *State*, 243 Md. 131, 220 A. 2d 547 (1966).

[16] *Beasley* v. *Burt*, 201 Ga. 144, 39 S.E. 2d 51 (1946).

[17] *Hall* v. *Superior Court*, 198 Cal. 373, 245 P. 814 (1926) (judge owns property in an irrigation district immediately involved in litigation); for a view requiring a party capacity, see another California case, *Central Pac. Ry. Co.* v. *Superior Court*, 211 Cal. 706, 296 P. 883, 888–89 (1931). The proper test is whether the third party has a "present proprietary interest in the subject matter." *City of Vallejo* v. *Superior Court*, 199 Cal. 408, 249 P. 1084 (1926). If so, the judge is disqualified or worse. In Anonymous, 1 Salk. 396, 91 Eng. Rep. 343 (K.B. 1698), the judge was "laid by the heels" for sitting in an ejectment case when he was lessor of the plaintiff.

[18] *Bentley* v. *Lucky Friday Extension Mining Co.*, 70 Idaho 511, 223 P.2d 947 (1950).

[19] *Adams* v. *McGehee*, 211 Ga. 498, 86 S.E.2d 525 (1955).

[20] *In re Farber*, 260 Mich. 652, 245 N.W. 793, 795 (1932).

[21] *Id.* at 688. The same problem arises when municipal bodies are called upon to award contracts for public works, and it is frequently held that the mere fact that a municipal officer is a shareholder in a supplier of a contractor is not a disqualification; *O'Neill v. Town of Auburn*, 76 Wash. 207, 135 P. 1000 (1913).

[22] As is said of a third-party involvement under an earlier form of the statute, where the judge as shareholder of a creditor was wholly unaffected by the case, the interest to disqualify may be "so slight or inconsequential that the rights of the parties would be best subserved by his proceeding . . ." *Utz & Dunn Co. v. Regulator Co.*, 213 F. 315, 318 (8th Cir. 1914).

BIOGRAPHICAL DATA OF JOHN P. FRANK

John P. Frank, lawyer and author, was born in Appleton, Wisconsin, in 1917, and received his B.A., M.A. and LL.B. at the University of Wisconsin and his J.S.D. from Yale University. He has held various governmental positions, having been law clerk to Mr. Justice Hugo L. Black at this October, 1942, Term, and having served as an assistant to Secretary of Interior Ickes and as a special Assistant in the Department of Justice under Attorney General Biddle.

Mr. Frank taught law from 1946 to 1954 at Indiana and Yale Universities, specializing in constitutional law, legal history, and procedure, and has been a visiting professor at the University of Washington and the University of Arizona. From 1954 to the present, he has been a member of the firm of Lewis Roca Beauchamp & Linton in Phoenix, Arizona.

Mr. Frank is the author or editor of nine books, largely on legal subjects. These include *Marble Palace* and *The Warren Court*, books on the United States Supreme Court; *Lincoln as a Lawyer;* and *Justice Daniel Dissenting*, a biography of a nineteenth century Supreme Court Justice. His lectures at the opening of the Earl Warren Legal Center at the University of California will shortly be published under the name of *American Law: The Case for Radical Reform.*

Mr. Frank is a member of the Advisory Committee on Civil Procedure of the Judicial Conference of the United States. He is also the author of numerous articles in legal and popular magazines, including *Fortune, Redbook, Reader's Digest*, and others.

Mr. HOLLINGS. He says, at the very beginning, in talking of the duty of a judge to sit:

One other important generalization. Particularly in the federal practice, the judge has an equal duty to disqualify when he should and to sit when he should. "It is a judge's duty to refuse to sit when he is disqualified but it is equally his duty to sit when there is no valid reason" not to; *Edwards* v. *United States*, 334 F. 2d 360, 362, n. 2 (5th Cir. 1964) a case in which the judge clearly regretted that he could not withdraw. This is the general federal view.

He goes on and finalizes the entire opinion, and Professor Frank states:

In the instant case, it was necessary to have all of the judges of the Circuit participate; it was an *en banc* determination. Had Judge Haynsworth not participated, the Court would have been unable to decide the case at all. But regardless of that circumstance, since he was not disqualified, it was, under the strict federal rule of duty, his plain responsibility to participate, *and he would have shirked his duty if he had not done so.* There is "as much obligation upon a judge not to recuse himself when there is no occasion as there is for him to do so when there is." *In re Union Leader Corp.*, 292 F. 2d 381, 391 (1st Cir. 1961), *cert. denied*, 368 U.S. 927 (1961).

I will just read the one on ethics, in which he said:

In the Darlington case, it was his plain responsibility to participate, and he would have shirked his duty if he had not done so.

How many Senators have heard that? In the Darlington case, which the smear is all about, this eminent authority says that if he had not participated, he would have shirked his duty. He says the judge shall sit in such a case. He says there is

"as much obligation upon a judge not to recuse when there is no occasion as there is for him to do so when there is."

I understand further inquiry has been made of this gentleman with respect to the matter of the case——

The PRESIDING OFFICER. The time of the Senator has expired.

Mr. HOLLINGS. Mr. President, I ask unanimous consent to have an additional 10 minutes.

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

Mr. HOLLINGS. By the way, Judge Frank's opinion was concurred in by Judge Lawrence Walsh, chairman of the American Bar Association, who has the following background:

I have been admitted to the bar of New York since 1936, the bar of the Supreme Court since, well, 1950. I have been assistant district attorney and counsel to the Governor of New York, counsel to and director of the New York-Waterfront Commission, New York Harbor. I have been a Federal judge deputy attorney general of the United States.

He now represents the U.S. Government in the negotiations in Paris.

Judge Walsh was chairman of the particular American Bar Association group which examined Judge Haynsworth's qualifications, opinions, and everything else. I quote from Judge Walsh with reference to the Darlington case:

We believe that there was no conflict of interest in the Darlington case which would have barred Judge Haynsworth from sitting and we also concluded that it was his duty to sit.

They come back to that same conclusion. So it is not one particular man's opinion. This is the general, prevailing authority. In fact, Judge Frank says that if there is authority otherwise, he wishes that they would please point it out for him.

Let us go specifically to the matter of the Grace Line.

S. 2994—INTRODUCTION OF A BILL PROVIDING A JUDGE SHALL ABSTAIN FROM PARTICIPATION IN ANY CASE INVOLVING A PARTY LITIGANT IN WHICH HE HAS ANY INVESTMENT

Mr. HOLLINGS. Mr. President, I introduce a bill at this time and ask that it be referred.

The PRESIDING OFFICER. The bill will be received and appropriately referred.

The bill (S. 2994), to amend title 28, section 455, United States Code, introduced by Mr. HOLLINGS, was received, read twice by its title, and referred to the Committee on the Judiciary.

Mr. HOLLINGS. I should like to read the bill, since it is short:

That Title 28, Section 455, U.S. Code, is amended by adding at the end of such section the following:

"Ownership by a judge of stock in a corporation which is a party litigant or which owns any interest in a party litigant shall be deemed substantial for the purposes of this section; and a judge shall abstain from participation in any case involving a party litigant in which he has any investment whatever."

Obviously, the thrust of the introduction of this bill is to bring into focus the particular provision of the statute with reference to which Judge Haynsworth would be called back and asked about the Grace Co. case, in which he participated in the per curiam decision. Ipso facto, the question would be whether it was his duty to sit. He would have sat because he would have said, "It was my duty. I would not have been doing my my duty if I had not sat." That is all opposed to the argument that he was insensitive; that he has no regard for his duty. He does have regard for his duty.

The question is one of judicial authority, rather than monetary interest. It is a question of persuasion; whether legally the judge should sit or whether it bars him from coming before the court. The main thing is that the judge has been adhering to the statute in this case. He has been adhering to the ethic.

In the testimony of Judge Frank he states that, with respect to the statute involved and the canon involved, the question raised by the Senator from Indiana (Mr. BAYH) and others, there is no conflict at all, and he has adhered to the particular statute involved with the effect that the judge did not violate the canon.

But I am sure Senators have not had that language read to them from that particular part of his testimony. And I ask unanimous consent to insert an excerpt of his testimony in the RECORD at this point.

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

Mr. FRANK. Because I did not deal with the Canons. Because I think for purposes of the Federal courts they are simply immaterial. They merely are reflective of, in this highly general language of, what is in the Code anyway, and the rule for the Federal judges is adequately, I think, covered by the statutes and the cases and I don't think the Canons really add anything other than a confirming note or echo.

Mr. HOLLINGS. The point is that when asked by Senator BAYH, "What about the canon?" he said:

The ethic and the statute are consonant. The statute is no more than a clear enunciation of the ethic and the duties that the court has and that the judge has.

In my judgment, he had a particular duty, and there has been no violation of that particular part of the canons of ethics.

There is a feeling in this body—and I know, because I have been talking with Senators—that if you own a share of stock, you ought to disqualify yourself.

Mr. President, the judiciary does not know that. They point to the California case and to the cases by Judge Frank, holding that they have a duty to sit. I want to clarify that, and if the Senator from Indiana wishes to join me as a cosponsor, fine; let us tell the judge exactly what he is expected to do.

To me, this situation is very much like that of the young fellow who went to the psychiatrist, who, in attempting to analyze his problem, drew a circle and asked the young man, "What does that make you think of?"

"Sex," he responded.

The psychiatrist drew a line, and asked the same question.

Again he said, "Sex."

Then the psychiatrist drew a cross, and the young man again replied, "Sex."

Thereupon the psychiatrist turned to him and said: "You have got the most depraved mind I ever saw. All you ever think about is sex."

To which the young man replied: "Who is filthy minded? You are the one drawing the dirty pictures."

Mr. President, who has provided the statute? This body and the House next door, the Congress, with the signature of the President thereon. When a judge adheres to the statute, we say, "By gosh, you are insensitive." We say, "You violated the canons of ethics." We say, "You violated the statute."

Mr. President, that is not the case at all, because the authors, those who have dealt with it—and there is no more eminent authority on judicial disqualification than John P. Frank—in accordance with the decisions of the courts, and with that 30-year-old decision by the American Bar Association, have all held that Judge Haynsworth is in obedience, and that he is not insensitive. He has had a large holding; but we have never said they could not have holdings in stocks.

He is not involved in honorariums. He is not involved in receiving fees, through his clients or through educational institutions. He is not involved with foundations. He is not practicing law while still on the bench. He has made an error in the Brunswick case, but no one says that is really a breach of ethics; it is more a lapse of memory.

By this long, drawn-out proceeding, we cannot get at the facts. We have got to extract it from the hearsay and the rumor, first that they have withdrawn his name, or he has asked that it be withdrawn.

Mr. President, I say that does not provide the answer, nor comport with the dignity of the most deliberative governmental body in this world.

EXHIBIT 1

STATEMENT IN COMMENT ON APPOINTMENT OF JUDGE CLEMENT HAYNSWORTH TO THE SUPREME COURT OF THE UNITED STATES

It is not surprising that a Supreme Court appointment from the South, by a President who campaigned with some degree of criticism of the Warren Court, should attract a measured amount of liberal skepticism. The degree of reaction to Judge Clement Haynsworth's nomination, however, may be quite unworthy of some of the truly fine people who have too quickly given it currency. In those areas of statutory interpretation and constitutional adjudication where the issue is so unsettled that judicial discretion must necessarily play a major role, Judge Haynsworth's record cannot be seen as illiberal.

In Hawkins v. North Carolina Dental Society, Judge Haynsworth authored the court of appeals opinion which desegregated the North Carolina Dental Association, rejecting its claim that it was not subject to the equal protection clause of the 14th Amendment. He joined as well in North Carolina Teachers Association v. Asheboro City Board of Education, reversing a lower federal court which had upheld the displacement of Negro teachers who had lost their jobs to whites when schools were integrated. He also shared the court's decision in Newman v. Piggy Park Enterprises, applying the Civil Rights Act against a claim that insufficient food was sold for consumption on the premises to bring the business within the statute.

In the field of criminal justice, he authored an extraordinarily careful opinion in Rowe v. Peyton, extending the right of prisoners to have their convictions reviewed on

habeas corpus—a new development later affirmed by the Supreme Court. He joined in Crawford v. Bounds to protect defendants in capital cases from being sentenced by death-prone juries from which all expressing any reservation to capital punishment had been excluded—a new development also subsequently affirmed by the Supreme Court in a related case. In Pearce v. North Carolina, he applied a constitutional principle newly developed at the federal level in his own circuit to protect defendants from harsher sentences following retrial—again in advance of the Supreme Court which affirmed the decision several months later.

In respect to First Amendment rights, he joined in the first federal decision which struck down a state law restricting the right of university students to hear guest speakers on campus—a principle later expanded by a half-dozen other federal courts and indirectly approved by the Supreme Court in a related case just this year.

On occasion when his opinion has differed conservatively from that of more liberal jurists, it has not been without care or reason. Thus, his conclusion in Baines v. City of Danville that only an extraordinary kind of civil rights case could be removed from a state court to a federal court was accompanied by a painstaking analysis with which a majority of the Supreme Court subsequently agreed in Peacock v. City of Greenville. Similarly, his conclusion in Warden v. Hayden that an otherwise constitutional search is not unreasonable because its object is only to secure evidence of a crime was also subsequently shared by a majority of the Supreme Court.

I do not submit that these decisions warrant that Judge Haynsworth will be a "liberal" justice. His record on the court of appeals does not—and in the nature of things could not—enable us to predict his votes in the substantially different role of associate supreme court justice. They do indicate, however, that he is an able and conscientious man who will approach his duties on the Supreme Court with a spirit of open-mindedness as well as an appreciation of the difficulties of the judicial process.

EXHIBIT 2

STATEMENT OF CHARLES ALAN WRIGHT

My name is Charles Alan Wright. I am Charles T. McCormick Professor of Law at The University of Texas. I come to support the nomination of Judge Haynsworth to the Supreme Court.

For more than twenty years my professional specialty has been observing closely, and teaching and writing about, the work of the federal courts. From 1950 to 1955 I was a member of the faculty at the University of Minnesota Law School and I have been at The University of Texas since that time. I was a visiting professor at the University of Pennsylvania Law School in 1959–60, at the Harvard Law School in 1964–65, and at the Yale Law School in 1968–69. I regularly teach courses in Federal Courts and in Constitutional Law, a seminar in Federal Courts, and a seminar on the Supreme Court. Since 1964 I have been a member of the Standing Committee on Rules of Practice and Procedure of the Judicial Conference of the United States and prior to that time was a member of the Advisory Committee on Civil Rules. I was Reporter for the recently-completed Study of Division of Jurisdiction between State and Federal Courts made by the American Law Institute.

My writings include a seven-volume revision of the Barron and Holtzoff Treatise on Federal Practice and Procedure. That set of books is now being supplanted by a new treatise on the same subject. Publication of the new treatise began in February of this year with my three volumes on criminal practice and procedure, and the first of the volumes on civil litigation, which I am writing in collaboration with Professor Arthur R. Miller, was published in April. In addition I am the author of a one-volume hornbook, *Wright on Federal Courts*, a second edition of which is now at the publisher's, and, in collaboration with two others, am the author of the Fourth Edition of *Cases on Federal Courts*.

With this professional interest, and with these writing commitments, I necessarily study with care all of the decisions of the federal courts, and inevitably form judgments about the personnel of those courts. We are fortunate that federal judges are, on the whole, men of very high caliber and great ability. Among even so able a group, Clement Haynsworth stands out. Long before I ever met him, I had come to admire him from his writings as I had seen them in *Federal Reporter*.

Some of the criticisms of Judge Haynsworth that I have read in the press seem to me to fail to take into account the difference between the role of a Justice of the Supreme Court and that of a judge of an inferior court. In the first place, the nature of the work is different. The Supreme Court today is necessarily a public law Court, with almost all of its time devoted to momentous cases involving the interpretation and application of the Constitution and the statutes of the United States. In a court of appeals, such as the Fourth Circuit, there is much more private litigation, of interest only to the parties in the case, and many more cases of a kind that the Supreme Court rarely reviews, such as the construction of a particular patent, award of compensation in an eminent domain proceeding, the niceties of the Bankruptcy Act, sufficiency of the evidence in a personal injury case, and the meaning of state law in a diversity case. To form a judgment about Judge Haynsworth based only on his opinions in the comparatively few cases in which he has participated that are of the sort he is likely to hear on the Supreme Court is to ignore the vast body of his work and thus to risk forming a mistaken impression of his judicial qualities and of his conception of the role of a judge. To avoid falling into that same error myself, I have gone back in the last several weeks and looked at every opinion in which he has participated, opinions covering a span of 12 years and 167 volumes of *Federal Reporter*.

Second, it must be remembered that the function of a lower court judge is to apply the law as the Supreme Court has announced it, except for those rare instances in which there is solid reason to believe that the Supreme Court itself would no longer adhere to an old decision. He cannot disregard an authoritative Supreme Court precedent no matter how deeply he may feel that the highest tribunal has erred. At the same time, as Learned Hand once observed, he must be slow to embrace "the exhilarating opportunity of anticipating a doctrine which may be in the womb of time, but whose birth is distanct * * *" [*Spector Motor Service* v. *Wash*, 139 F. 2d 809, 823 (2d Cir. 1944) (dissenting opinion).] The example of John J. Parker shows what a tragic mistake it can be to suppose that the opinions of a conscientious and law-abiding lower court judge necessarily reflect his own understanding of the Constitution and the laws. Even those who think, as I emphatically do not, that it is proper to assess a judge on the basis of whether the results he has reached are in accord with one's own preferences should be careful, in reviewing the record of a lower court judge, to consider particular results in the context of what the law, as the Supreme Court had announced it, was at the time the case came down.

Let me give one example of the point I have just made. In 1960 Judge Haynsworth joined with Judges Sobeloff and Boreman in a short per curiam opinion. A plaintiff was arguing that state law denying an illegitimate child the right to inherit from his father was a denial of the equal protection of the laws to illegitimate persons. The court said that this argument was "so manifestly without merit" that it did not present a substantial federal question and the federal courts had no jurisdiction. [*Walker* v. *Walker*, 274 F. 2d 425 (4th Cir. 1960).] The decision seems strange, and probably wrong, when read today. In the light of the Supreme Court's decision that it is a denial of equal protection to refuse to allow an illegitimate child to recover for the wrongful death of its mother, the argument made to the Fourth Circuit in 1960 today certainly presents at the least a substantial federal question. But the Supreme Court decision did not come down until 1968 [*Levy* v. *Louisiana*, 391 U.S. 68 (1968)], and it is difficult to criticize lower court judges for failing to anticipate, eight years in advance, a Supreme Court decision that, when it finally came down, was criticized by three members of the Supreme Court as a "constitutional curiosit[y]" achieved only by "brute force." [*Id.* at 76.] I suggest the same point is equally applicable in other areas of the law.

There are judges who have been great essayists. We remember persons such as Justice Cardozo and Judge Learned Hand as much for their contributions to literature as for their contributions to law. Judge Haynsworth is not of this number. Very rarely does he indulge himself in a well-turned epigram or in quotable rhetoric. Instead his opinions are direct and lucid explanations of the process by which he has reached a conclusion. He faces squarely the difficulties a case presents but he resists the temptation to speculate about related matters not necessary to decision. There is one case in which, though affirming a decision, he wrote for more than a page about the "slovenly practices in offices of District Attorneys which come to our attention much too frequently" in connection with the drafting of indictments [*United States* v. *Roberts*, 296 F.2d 198, 201–202 (4th Cir. 1961)], but in this instance he was expressly authorized to speak for all of the judges of the Fourth Circuit, and not merely those on the panel, and the warning he uttered was a useful one in reducing the opportunity for attack in future criminal cases. On reading Judge Haynsworth's opinions I am reminded of Justice Jackson's classic advice to district judges about Judge Learned Hand and his cousin, Judge Augustus Hand. Justice Jackson said: "Always quote Learned and follow Gus." [Quoted in Clark, *Augustus Noble Hand*, 68 HARV.L.REV. 1113, 1114 (1955)]. If Judge Haynsworth's opinions are not quotable, they are easy to follow.

It would be very hard to characterize Judge Haynsworth as a "conservative" or a "liberal"—whatever these terms may mean—because the most striking impression one gets from his writing is of a highly disciplined attempt to apply the law as he understands it, rather than to yield to his own policy preferences. Thus in one case he felt compelled to hold that sovereign immunity barred any relief for a wrong committed by the National Park Service. In doing so, he wrote: "If some of us, appraising the policy considerations, were inclined to assign a more restricted role to the doctrine of sovereign immunity in this area, we could not follow our inclination when the Supreme Court, clearly and currently, is leading us in the other direction." [*Switzerland Co.* v. *Udall*, 337 F. 2d 56, 61 (4th Cir. 1964.)] When the Board of Supervisors of Prince Edward County made midnight disbursements of tuition grants so that the money would be gone before the Fourth Circuit had an opportunity to rule on the legality of this action, Judge Haynsworth thought that their conduct was "unconscionable" and "contemptible," but,

unlike the majority of his court, he could not find it "comtemptuous and punishable as such" since they had violated no court order in distributing the funds. [*Griffin* v. *County School Board of Prince Edward County*, 363 F.2d 206, 213, 215 (4th Cir. 1966) (dissenting opinion).] Many lawyers would agree.

Judge Haynsworth shows a considerable respect for precedent, and has felt bound by decisions that he thought incorrect [*Eaton* v. *Grubbs*, 329 F. 2d 710, 715 (4th Cir. 1964], but he insists that precedents be used with discrimination. In his first dissenting opinion he objected that the majority had applied language of other cases out of context and said "at least, if disembodied language is to be applied to a dissimilar question, it should not be regarded as controlling." [*Cooner* v. *United States*, 276 F. 2d 220, 238 (4th Cir. 1960) (dissenting opinion). See also *United States v. Bond*, 279 F. 2d 837, 848 (4th Cir. 1960) (dissenting opinion).] In a well-known later case he objected to the majority's reliance on the old and discredited rule that law officers may seize contraband or the instrumentalities of a crime but may not seize evidence of the crime, saying that "the language the Supreme Court has employed must be read in the light of what it has held." [*Hayden v. Warden, Maryland Penitentiary*, 363 F. 2d 647, 657 (4th Cir. 1966) (separate opinion).] He went on to make the argument that since the standards for use of confessions are being stiffened, the police must rely increasingly on scientific investigation of crime, and that they cannot do this if they are denied access to evidence that may be subjected to scientific analysis. The view he took there was vindicated when the case reached the Supreme Court, and that Court discarded the "mere evidence" rule. [*Warden, Maryland Penitentiary* v. *Hayden*, 387 U.S. 294 (1967).]

In another case he held, contrary to an old Supreme Court decision, that habeas corpus would lie to attack a sentence that the prisoner was to serve in the future. He said: "This Court, of course, must follow the Supreme Court, but there are occasional situations in which subsequent Supreme Court opinions have so eroded an older case, without explicitly overruling it, as to warrant a subordinate court in pursuing what it conceives to be a clearly defined new lead from the Supreme Court to a conclusion inconsistent with an older Supreme Court case." [*Rowe* v. *Peyton*, 383 F. 2d 709, 714 (4th Cir. 1967).] His prediction that the old case was so eroded that it would no longer be followed was proved accurate when the Supreme Court unanimously affirmed his decision. [*Peyton* v. *Rowe*, 391 U.S. 54 (1968).]

In that same habeas corpus case he showed, as he has throughout his judicial career, an awareness that law is not static and that changing times may require different solutions for problems. He pointed out how the nature of habeas corpus has changed since the great Writ was first developed and said: "The problem we face simply did not exist in the Seventeenth Century. Now that recently it has arisen, if there is a substantive right crying for a remedy, it seems most inappropriate to approach a solution in terms of a Seventeenth Century technical conception which had no relation to the context in which today's problem arises." [383 F. 2d at 713–714.] This has been a consistent theme in Judge Haynsworth's opinions. In his first year on the bench, in a case holding that a medical examiner's certificate showing the percentage of alcohol in a defendant's blood was admissible, he wrote that the Confrontation Clause of the Sixth Amendment was not intended "to serve as a rigid and inflexible barrier against the orderly development of reasonable and necessary exceptions to the hearsay rule." [*Kay* v. *United States*, 255 F. 2d 476, 480 (4th Cir. 1958).] Only last year, in an important opinion for his court adopting a new test of insanity, he emphasized the need for "judicial reassessment of notions too long held uncritically and of a verbal formalism too long parrotted." [*United States* v. *Chandler*, 393 F.2d 920, 925 (4th Cir. 1968).]

The same respectful but discriminating approach Judge Haynsworth shows in the use of precedents is evident when the problem is one of construing a statute. He does not make a fortress of the dictionary. He insists, instead, on construing statutes in a fashion that will "effectuate the apparent purpose and intention of the Congress" [*Cross & Blackwell Co.* v. *F.T.C.*, 262 F. 2d 600, 605 (4th Cir. 1959)], and has refused "to adopt a literal interpretation of this statute without regard to its purpose or the extraordinary result to which it would lead." [*Alvord* v. *C.I.R.*, 277 F.2d 713, 719 (4th Cir. 1960). See also *Baines* v. *City of Danville*, 337 F.2d 579, 593 (4th Cir. 1964), *affirmed*, 384 U.S. 590 (1966).]

Another consistent theme in Judge Haynsworth's writings is his belief that it is not the function of an appellate court to make findings of fact. Both in civil and in criminal cases he shows great faith in the jury system. In an extermely important decision earlier this year he said that "faith in the ability of a jury, selected from a cross-section of the community, to choose wisely among competing rational inferences in the resolution of factual questions lies at the heart of the federal judicial system." [*Wratchford* v. *S. J. Groves & Sons Co.*, 405 F.2d 1061, 1065 (4th Cir. 1969).] This is merely the latest expression of an attitude he has had as long as he has been on the bench. [See, *e.g.*, *Dixon* v. *Virginian Ry. Co.*, 250 F.2d 460, 462 (4th Cir. 1957).] He has been quick to hold that there must be a new trial if there was any possibility that an improper influence might have been brought to bear on the jury. [*Holmes* v. *United States*, 284 F.2d 716 (4th Cir. 1960); *Thomas* v. *Peerless Mattress Co.*, 284 F.2d 721 (4th Cir. 1960); *United States* v. *Rogers*, 289 F.2d 433 (4th Cir. 1961); *United States* v. *Virginia Erection Corp.*, 335 F.2d 868 (4th Cir. 1964).] Long before the Supreme Court came to a similar conclusion [*Bruton* v. *United States*, 391 U.S. 123 (1968)], he showed a proper skepticism about the efficacy of instructions cautioning a jury that a confession is admissible against one defendant but not against another and called for the routine adoption of practices that would give greater protection to the codefendant. [*Ward* v. *United States*, 288 F.2d 820 (4th Cir. 1960).] He has recognized, too, that jurors can be swayed by prejudice, and has held that when Negro defendants were on trial counsel must be given an opportunity to explore whether any members of the jury panel belonged to organizations that might suggest prejudices against Negroes. [*Smith* v. *United States*, 262 F.2d 51 (4th Cir. 1958).]

The jury occupies a significant constitutional role in our system, but even when it is a judge rather than a jury who has found the facts, Judge Haynsworth has thought that great weight should be given to the findings and that the appellate court should not substitute its own view of the facts for that taken by the district judge. [*Hall* v. *Warden, Maryland Penitentiary*, 313 F. 2d 483, 497 (4th Cir. 1963) (dissenting opinion); *United States* v. *Ellicott*, 336 F. 2d 868, 872–874 (4th Cir. 1964) (dissenting opinion).]

Finally, Judge Haynsworth respects the place of the states, and of the state judiciaries, in our form of government. Indeed he has been reversed by the Supreme Court for deferring too much to the state courts. [*Griffin* v. *Board of Supervisors of Prince Edward County*, 322 F. 2d 332 (4th Cir. 1964), *reversed*, 377 U.S. 218 (1964).] At the same time he has insisted on the independence of the federal courts. In an important decision he wrote that a state may not "deny the judicial power the states conferred upon the United States when they ratified the Constitution or thwart its exercise within the limits of congressional authorization." [*Markham* v. *City of Newport News*, 292 F. 2d 711, 713 (4th Cir. 1964).] This was in keeping with his voiced "concern for the perpetuation of an independent federal judicial system * * *." [*Wratchford* v. *S. J. Groves & Sons Co.*, 405 F. 2d 1061, 1066 (4th Cir. 1969).]

History teaches us that it is folly to suppose that anyone can predict in advance what kind of a record a particular person will make as a Justice of the Supreme Court. The awesome and lonely responsibility that the Justices have in considering the great issues that come before them has made them, in many instances, different men than they were before. All that one can properly undertake, in assessing a nominee to that Court, is to consider whether he has the intelligence, the ability, the character, the temperament, and the judiciousness that are essential in the important work he will be called upon to perform. Clement Haynsworth has shown in twelve years on the circuit court bench that he possesses all of these qualities in great measure. I hope that he will be quickly confirmed.

Thank you.

SUPPLEMENTAL STATEMENT OF CHARLES ALAN WRIGHT

On September 3d I sent to the Judiciary Committee copies of the prepared text of the testimony I expected to give in the hearing then scheduled for September 9th. The postponement of the hearing because of the regrettable death of Senator Dirksen and the delay in my own appearance before the Committee has made it possible for me to give further study to the cases in which Judge Haynsworth has participated and analyze in closer detail his philosophy in particular areas of the law to the extent that this is disclosed by his votes and his opinions. My attention has centered on the areas of criminal procedure and freedom of expression.

I continue to believe, as my original statement indicates, that it is impossible to know in advance what the voting record will be of any appointee to the Supreme Court and that it is especially treacherous to attempt to make such an advance assessment on the basis of what a man has done as a judge of a lower court prior to appointment to the Supreme Court. On many issues the record will be silent simply because the lower court judge has never been confronted with those issues. For one example, the meaning of the Establishment and Free Exercise Clauses of the First Amendment has never, so far as I can find, come up in any case in which Judge Haynsworth has participated. There are other important areas of the law of which this is equally true. Even where a lower court judge has been confronted with a particular issue he has done so as a judge writing within the framework of relevant Supreme Court decisions and not as a free agent.

For these reasons the remarks that follow are a description of the record of Judge Haynsworth. They are not an attempt to predict the record of Justice Haynsworth.

Few, if any, areas of the law are the subject of more controversy today than that of criminal procedure. It is an area of special interest to me because, as I noted in my original statement, earlier this year I published a three-volume treatise on federal criminal procedure. In the Preface to that treatise I said: "I freely confess to one bias. I admire and respect the Supreme Court of the United States." [1 Wright, *Federal Practice and Procedure: Criminal* viii (1968).] It is with that bias that I reviewed the criminal cases in which Judge Haynsworth has participated.

The overall impression that I get from these cases is that of an intensely practical approach to criminal procedure. This approach is hardly surprising in a judge who has expressed in many ways and in many

contexts the thought that "Theoretical abstractions are of no help. Our conclusion must be founded upon practical considerations." [*United States* v. *Southern Ry. Co.*, 341 F.2d 669, 671 (4th Cir. 1956).] Judge Haynsworth has been in the vanguard, often ahead of the Supreme Court, in protecting persons accused of a crime against any tilting of the scales of justice that might lead to the conviction of an innocent man. At the same time he has been reluctant to set free a person who is undoubtedly guilty because of some minor imperfection, saying that this is "too high a price to pay for indulgence of a sentimentalism." [*United States* v. *Slaughter*, 366 F.2d 833, 847 (4th Cir. 1966) (dissenting opinion).] Let me give illustrations of the cases that have led me to these conclusions.

One area of potential abuse in criminal procedure, in which there is a very real danger of convicting the innocent, is where several defendants are tried at the same time. There is substantial risk that the guilt of one defendant will rub off on another and that the jury will not make an independent evaluation of the evidence against each defendant.

In 1968 the Supreme Court reduced a part of this risk when it ruled that two defendants cannot be tried together if one has made a confession implicating the other unless precautions have been taken to protect the right of confrontation of the defendant who has not confessed. [*Bruton* v. *United States*, 391 U.S. 123 (1968).] Eight years before that decision Judge Haynsworth had written of the need for precautions of this kind and had said that "in the normal case, such a precaution should be taken routinely." [*Ward* v. *United States*, 288 F. 2d 820, 823 (4th Cir. 1960).] Even prior to that case Judge Haynsworth had concurred in one of the leading opinions on joinder of defendants, *Ingram* v. *United States* [272 F. 2d 567 (4th Cir. 1959)]. The holding in *Ingram* is that joinder of defendants is not permissible unless the requirements of the Rules of Criminal Procedure on joinder are satisfied, and that "it is not 'harmless error' to violate a fundamental procedural rule designed to prevent 'mass trials.'" [*Id.* at 570–571.] The *Ingram* decision seems to me demonstrably sound and I regret that the Second Circuit, in an opinion by Judge Friendly, has reached a contrary result. [*United States* v. *Granello*, 365 F. 2d 990 (2d Cir. 1966). See 1 Wright, Federal Practice and Procedure: Criminal 327–329 (1969).]

The right to a speedy trial is one of the important protections in criminal procedure, secured by the Sixth Amendment. For many years this right had been effectively denied to many defendants because the cases held that a state was under no obligation to try a defendant who was in a federal prison or the prison of another state on some other charge. The Supreme Court announced a different rule earlier this year, in a case in which I had the honor to be appointed by the Court as counsel for the indigent prisoner. [*Smith* v. *Hooey*, 393 U.S. 374 (1969).] It ruled that a state must make a good faith effort to have a defendant confined elsewhere returned for trial on the charges pending in the state.

Judge Haynsworth had joined in an opinion a year earlier anticipating the result the Supreme Court was later to reach [*Pitts* v. *North Carolina*, 395 F.2d 182 (4th Cir. 1968)], and only a few days before the Supreme Court decision he wrote the opinion for an en banc court liberalizing the use of habeas corpus, despite some serious technical difficulties, in order to provide a remedy for state prisoners who wish to enforce their right to be tried by another state. [*Word* v. *North Carolina*, 406 F.2d 352 (4th Cir. 1969).]

This term the Supreme Court also put teeth in the requirements of Criminal Rule 11 with regard to guilty pleas, by holding that the judge must personally address the defendant and determine that the plea is being made voluntarily and with an understanding of the nature of the charge. [*McCarthy* v. *United States*, 394 U.S. 459 (1969).] This came as no new doctrine in the Fourth Circuit, where the court, speaking through Judge Haynsworth, has long recognized a similar doctrine and held that Rule 11 "requires something more than conclusionary questions phrased in the language of the rule. It contemplates such an inquiry as will develop the underlying facts from which the court will draw its own conclusion." [*United States* v. *Kincaid*, 362 F.2d 939, 941 (4th Cir. 1966).]

One of the major decisions of the final decision day of the Warren Court was *North Carolina* v. *Pearce* [395 U.S. 711 (1969)], severely restricting the power of a judge to give a defendant who has had a first conviction set aside a more severe sentence after a second conviction on the same charge. The decision there affirmed by the Supreme Court was one in which Judge Haynsworth had joined [*Pearce* v. *North Carolina*, 397 F.2d 253 (4th Cir. 1968)], and indeed another decision in which he concurred, holding that the same rule applies even when the second sentence is imposed by a jury rather than by a judge [*May* v. *Peyton*, 398 F.2d 476 (4th Cir. 1968)], speaks to a question on which the Supreme Court is still silent and may well go beyond what the Supreme Court will require.

Judge Haynsworth's concern for the sentencing process is evident in still another case. The usual rule is that an appellate court may not consider the length of a sentence provided that it is within statutory limits. The Senate has passed a bill that would change this rule but to date it remains the rule. It would seem to follow that the length of a sentence within statutory limits may not be challenged collaterally by a motion under 28 U.S.C. § 2255. But the Fourth Circuit, in an opinion in which Judge Haynsworth joined, held that this rule must yield where they are exceptional circumstances, and that there were such circumstances, and § 2255 relief was available, where the judge had given the maximum sentence authorized by statute under the mistaken impression that he had no discretion to give a lesser sentence [*United States* v. *Lewis*, 392 F. 2d 440 (4th Cir. 1968).]

In 1966 the Fourth Circuit, sitting en banc, held unanimously that the method by which the police had had the victim of a crime identify the voice of a suspect was so suggestive that to allow evidence of the identification into evidence was a denial of due process. [*Palmer* v. *Peyton*, 359 F. 2d 199 (4th Cir. 1966).] That decision was cited approvingly by the Supreme Court a year later [*Stovall* v. *Denno*, 388 U.S. 293, 302 (1967)], and the Court has subsequently set aside a conviction on this ground. [*Foster* v. *California*, 394 U.S. 440 (1969).]

Judge Haynsworth has taken a generous view of the right to bail. Years ago he joined in an opinion holding that "normally bail should be allowed pending appeal, and it is only in an unusual case that denial is justified." [*Rhodes* v. *United States*, 275 F. 2d 78, 82 (4th Cir. 1960).] More recently he wrote an opinion holding, over vigorous dissent, that a federal court had properly released Rap Brown on his own recognizance from state custody on an extradition warrant. [*Brown* v. *Fogel*, 387 F. 2d 692 (4th Cir. 1967).]

Judge Haynsworth has detected violations of due process both where counsel was not provided an indigent for more than three months after his arrest [*Timmons* v. *Peyton*, 360 F.2d 327 (4th Cir. 1966)], and where defendant was brought to trial three and a half hours after indictment and there was insufficient time for appointed counsel to investigate the case. [*Martin* v. *Commonwealth*, 365 F.2d 549 (4th Cir. 1966).] He also voted to grant habeas corpus on the ground that the prosecuting attorney in a state case had had a conflict of interest since at the same time he was prosecuting the defendant he represented the defendant's wife in a divorce proceeding. [*Ganger* v. *Peyton*, 379 F.2d 709 (4th Cir. 1967).]

One of Judge Haynsworth's opinions reverses a criminal conviction because the judge had given an unbalanced version of the "Allen charge"—or "dynamite charge" as it is known in my part of the country. [*United States* v. *Smith*, 353 F.2d 166 (4th Cir. 1965).] See also *United States* v. *Rogers*, 289 F.2d 433 (4th Cir. 1961). The case is particularly interesting because there had been no objection to the charge in the district court, as is normally required for the appellate court to consider the point, but the danger that even the pure "Allen charge" will coerce a divided jury into convicting a person is so great [2 Wright, *Federal Practice and Procedure: Criminal* § 902 (1969)] that Judge Haynsworth concluded that a one-sided version of that charge was "plain error" that the appellate court might notice on its own motion.

Senator Tydings has called attention earlier in these hearings to Judge Haynsworth's splendid opinion in *United States* v. *Chandler* [393 F.2d 920 (4th Cir. 1968)], in which he rejected an antiquated test of mental responsibility and adopted for his circuit a new test more consonant with modern psychiatric knowledge.

There is an interesting passage in one of Judge Haynsworth's earliest opinions in which he wrote: "However compelling our conviction that Call has been guilty of wrongdoing, we may not affirm his conviction as a co-conspirator unless the evidence is reasonably susceptible of the inference that he knew of the conspiracy." [*Call* v. *United States*, 265 F. 2d 167, 172 (4th Cir. 1959).] The principle that a defendant may not be convicted because he is a bad man, but only if he committed the crime for which he is indicted, is one of great importance.

Judge Haynsworth has done much to remove shackles on the writ of habeas corpus and to make it freely available to those who claim that they have been denied their constitutional rights. At page 6 of my original statement I have discussed his best known case in this area, *Rowe* v. *Peyton* [383 F. 2d 709 (4th Cir. 1967), affirmed 391 U.S. 54 (1968)], in which he correctly anticipated that the Supreme Court would no longer follow its earlier precedent holding that a prisoner in custody under one sentence could not challenge another sentence he was to serve in the future. In his opinion in that case he combines great scholarship with the practical approach that is a major theme in all of his opinions. A formalistic approach to the statutory requirement that a prisoner be "in custody" would harm both the prisoner and the state. "It is to the great interest of the Commonwealth and to the prisoner to have these matters determined as soon as possible when there is the greatest likelihood the truth of the matter may be established. Justice delayed for want of a procedural, remedial device over a period of many years is, indeed, justice denied to the prisoner and, in an even larger degree, to Virginia." [383 F. 2d at 715.]

But *Rowe* stands far from alone. Judge Haynsworth has written that the statutory requirement that state remedies be exhausted does not bar relief when the state court has decided the identical substantive point in a case involving another prisoner and pursuit of the state remedies, therefore, would be futile. [*Evans* v. *Cunningham*, 335 F.2d 491 (4th Cir. 1964).] He has held that petitions by prisoners are not to be read with a hostile eye and that "claims of legal substance should not be forfeited because of a failure to state them with technical precision." [*Coleman* v. *Peyton*, 340 F.2d 603, 604 (4th Cir. 1965).] The district court, on habeas corpus, is not bound by a wholly

conclusionary finding by the state court [*Outing* v. *North Carolina*, 344 F.2d 105 (4th Cir. 1965)] nor may it accept the historical facts as found by the state court if the state court had no adequate basis for its findings. [*McCloskey* v. *Barlow*, 349 F.2d 119 (4th Cir. 1965).] In many ways the most interesting of the Haynsworth opinions on habeas corpus, other than the *Rowe* case, is *White* v. *Pepersack* [352 F.2d 470 (4th Cir. 1965).] A state court defendant, charged with first degree murder, had taken the stand and admitted the killing but testified to facts that would, if believed, show that it was not premeditated and that he could be convicted only of some lesser offense. The district court held that defendant's admission was tantamount to a plea of guilty and barred him from seeking habeas corpus on the grounds of an illegal search, an involuntary confession, and use of perjured testimony. The Fourth Circuit held to the contrary. In his opinion for the court, Judge Haynsworth wrote that defendant's testimony was surely not a plea of guilty to first degree murder and pointed out that if the state court had found the defendant guilty of second degree murder and imposed an appropriate sentence defendant himself might well have accepted his punishment as proper. Judge Haynsworth then said:

"Extended judicial inquiry, with all of its expense and delay, is the natural product of overconstruction of a defendant's admissions and the imposition of an inappropriate sentence. The flood of postconviction cases in state and federal courts will be stemmed only if justice is made to shine more brightly in the trial courts."

[*Id.* at 473.] The decision is reminiscent of an earlier one in which he had criticized slovenly practices in drawing indictments on the part of some United States attorneys and pointed out that the consequence of such practice is "the needless expenditure of much time and effort by [the United States Attorney], by defendants and their counsel and by the courts. Here, as in most situations, much waste could be avoided by an initial exercise of reasonable care." [*United States* v. *Roberts*, 296 F. 2d 198, 202 (4th Cir. 1961).]

It seems to me clear that Judge Haynsworth has clearly shown his unwillingness to tolerate procedures in criminal cases that taint the factfinding process or that cast doubt on the fairnesss of the proceeding or that unreasonably clog claims of constitutional right. In one case he wrote:

"Current astuteness in the protection of individual rights is not at odds with the interests of a society which places high values upon liberty and justice and freedom and fairness. It is the cornerstone of such a society."

[*Smallwood* v. *Warden, Maryland Penitentiary*, 367 F. 2d 945, 952 (4th Cir. 1966) (dissenting opinion).] Judge Haynsworth's whole record on the bench of the court of appeals demonstrates that that remark is not empty rhetoric but a statement of deeply felt conviction.

Some of the rules that the Supreme Court has laid down in criminal cases are not concerned with assuring a correct result or with preserving fairness in the proceeding but are intended to deter practices by those responsible for law enforcement that have been found to be inconsistent with the values of our free society. Judge Haynsworth has not been unmindful of this function of the courts. He had been on the bench barely a year when he joined in an opinion in which the court gave a broad reading to the then-recent decision in *Mallory* v. *United States* [354 U.S. 449 (1957)], and said:

"The teaching of the Mallory case is that insistence on strict compliance with Rule 5(a) is necessary to discourage police from the use of third degree methods, and that only in that way will the opportunity and the temptation be denied them. Unnecessarily prolonged detention before bringing the accused to a Commissioner or other judicial officer, to give police opportunity to extract a confession, is odious to our federal criminal jurisprudence * * *. [*Armpriester* v. *United States*, 256 F. 2d 294, 296 (4th Cir. 1958).]"

He wrote for his court in holding that the *Miranda* rules apply to custodial questioning even though the defendant was not formally under arrest. A dissenter argued that the majority was giving an overdrawn reading to *Miranda* and that the decision was "indeed a blow to law enforcement," but Judge Haynsworth said: "If the arresting officer's failure to make a formal declaration of arrest were held conclusive to the contrary, the rights afforded by *Miranda* would be fragile things indeed." [*United States* v. *Pierce*, 397 F. 2d 128, 130 (4th Cir. 1968).]

One other case about which Senator Tydings has already commented shows Judge Haynsworth's sensitivity to the role of the courts in deterring improper law enforcement practices. The case is *Lankford* v. *Gelston* [364 F. 2d 197 (4th Cir. 1966)]. The court en banc held unanimously, in a fine opinion by Judge Sobeloff, that an injunction should issue to prevent the Baltimore police from making blanket searches on uncorroborated anonymous tips. Most of the homes searched were occupied by Negroes. The court took note of the deteriorating relations between the Negro community and the police in Baltimore and said that "it is of the highest importance to community morale that the courts shall give firm and effective reassurance, especially to those who feel that they have been harassed by reason of their color or their poverty." The court took note of the serious problems of law enforcement but it said:

"Law observance by the police cannot be divorced from law enforcement. When official conduct feeds a sense of injustice, raises barriers between the department and segments of the community, and breeds disrespect for the law, the difficulties of law enforcement are multiplied."

[*Id.* at 204.]

I spoke at the outset of the very practical approach Judge Haynsworth takes to problems of criminal procedure. Law enforcement is a deadly serious matter and of great importance to all parts of society. It is not a game in which the police are to be called "out" for failure to touch every base.

The *Hayden* case, discussed at page 6 of my original statement, illustrates this. There Judge Haynsworth indicated his disagreement with the majority of the court in its adherence to the old rule that "mere evidence" may not be the object of a lawful search, and the Supreme Court, in reversing the decision, agreed with him. [*Hayden* v. *Warden, Maryland Penitentiary*, 363 F. 2d 647, 657–658 (4th Cir. 1966) (separate opinion), reversed 387 U.S. 294 (1967).] The "mere evidence" rule was an outdated relic of a former era. It stemmed from property law conceptions about search and seizure while today the Fourth Amendment is recognized as protecting an interest in privacy rather than interests in property. As a practical matter, the rule was a needless hobble on the police while at the same time it gave no substantial protection to the right of the people to be secure from unreasonable searches. Police could, and did, seize much evidence on the ground that it was a fruit of the crime, or contraband, or an instrumentality of crime, and thus properly the subject of a search. Only occasionally did a criminal defendant receive an unexpected windfall when a court was unable to bring particular evidence into one of these categories and was forced to exclude it. [See 3 Wright, *Federal Practice and Procedure: Criminal* § 664 (1969).] The rule had no reason for existence today and Judge Haynsworth was right, as the Supreme Court held, in believing that the time had come to discard it.

The practicality of his approach is evident also in a dissent he wrote in a case in which the majority held that a confession was involuntary. [*Smallwood* v. *Warden, Maryland Penitentiary*, 367 F. 2d 945 (4th Cir. 1966).] Judge Haynsworth thought that the circumstances in the case were far milder than in any case in which the Supreme Court had found a confession involuntary, but his principal argument was that it was pointless to test a 1953 confession by 1966 standards. The practices the police followed were practices that the Supreme Court in 1953, and for some years thereafter, approved. The police at that time could not have anticipated the change in standards that was later to evolve. Nor would setting the prisoner free in 1966 assist the police today in understanding their duty. The later Supreme Court decisions, and *Miranda* in particular, inform the police more authoritatively than would a decision of the Fourth Circuit. All of these considerations led Judge Haynsworth to say:

"It is not fair to the states or to the public to vacate judgments as old as this one on the basis of evolving constitutional standards which could not have been reasonably anticipated by the police at the time they acted."

[*Id.* at 952.] His view did not prevail in that case, but even those of us who welcome most enthusiastically the developments of the last decade in the law of confessions must concede that there is much force to Judge Haynsworth's position.

In appraising his decisions in confession cases, it is necessary to keep in mind the point that I developed at pages 7–9 of my original statement about Judge Haynsworth's reluctance to substitute his view of the facts for those of a jury or a district judge. This is a consistent thread in his confession opinions. It appears perhaps most clearly in a decision he wrote in 1967 upholding a determination that a confession was voluntary. [*Outing* v. *North Carolina*, 383 F. 2d 892 (4th Cir. 1967).] The case was obviously a close one. Judge Kaufman wrote a 26 page dissent, but the Supreme Court, unanimously so far as it appears, refused to review the case [390 U.S. 997 (1968).] Judge Haynsworth said that if the district judge had drawn an ultimate inference that the confession was coerced the court might well have sustained him. But the district judge found that the confession was not coerced and this finding was neither clearly erroneous as an inference of fact nor influenced by an erroneous view of law. Since this ultimate inference was a permissible one, the majority of the court felt that it should accept it. I think that here, as in other areas of the law, Judge Haynsworth shares an attitude expressed by Judge Chase, of the Second Circuit, some years ago when he said: "Though trial judges may at times be mistaken as to facts, appellate judges are not always omniscient." [*Orvis* v. *Higgins*, 180 F. 2d 537, 542 (2d Cir. 1950) (dissenting opinion).] Since this has been for many years my own view [see Wright, *The Doubtful Omniscience of Appellate Courts*, 41 Minn. L. Rev. 751 (1957)], I cannot find in it any ground for criticism of Judge Haynsworth or for believing that he is tolerant of coercive police practices.

In conclusion, I would like to turn away from criminal law and address myself briefly to the vitally important freedoms of expressions protected by the First Amendment. I am one of those who believe that these have a "preferred position" in our constitutional scheme and that they are of special significance at a time when many groups in our country are unhappy with the established order and wish to air their grievances. Judge Haynsworth has had very little occasion to address himself to the issues these freedoms pose and the decisions are too few to form any solid judgments.

I can find only eight cases involving any

significant question of freedom of expression in which Judge Haynsworth has participated. Four of these are obscenity cases, a class of litigation that is perhaps sui generis, and that is not only immensely difficult in itself but is even more difficult for a lower court judge to try to understand the rules, such as they are, that the Supreme Court has laid down. In two cases he wrote for a unanimous court holding particular magazines obscene and was reversed by the Supreme Court [*United States* v. *392 Copies of Magazine Entitled "Exclusive,"* 373 F. 2d 633 (4th Cir. 1967, reversed 389 U.S. 50 (1967); *United States* v. *Potomac News Co.*, 373 F. 2d 635 (4th Cir. 1967) reversed 389 U.S. 47 (1967.] The reversals in each instance were per curiam decisions in which the Supreme Court relied on its Delphic opinion in *Redrup* v. *New York* [386 U.S. 767 (1967], which came down after Judge Haynsworth's decisions. In a third case he was part of a 5–2 majority of the Fourth Circuit holding that obscenity cannot be determined on a per se basis that any collection of photographs of nudes is obscene if, in some of the pictures, the pubic area is exposed. [*United States* v. *Central Magazine Sales, Ltd.*, 381 F. 2d 821 (4th Cir. 1967).] Finally he joined in a 2–1 decision that if material has been found by the district court not to be obscene, it should be admitted through customs and its release should not be held up pending appeal. [*United States* v. *Reliable Sales Co.*. 376 F. 2d 803 (4th Cir 1967).]

The other four cases are of more general importance. Judge Haynsworth was a member of a three-judge district court that held unconstitutional on grounds of vagueness a North Carolina statute limiting the kinds of persons who may speak on state university campuses. [*Dickson* v. *Sitterson*, 280 F.Supp. 486 (M.D.N.C. 1968).] Professor Van Alstyne, who is to testify in support of Judge Haynsworth, appeared in the case as amicus curiae and is the leading expert in the country on that particular field of the law. He is better qualified than I am to tell you of the significance of the decision. Judge Haynsworth was a member of a panel of his court upholding suspensions of students at Bluefield State College for taking part in a disruptive demonstration. [*Barker* v. *Hardway*, 399 F.2d 638 (4th Cir. 1969).] The Supreme Court refused to review the decision. Justice Fortas, who had been spokesman for the Court one week before in the *Tinker* case [*Tinker* v. *Des Moines Independent Community School District*, 393 U.S. 503 (1969)], in which it was held that school students cannot be disciplined for wearing black arm bands to express their disapproval of the Vietnam war, wrote an opinion concurring in denial of certiorari in the Bluefield States case. He said that "the petitioners here engaged in an aggressive and violent demonstration, and not in peaceful, nondisruptive expression, such as was involved in *Tinker*." [*Barker v. Hardway*, 394 U.S. 905 (1969) (concurring opinion).]

In *United Steelworkers of America* v. *Bagwell* [383 F.2d 492 (5th Cir. 1967)], Judge Haynsworth wrote the opinion holding unconstitutional a city ordinance prohibiting distribution of circulars about union membership without a prior permit from the chief of police. The decision on the merits is unexceptionable. The path was clearly marked by Supreme Court precedents. What is more interesting is the enthusiastic acceptance the court gave to the principle of *Dombrowski* v. *Pfister* [380 U.S. 479 (1965)] that in some cases in which First Amendment rights are involved the usual rules barring a federal court from interfering with a state's enforcement of its criminal laws no longer apply. One like myself who has doubts about whether the protection *Dombrowski* gives to cherished First Amendment rights is not outweighted by its cost in federal-state relations must note with interest Judge Haynsworth's willingness to apply, if not indeed to extend, *Dombrowski*.

Indeed Judge Haynsworth may have partially anticipated *Dombrowski* in a well-known case arising out of demonstrations by Negroes in Danville, Va. The case is a complicated one, involving a number of different issues, and several different appeals disposed of under a single title. Many demonstrators were arrested in Danville for violation of a state court injunction and local ordinances. Some of these persons attempted to remove their cases to federal court. Others went directly to federal court and sought to enjoin the pending state court prosecutions as well as future arrests. The case, which produced one per curiam opinion and two opinions by Judge Haynsworth for the majority of the Fourth Circuit, established four things. First, the court held that the Anti-Injunction Act of 1793, 28 U.S.C. § 2283, did not bar it from issuing a temporary injunction restraining state court prosecutions in order to preserve the status quo while it determined whether grant of a permanent injunction would fall under any of the exceptions to the Act. [*Baines* v. *City of Danville*, 321 F. 2d 643 (4th Cir. 1963); *Baines* v. *City of Danville*, 337 F. 2d 579, 593–594 (4th Cir. 1964).] This was a creative interpretation of the Anti-Injunction Act and is surely sound. [See American Law Institute, *Study of the Division of Jurisdiction between State and Federal Courts* 307 (Official Draft 1969).] Second, the court held that the circumstances did not permit removal of a criminal prosecution from state to federal court under 28 U.S.C. § 1443, which allows removal of certain civil rights cases. [*Baines* v. *City of Danville*, 357 F. 2d 756 (4th Cir. 1966).] This holding was affirmed by the Supreme Court. [*Baines* v. *City of Danville*, 384 U.S. 590 (1966).] Third, the court held that the Civil Rights Act, 42 U.S.C. § 1983, does not expressly authorize a stay of state proceedings and that the Anti-Injunction Act therefore barred an injunction against prosecutions already pending in the state court. [*Baines* v. *City of Danville*, 337 F. 2d 579, 586–594 (4th Cir. 1964).] The Supreme Court denied certiorari on this aspect of the case [*Chase* v. *McCain*, 381 U.S. 939 (1965)], and the question remains an open one in the Supreme Court. [See *Cameron* v. *Johnson*, 390 U.S. 611, 613 n. 3 (1968.]

Finally, and most importantly for present purposes, Judge Haynsworth held that the rule of comity by which federal courts do not ordinarily interfere with the states in the enforcement of their criminal laws is not absolute, and that the district judge should enjoin further arrests under the ordinances and the injunction "if he finds that in combination they have been applied so sweepingly as to leave no reasonable room for reasonable protest, speech and assemblies, and thus, in application, are plainly unconstitutional." [*Baines* v. *City of Danville*, 337 F. 2d 579, 594–596 (4th Cir. 1964).] *Dombrowski* demonstrates that Judge Haynsworth was right in going that far in allowing the federal court to give relief, although under *Dombrowski* a federal injunction against future prosecutions is also permitted if the challenged laws are unconstitutional on their face.

There is a passage in one of these opinions in which Judge Haynsworth speaks to the meaning of the First Amendment.

"Whatever constitutional basis there may be for the substantive demands of the demonstrators, they have, unquestionably, rights of free speech and assembly guaranteed by the First Amendment, and recognition of those First Amendment rights is required of Danville by the Fourteenth Amendment. Those First Amendment rights incorporated into the Fourteenth Amendment, however, are not a license to trample upon the rights of others. They must be exercised responsibly and without depriving others of their rights, the enjoyment of which is equally as precious. It is thus plain, for instance, that while Negroes, excluded because of their race from a privately operated theater, have a right to protest their exclusion and to inform the public and public officials of their grievance, they do not have the right, by massive occupancy of approaches to the theater, to exclude everyone else from it, or to coerce acceptance of their demands through violence or threats of violence.

"* * * It is well established that public officials, charged with the duty of maintaining law and order, may enforce laws and injunctions reasonably necessary for that purpose, but injunctions and statutes which exceed the necessities of the situation cannot be lawfully enforced if they infringe upon constitutional rights. What is required is mutual accommodation of the rights of the public and those rights of protestants which are guaranteed by the First Amendment."

[*Id.* at 586–587.] Later Supreme Court decisions, notably Justice Goldberg's opinion for the Court in *Cox* v. *Louisiana* [379 U.S. 536, 554–555 (1965)], demonstrate that the quoted passage from Judge Haynsworth's opinion represents sound First Amendment philosophy.

The record of the nominee on freedom of expression is scantier than his record on criminal procedure but from his decisions in that area of the law there is no reason to doubt his devotion to the great protections of the First Amendment.

I end as I begin. I cannot predict the votes of Justice Haynsworth. The cases I have reviewed in this statement demonstrate, I believe, that in the areas of criminal procedure and freedom of expression the record of Judge Haynsworth on the Fourth Circuit has been a constructive and forward-looking one. But I support his nomination, not because his views on these subjects or others are similar to mine, but because his overall record shows him to have the ability, character, temperament, and judiciousness that are needed to be an outstanding Justice of the United States Supreme Court.

EXHIBIT 3

U.S. COURT OF APPEALS,
FOURTH JUDICIAL CIRCUIT,
Greenville, S.C., September 6, 1969.

Hon. JAMES O. EASTLAND,
Chairman, Committee on the Judiciary, Washington, D.C.

MY DEAR SENATOR: I have received by telephone this morning a copy of the letter addressed to you on yesterday by Senator Hart and Senator Tydings.

To the extent the requested information has relevance, I believe that the requested information is already in your possession in the statement I have filed with you, in the file delivered to you by the Department of Justice, and in the copies of my income tax returns. However, I shall address myself to the Senators' request as best I can.

(1) My financial interest in Carolina Vend-A-Matic and its subsidiaries from 1957 to 1964 is fully detailed in the statement I have previously filed. I never received any compensation from Carolina Vend-A-Matic or any of its subsidiaries as an officer or as a trustee of any profit sharing or retirement plan. I did receive compensation from Carolina Vend-A-Matic as a director, and in 1962 my wife received compensation as Secretary. These receipts for the period 1957–1964 are fully disclosed in the copies of the income tax returns filed with you. Since those returns are unavailable to me now, I cannot compile a schedule of those receipts here, but I am sure the staff of your Committee can do so from the tax returns.

(2) I believe the statement previously filed discloses the general nature of my services for Carolina Vend-A-Matic. In supplementa-

tion of that statement, however, I may report that there was a weekly luncheon meeting of the board of directors. I attended these meetings when I was in Greenville and not otherwise engaged. At these extremely informal meetings, we considered and discussed weekly cash flow data and problems of financing which were my particular concern. From time to time there were also discussions of personnel and other problems, though I never became directly involved in any of them. After I went on the court I may have handled matters of the renewal and extension of bank credit, though I am not at all certain that I did so. Mr. Dennis handled all arrangements with the bank beginning shortly after his employment.

I rendered no other services to Carolina Vend-A-Matic.

(3) A complete list of the locations of vending machines of Carolina Venda-A-Matic and its subsidiaries and the gross receipts from the machines in each location for the years 1957–1964 could be compiled only from the original books of record of Carolina Vend-A-Matic and its subsidiaries. Those books are in the possession of ARA in Philadelphia, Pennsylvania. I believe it would permit an accountant to have access to them if the Committee wishes it, but such information is not in my capacity to supply immediately.

The file compiled by Judge Sobeloff contains a copy of the proposal made by Carolina Vend-A-Matic to Drayton Mill in December 1963. It contains a list of the forty-six industrial plants in which Carolina Vend-A-Matic then had vending machines installed. These were all full food service operations, in addition to which Carolina Vend-A-Matic had many machines in numerous locations dispensing only coffee, cold drinks or candy. For your convenience, I can reproduce here the list of forty-six industrial plants in which Carolina Vend-A-Matic provided full food vending service in December 1963:

1. Apalache Plant, Greer.
2. Bloomsburg Mill, Abbeville.
3. Brandon Rayon, Greenville.
4. Buffalo Mill, Union.
5. Carlisle Finishing Co., Union.
6. Central Mill, Central.
7. Columbia Nitrogen Corp., Augusta, Ga.
8. Consolidated Trim Co., Union.
9. Delta Finishing Co., Cheraw.
10. Diehl Manufacturing Co., Pickens.
11. Dunlop Corp., Westminster.
12. Firth Carpet Co., Laurens.
13. Fork Shoals Mill, Fork Shoals.
14. F. W. Poe Manufacturing Co., Greenville.
15. Gayley Mill, Marietta.
16. Greer Mill, Greer.
17. Her Majesty Manufacturing Co., Mauldin.
18. Homelite, Greer.
19. James Fabrics, Cheraw.
20. Jeffrey Manufacturing Co., Belton.
21. Jonesville Mills, Jonesville.
22. Magnolia Finishing Plant, Blacksburg.
23. Monaghan Mill, Greenville.
24. Mohasco Industries, Liberty.
25. Morgan Mills, Inc., Laurinburg, N.C.
26. Oak River Mill, Bennettsville.
27. Owens-Corning Fiberglas Corp., Aiken.
28. Piedmont Mill, Piedmont.
29. Pickens Mill, Pickens.
30. Pratt Reed, Central.
31. Procter & Gamble Mfg. Co., Augusta, Ga.
32. Pyle National, Aiken.
33. Rocky River Mill, Calhoun Falls.
34. Runnymede Corp., Pickens.
35. Sangamo Electrical Co., Pickens.
36. Sangamo Electrical Co., Walhalla.
37. S.C.M. Corp., Orangeburg.
38. Selma Hosiery, Dillon.
39. Shuron Optical Co., Barnwell.
40. Southern Weaving Co., Greenville.
41. Torrington, Walhalla.
42. Torrington-Clinton Bearing Div., Clinton.
43. Union Bleachery, Greenville.
44. Union Mill, Union.
45. Victor Mill, Greer.
46. Woodside Mill, Liberty.

(4) I am unable to supply a complete answer to question No. 4 for the same reason I am unable to supply a complete answer to question No. 3. However, I do have audited statements of Carolina Vend-A-Matic and its subsidiaries for the years 1961, 1962 and 1963, which I enclose. The file developed by Judge Soberloff discloses that the gross receipts from the machines located in Gayley Mill and the Jonesville Products plant, both Deering Milliken affiliated, approximated $50,000 annually. Those machines were in place in those two plants in each of the years 1961 through 1963. The enclosed audited financial statements show gross sales in 1961 of $1,690,698 and in 1962 of $2,546,046. It thus appears that the gross receipts from machines in plants affiliated with Deering Milliken amounted to slightly less than three per cent of total sales in 1961, and to less than two per cent of total sales in 1962.

The estimated annual gross receipts from machines placed in Magnolia Finishing Plant were approximately $50,000. The gross receipts from the three Deering Milliken affiliated plants, therefore, approximate $100,000 annually. The machines in Magnolia Finishing Plant were in place during part of 1963 only and, without access to the original books of account, I cannot estimate the proportion of sales from machines in those three plants to total sales in that year. Had Magnolia Finishing Plant been in operation during the whole of 1963 and Carolina Vend-A-Matic's machines had been in place during the whole of that year, however, the sales in the three Deering Milliken affiliated plants would have been slightly more than three per cent of the total gross sales of $3,155,102.

(5) Carolina Vend-A-Matic never had vending machines in Darlington Manufacturing Company and, so far as I know, never had any business relation whatever with it.

(6) I cannot say that I never heard prior to December 1963 that Carolina Vend-A-Matic had vending machines in Gayley Mill, in Jonesville Products or in Magnolia Finishing Plant. From time to time there were references to such matters at the luncheon meetings of the directors, and I may have heard some reference to one, two, or all three. The specific locations of vending machines were simply not a matter of interest to me and, as stated before, I was never involved in any way in securing new vending machine locations. Nor, if I had heard that Carolina Vend-A-Matic had vending machines in those three plants, or any of them, can I say that I knew that any one of those plants was related to Deering Milliken. In the Deering Milliken group, there were some seventeen manufacturing corporations in which Deering Milliken, and/or individuals associated with Deering Milliken, owned all or a majority of the stock. (See Darlington Manufacturing Company v. NLRB, 325 F. 2d 682, 688, 397 F. 2d 760, 764.) I can only say now that when I participated in the hearing and decision of the Darlington case in 1963, I had no conscious awareness of any business relation between Carolina Vend-A-Matic and Deering Milliken affiliates, though, of course, I knew that Carolina Vend-A-Matic had vending machines in a miscellany of manufacturing plants.

Had I known in 1963, however, that Carolina Vend-A-Matic had vending machines in Gayley Mill, Jonesville Products and Magnolia Finishing Plant and that they were Deering Milliken affiliates, I would not have requested Chief Judge Sobeloff to relieve me of the duty of sitting. A judge has a duty to disqualify himself when there is legal disqualification, but he has an obligation to perform his judicial duty when there is no legal disqualification. I have disqualified myself in all cases in which my former law firm or any of its members were counsel, cases in which certain relatives were counsel, and all cases in which I had a stock interest in a party or in one which would be directly affected by the outcome of the litigation. (Even here, we, on the Fourth Circuit, regard a proportionately insignificant stock interest in a party as not disqualifying if, after being informed of it, the lawyers do not request the substitution of another judge. Thus instances may be found in the books in which judges of the Fourth Circuit owning 100 shares or so of General Motors may be found to have sat in a case involving General Motors. It seems to us inconceivable that any judge of the Fourth Circuit would be influenced by any such interest, and the lawyers involved, when the question has arisen, have not thought so.)

Disqualification is disruptive, however. If a district judge in a small district should refrain from participation in any case in which he conceivably might have a remote interest, or in which friends have an immediate, even an emotional interest, the efficiency of the judicial machinery would be gravely impaired. In a court of appeals it would adversely affect the random selection of panels, for it requires deliberate rearrangement which affects not only the one case involved, but others as well. It is administratively disruptive, and it can cast heavy and uneven burdens upon judges called upon to substitute. In an en banc case 28 U.S.C. § 46(c) requires the participation of every judge of the court in active service who is is not disqualified; declination of an active, qualified judge to sit would appear to be a violation of the statute and its purpose. In *Edward* v. *United States*, 5 Cir., 334 F.2d 360, 362–3, Judge Rives, somewhat regretfully, concluded after reviewing all of the considerations, "In the absence of a valid legal reason, I have no right to disqualify myself and must sit."

(7) This morning I contacted by telephone Mr. Lee F. Driscoll, Jr. of Philadelphia, Pennsylvania, who has possession of the minute books of Carolina Vend-A-Matic and its subsidiaries. He agreed to procure copies of all of the minutes and to transmit them to you. Meanwhile, I received this morning from him extracts from the minute books of Carolina Vend-A-Matic and its subsidiaries showing their officers and directors. For the possible convenience of the Committee, these sheets are attached.

(8) The sources and amounts of my income from 1957 through 1968 are fully disclosed in the copies of my income tax returns which have been filed with you. Without present access to them, I am unable to prepare schedules which would recapitulate that information. I have prepared and I attach hereto a list of my current investments.

(9) I am informed that since my sale of the stock of ARA received in exchange for my stock in Carolina Vend-A-Matic;

(i) Carolina Vend-A-Matic has been ejected from Gayley Mill as a result of some dissatisfaction on the part of the plant manager;

(ii) That Jonesville Products Plant was sold and is no longer an affiliate of Deering Milliken;

(iii) While Carolina Vend-A-Matic now serves only one Deering Milliken affiliated plant that it served in 1963, it serves ten others, one of which was a result of an acquisition of an existing supplier, the other nine having been obtained as a result of competitive bidding. I am further told by one of my former associates in Carolina Vend-A-Matic that Deering Milliken has maintained a record of all vending machine bids and proposals and a record of its own data showing the basis of its selection of

one of the bidders. I am further informed that if any such information should be of interest to the Committee, it may be obtained from Hal C. Byrd of Deering Milliken Research Corporation, Spartanburg, South Carolina.

This supplemental statement, together with my earlier statement and the file compiled by Judge Sobeloff and the copies of my tax returns, supplies as fully as I can with the materials to which I have access the answers to the questions suggested by Senators Hart and Tydings.

Finally, I hope the Committee now has all the information it needs, but if there is anything else you wish me to supply, I will be happy to undertake to do it.

Respectfully,

CLEMENT F. HAYNSWORTH.

INVESTMENTS OWNED BY CLEMENT FURMAN HAYNSWORTH, JR., SEPTEMBER, 1969

[Number of shares of stock]

Allied Chemical Corporation	108
American General Insurance Co	201
Brunswick Corporation	1000
Burlington Industries, Inc	400
Business Development Corporation of South Carolina	10
Chrysler Corporation	119
Cole Drug Company, Inc	600
Computer Servicenters, Inc	500
Dan River Mills	1575
Fairchild Camera and Instrument Corp	100
Georgia-Pacific Corporation	5238
Government Employees Financial Corp	106
Government Employees Life Insurance Co	110
W. R. Grace & Co	300
Greenville Memorial Gardens	72
G & W Land and Development Corp	18
Gulf & Western Industries	346
Insurance Securities Inc	100
International Tel. & Tel. Corp	200
The Investment Life and Trust Co	321
Ivest Fund, Inc	802.925
Jefferson-Pilot Corporation	250
Leverage Fund of Boston, Inc. (Capital)	350
The Liberty Corporation (Common)	9523
The Liberty Corporation (Voting preferred stock 40¢ convertible series)	337
Main-Oak Corporation	31
Monsanto Chemical Company	219
MGIC Investment Corporation	630
Multimedia, Inc. (Common)	11,728
Multimedia, Inc. (5% convertible cumulative preferred stock)	2932
Mutual Savings Life Ins. Co	240
Nationwide Corporation	500
Nationwide Life Insurance Co	20
Owens-Corning Fiberglas Corp	100
Peoples National Bank	330
Piedmont National Gas Co., Inc	60
The Rank Organization Limited	500
Scope Incorporated	120
Sonoco Products Co	284
South Carolina National Bank	768
Southern Weaving Company	287
Sperry Rand Corporation	400
J. P. Stevens & Co	550
Synalloy Corporation	52
Tenneco Inc	200
United Nuclear Corporation	104

DEBENTURES

	Amount
Government Employees Financial Corp. (convertible subordinated 5½%)	$350
Government Employees Financial Corp. (convertible subordinated 5¼%)	550
W. R. Grace & Co. (subordinate debenture 4¼%)	1,700

BONDS

	Amount
Calhoun-Charleston Tennessee Utility District	$4,000
Clemson, S.C., General Obligation Sewer	5,000
Greenville County, South Carolina, Hospital	5,000
Piedmont Park F/D Gv. Co	20,000
Greater Greenville Sewer District	4,000
Town of Williston, S.C	4,000
Pickens, S.C., Waterworks System Improvement Revenue	4,000
Greenville Waterworks System	10,000

REAL ESTATE

A one-seventh undivided interest in a tract of land upon which there is a warehouse known as ARA Warehouse, from which my net taxable income in 1968 was $548.

A one-fifth undivided interest in a small tract of land on which there is a small warehouse known as Lowndes Hill Warehouse, from which my net taxable income in 1968 was $343.

CAROLINA VEND-A-MATIC CO.

April 5, 1950, first meeting of subscribers and stockholders: Directors elected: Eugene Bryant, W. Francis Marion, R. E. Houston, Jr., Christie C. Prevost, Vincent G. Williams, John Mahoney, and Clement F. Haynsworth, Jr.

April 5, 1950, first board of directors meeting: Officers elected: president, Eugene Bryant; vice president, R. E. Houston, Jr.,; vice president, Vincent G. Williams; secretary, W. Francis Marion, and treasurer, Christie C. Prevost.

January 9, 1951, annual stockholder meeting: Directors elected: Eugene Bryant, R. E. Houston, W. Francis Marion, Christie C. Prevost, and Clement F. Haynsworth, Jr.

January 9, 1951, annual board of directors ("B of D") meeting: Officers elected, President, Eugene Bryant; vice president, R. E. Houston, Jr.; vice president, Clement F. Haynsworth, Jr.; secretary, W. Francis Marion, and treasurer, Christie C. Prevost.

January 8, 1952, annual stockholders meeting: Same directors elected.

January 8, 1952, annual B of D meeting: Same officers elected.

January 13, 1953, annual stockholders meeting: Same directors elected but Mrs. R. E. Houston, Jr. to act as alternate director when necessary.

January 13, 1953, annual B of D meeting: Same officers elected.

January 13, 1954, annual stockholders meeting: Same directors elected.

January 13, 1954, annual B of D meeting: Same officers elected.

January 10, 1955, annual stockholders meeting: Same directors elected.

January 10, 1955, annual B of D meeting: Same officers elected.

January 9, 1956, annual stockholders meeting: Same directors elected.

January 9, 1956, annual B of D meeting: Same officers elected.

(NOTE. There are no minutes of either an annual stockholders meeting or B of D meeting in January of 1957.)

May 29, 1957, special stockholders meeting: Recognition that there had been resignations by Eugene Bryant as President and Director and R. E. Houston, Jr. as Vice President and Elizabeth Houston as Director.

Buck Mickel, George McDougall and Wesley Davis elected Directors to serve wtih already elected Directors, W. Francis Marion, Christie C. Prevost and Clement F. Haynsworth, Jr.

May 29, 1957, special B of D meeting: Officers elected: president, W. Francis Marion; vice president, Wesley Davis; vice president, Clement F. Haynsworth, Jr.; secretary, George Mc Dougall, and treasurer, Christie C. Prevost.

January 14, 1958, annual stockholders meeting: Same directors elected.

January 14, 1958, annual B of D meeting: Officers elected: president, W. Francis Marion; vice president, Buck Mickel; vice president, Wesley Davis; vice president, Clement F. Haynsworth, Jr.; secretary, George Mc Dougall, and treasurer, Christie C. Prevost.

January 13, 1959, annual stockholders meeting: Same directors elected.

January 13, 1959, annual B of D meeting: Same officers elected.

January 12, 1960, annual stockholders meeting: Directors elected: W. Francis Marion, Buck Mickel, J. Wesley Davis, C. F. Haynsworth, Jr., George Mc Dougall, Christie C. Prevost, and Wade H. Dennis.

January 12, 1960, annual B of D meeting: Same officers elected except that Wade H. Dennis is added as a vice president.

January 10, 1961, annual stockholders meeting: Same directors elected.

January 10, 1961, annual B of D meeting: Same officers elected.

January 9, 1962, annual stockholders meeting: Same directors elected.

January 9, 1962, annual B of D meeting: Officers elected: president, W. Francis Marion; vice president, Buck Mickel; vice president, J. Wesley Davis; vice president, C. F. Haynsworth, Jr.; vice president, George E. Mc Dougall; vice president, Wade H. Dennis; secretary, Dorothy M. Haynsworth, and treasurer, Christie C. Prevost.

January 8, 1963, annual stockholders meeting: Same directors elected.

January 8, 1963, annual B of D meeting: Same officers elected.

October 21, 1963, weekly B of D meeting: Resignation of Clement F. Haynsworth, Jr. as Director is accepted as of October 31, 1963. He remains a stockholder. The Minutes refer to a letter stating his reasons but such a letter is not found in the Minutes.

January 14, 1964, annual stockholders meeting: Directors elected. Wesley Davis, Wade H. Dennis, W. Francis Marion, Buck Mickel, George McDougall, and Christie C. Prevost.

January 14, 1964, annual B of D meeting: Officers elected. President, Wade H. Dennis; vice president, Buck Mickel; vice president, Wesley Davis; vice president, W. Francis Marion; vice president, George E. McDougall; treasurer, Christie C. Provost; secretary, William S. Mullins, and assistant secretary, Mary Frances Dennis.

(NOTE.—At weekly B of D Meeting on April 6, 1964, resolution was passed that certain property be leased from C. F. Haynsworth, Jr. and some of the present Directors and Officers of the Company.)

April 8, 1964, special B of D meeting: Resignation of W. Francis Marion as Director and Vice President and Mary Frances Dennis as Asst. Secretary were accepted.

Additional Officers elected: Vice president, James F. Hutton; assistant secretary, Lee F. Driscoll, Jr., and assistant treasurer, Edwin W. Keleher.

January 12, 1965, action of shareholder by consent: Directors elected: Herman G. Minter, James F. Hutton, and David D. Dayton.

January 12, 1965, action of B of D by consent: Officers elected: president, James F. Hutton; vice president, Wade H. Dennis; vice president, Roy Gramling; secretary, Lee F. Driscoll, Jr.; treasurer, Herman G. Minter, and assistant treasurer, Edwin W. Keleher.

January 12, 1966, action of shareholders by consent: Same directors elected.

January 12, 1966, action of B of D by consent: Same officers elected.

December 15, 1967, action by shareholder by consent: Directors elected: Herman G. Minter, David D. Dayton, and James F. Wanink.

December 15, 1967, action of B of D by consent: Officers elected: President, James F. Wanink; Vice president, David D. Dayton; Vice president, Wade H. Dennis; Treasurer, Herman G. Minter; Secretary, Lee F. Driscoll,

Jr.; assistant treasurer, James A. Rost; and assistant secretary, Henry T. Dechert.

May 27, 1968, action of B of D by consent: Harry S. Glick elected as assistant treasurer.

VENDING CO.

July 2, 1956, meeting of subscribers to capital stock: Directors elected: Eugene Bryant, C. F. Haynsworth, Jr., R. E. Houston, Jr., W. Francis Marion, and Christie C. Prevost

July 2, 1956, directors meeting: Officers elected: President, Euguene Bryant; vice president, C. F. Haynsworth, Jr.; vice president, R. E. Houston, Jr.; secretary, W. Francis Marion, and treasurer, Christie C. Prevost.

January 8, 1957, annual stockholders meeting: Same directors elected.

January 8, 1957, annual board of directors ("B of D") meeting: Same officers elected.

May 29, 1957, special stockholders meeting: Resignations by Eugene Bryant as a director and president, by R. E. Houston, Jr., as vice president, and by Elizabeth W. Houston as a director (alternate) were noted.

Buck Mickel, George E. McDougall, and J. Wesley Davis, were elected to serve with already elected directors, W. Francis Marion, C. F. Haynsworth, Jr., and Christie C. Prevost.

May 29, 1957, special B of D meeting: Officers elected: President, W. Francis Marion; vice president, Buck Mickel; vice president, J. Wesley Davis; vice president, C. F. Haynsworth, Jr.; secretary, George E. McDougall, and treasurer, Christie C. Prevost.

January 14, 1958, annual stockholders meeting: Same directors elected.

January 14, 1958, annual B of D meeting: Same officers elected.

January 13, 1959, annual stockholders meeting: Same directors elected.

January 13, 1959, annual B of D meeting: Same officers elected.

January 12, 1960, annual stockholders meeting: Directors elected: W. Francis Marion, Buck Mickel, J. Wesley Davis, C. F. Haynsworth, Jr., George E. McDougall, Christie C. Prevost, and Wade H. Dennis.

January 12, 1960, annual B of D meeting: Same officers elected except that Wade H. Dennis is added as a vice president.

January 10, 1961, annual stockholders meeting: Same directors elected.

January 10, 1961, annual B of D meeting: Same officers elected.

January 9, 1962, annual stockholders meeting: Same directors elected.

January 9, 1962, annual B of D meeting: Officers elected: President, W. Francis Marion; vice president, Buck Mickel; vice president, J. Wesley Davis; vice president, C. F. Haynsworth, Jr.; vice president, George E. McDougall; vice president, Wade H. Dennis; secretary, Dorothy M. Haynsworth, and treasurer, Christie C. Prevost.

January 8, 1963, annual stockholders meeting: Same directors elected.

January 8, 1963, annual B of D meeting: Same officers elected.

*October 21, 1963, regular B of D meeting, resignation of Clement F. Haynsworth, Jr. as a Director was accepted as of October 31, 1963.

January 14, 1964, annual stockholders meeting: Directors elected: Wesley Davis, Wade H. Dennis, W. Francis Marion, Buck Mickel, George McDougall, and Christie C. Prevost.

January 14, 1964, annual B of D meeting: Officers elected: President. Wade H. Dennis; vice president, Buck Mickel; vice president, Wesley Davis; vice president, W. Francis Marion; vice president, George E. McDougall; treasurer, Christie C. Prevost; Secretary, William S. Mullins, and assistant secretary, Mary Frances Dennis.

All qualifying shares held by directors were canceled and new shares issued to Carolina Vend-A-Matic Co.

April 8, 1964, special B of D meeting: Resignation of W. Francis Marion as a Director and vice president and of Mary Frances Dennis as assistant secretary were noted.

Additional Officers elected: vice president, James F. Hutton; assistant secretary, Lee F. Driscoll, Jr., and assistant treasurer, Edwin W. Keleher.

January 12, 1965, action of shareholder by consent: Directors elected: James F. Hutton, Herman G. Minter, and David D. Dayton.

January 12, 1965, action of B of D by consent: Officers elected: President, James F. Hutton; vice president, Wade F. Dennis; vice president, Ray Grambling; vice president, David D. Dayton; Secretary, Lee F. Driscoll, Jr.; treasurer, Herman G. Minter, and assistant treasurer, E. W. Keleher.

December 15, 1967, action by sole shareholder by consent: Directors elected: Herman G. Minter, David D. Dayton, and James F. Wanink.

December 15, 1967, action of B of D by consent: Officers elected: president, James F. Wanink; vice president, David D. Dayton; vice president, Wade H. Dennis; treasurer, Herman G. Minter; secretary, Lee F. Driscoll, Jr.; assistant treasurer, James A. Rost, and assistant secretary, Henry T. Dechert.

May 27, 1968, action of B of D by consent: Harry S. Glick elected as an assistant treasurer.

VEND CO. OF GEORGIA

October 31, 1962, meeting of subscribers to capital stock: W. Francis Marion, Buck Mickel, J. Wesley Davis, C. F. Haynsworth, Jr., George E. McDougall, Christie C. Prevost, and Wade H. Dennis.

November 1, 1962, first board of directors ("B of D") meeting: Officers elected: President and general manager, Wade H. Dennis, and vice president and secretary-treasurer, William S. Mullins.

January 8, 1963, annual stockholders meeting: Same directors elected.

January 8, 1963, annual B of D meeting: Same officers elected.

**October 21, 1963, regular B of D meeting:* Resignation of Clement F. Haynsworth, Jr., as director is accepted as of October 31, 1963.

January 14, 1964, annual stockholders meeting: Directors elected: Wesley Davis, Wade H. Dennis, Buck Mickel, George McDougall, and Christie C. Prevost.

January 14, 1964, annual B of D meeting: Same officers elected.

April 8, 1964, special B of D meeting: Resignation of W. Francis Marion as a director accepted.

Additional officers elected: Vice president, James F. Hutton; assistant secretary, Lee F. Driscoll, Jr., and assistant treasurer, Edwin W. Keleher.

June 12, 1964: Vend Co. of Georgia merged into Carolina Vend-A-Matic Company with the latter surviving.

VEND CO. OF NORTH CAROLINA

May 13, 1963, organizational meeting of shareholders: Directors elected: Wesley Davis, Wade H. Dennis, W. Francis Marion, Buck Mickel, George McDougall, and Christie C. Prevost.

May 13, 1963, first board of directors ("B of D") meeting: Officers elected: President and General Manager, Wade H. Dennis, and vice president and secretary treasurer, William S. Mullins.

October 21, 1963, regular B of D meeting: Resignation of Clement F. Haynsworth, Jr., as a Director is accepted as of October 31, 1963. (NOTE: This is confusing because there is no record he was elected as a director).

January 14, 1964, annual stockholders meeting: Same directors elected.

January 14, 1964, annual B of D meeting: Same officers elected.

April 8, 1964, special B of D meeting: Resignation of W. Francis Marion as a Director accepted.

Additional officers elected: Vice president, James F. Hutton; assistant secretary, Lee F. Driscoll, Jr., and assistant treasurer, Edwin W. Keleher.

June 12, 1964: Vend Co. of North Carolina merged into Carolina Venda-A-Matic Company with the latter surviving.

EXHIBIT 4

STOCKS OWNED BY CLEMENT F. HAYNSWORTH, JR. BEGINNING APRIL 1, 1957, SUBSEQUENT PURCHASES, SALES, STOCK DIVIDENDS, ETC THROUGH OCT. 1, 1969

Stock owned as of April 1, 1957

Carolina Natural Gas Corporation, 75 shares.

Carolina Vend-A-Matic Company, 24 shares.

Ford Motor Company, 25 shares.

Martel Mills Corporation now Valfour Corporation, 125 shares.

Woodside Mills, 350 shares.

Chrysler Corporation, 14 shares.

Cup O'Life Corporation, 100 shares.

Georgia Pacific Plywood Company now Georgia-Pacific Corporation, 239 shares.

W. R. Grace & Co., 100 shares.

Liberty Life Insurance Company now The Liberty Corporation, 116 shares.

Greenville Hotel Company now Main-Oak Corporation, 3.1 shares.

Monsanto Chemical Company, 157 shares.

The Peoples National Bank, 50 shares.

Sonoco Products Company, 110 shares.

The South Carolina National Bank, 144 shares.

The First National Bank, 60 shares.

Southern Weaving Company, 14 shares.

J. P. Stevens & Co., Inc., 741 shares.

United Nuclear Corporation formerly Sabre-Pinon Corporation formerly Sabre Uranium Corporation, 50 shares.

Owens-Corning Fiberglas Corporation, 20 shares.

Tekoil Corporation, 100 shares.

WMRC, Inc. now Multimedia, 990 shares.

Buckhorn Sanctuary, 1 share.

Greenville Country Club, 1 share.

Period—April 1, 1957, to December 31, 1957

	Amount received
Sales:	
Martel Mills (partial liquidating dividend)	$4,375.00
25 shares Ford Motor Company	922.90
4 shares Carolina Vend-A-Matic	5,000.00
1 share Buckhorn Sanctuary	1,289.01
Purchases:	
10 shs. Peoples National Bank	460.00
15/50 sh. Georgia-Pacific Corporation	8.15
18 shs. Carolina Natural Gas Corporation	36.00
7 shs. Sonoco Products Company	180.25
10/50 sh. Georgia-Pacific Corporation	7.28
5/50 sh. Georgia-Pacific Corporation	2.84
Hollyridge Development Company	3,000.00
Hollyridge Development Company	500.00

Period—April 1, 1957, to December 31, 1957

Stock dividends:

35/50 sh. Georgia-Pacific Corporation.

4 & 40/50 sh. Georgia-Pacific Corporation.

5 shs. Georgia-Pacific Corporation.

58 shs. Liberty Life Insurance Company.

3 shs. Monsanto Chemical Company.

50 shs. Westwater Corporation later North Star Oil Corporation (Board of Directors of Sabre-Pinon voted their shareholders of record 9–27–57 a share for share distribution of Westwater stock).

Stock exchanges and gifts:

78 shs. The South Carolina National Bank received for 60 shs. 1st Natl. Bank stock on basis of 1.3 shs. of SCNB for each sh. of 1st NB.

137 shs. Liberty Life Insurance Company—Christmas present—Mother. *This stock was given me by my mother.*

1958

Sales:
- Hollyridge Development Co.—3% debentures — $2,902.50
- Greenville Country Club—certificate — 500.00
- Valfour Corp. (Martel Mills) (Liquidating dividend) (Payable in part by $3125 face amount Burlington Industries, Inc. 5.4% subordinated debentures) — 3,484.38

Purchases:
- Hollyridge Development Co.—balance on subscription — 1,000.00
- 86/100 sh. Monsanto Chemical Co — 30.01
- 45/50 sh. Georgia-Pacific Corporation — 29.57
- 39/50 sh. Georgia-Pacific corporation — 29.06
- 33/50 sh. Georgia-Pacific Corporation — 29.63
- 27/50 sh. Georgia-Pacific Corporation — 26.60

Stock dividends:
1 and 14/100 shs. Monsanto Chemical Co.
5 shs. Georgia-Pacific Corporation.
5/50 sh Georgia-Pacific Corporation.
5 & 11/50 shs. Georgia- Pacific Corporation.
5 & 17/50 shs. Georgia-Pacific Corporation.
5 & 23/ shs. Georgia-Pacific Corporation.

Stock splits:
56 shs. Southern Weaving Company (Par Value of stock changed to $10 share. New stock certificates issued which would give stockholders 5 shares of $10 par value stock for each share of no par value stock formerly held.)

1959

Conversion and/or
Sales: Burlington debentures (face amt. $3,125) sent in for conversion into common stock of Burlington Industries, Inc. 12–22–59.
156 shs. common stock Burlington Industries plus check for $5.78, rec'd 12–28–59.
Valfour Corp. (Martel Mills) liquidating dividend, and is shown on 1960 income tax ret. $6.25.

Purchases:
- 21/50 sh. Georgia-Pacific Corporation — $28.57
- ¾ sh. Georgia-Pacific Corporation — 34.27
- 43/100 sh. Georgia-Pacific Corporation — 21.47
- 23 shs. and 8/10 right The South Carolina National Bank — 1,158.00
- 100 shs. White Stag Mfg. Co. (now part The Warner Brothers Company 107–1/7 Cum. Conv. Sink. Fund P/d) — 1,600.00
- 10 shs. Business Development Corporation of South Carolina — 100.00
- 72 shs. Greenville Memorial Gardens — 4,000.00
- 200 shs. The Investment Life and Trust Company — 800.00
- 1/6 sh. voting stock Liberty Life Insurance Company — 3.08
- 1/6 sh nonvoting stock Liberty Life Insurance Company — 3.08

Change in par value, stock dividends, stock splits:
5 & 29/50 shs. Georgia-Pacific Corporation—dividend.
3 & 57/100 shs. Georgia-Pacific Corporation—dividend.
71 & ¼ shs. Georgia-Pacific Corporation issued to take care of par value change from $1 to 80 cents.
2 shs. W. R. Grace & Co.—dividend.
1,296 shs. Liberty Life Insurance Company nonvoting stock) All old certifs.
1,296 shs. Liberty Life Insurance Company voting stock) sent in with cks. for $6.16 for effectuation of this change.
3 & 22/100 shs. Monsanto Chemical Company—dividend.
15 shs. The Peoples National Bank—dividend.

1959—Continued

Change in par value, stock dividends, stock splits—Continued
11 & 7/10 sh. Sonoco Products Company—dividend.
245 shs. The South Carolina National Bank—change of par value from $10 to $5 per share.

Gifts: (Donor):
141 shs. J. P. Stevens & Co., to Christ Church (Given to broker on Sept. 17, 1959 for transfer to Christ Church).

1960

Sales:
- Valfour Corp. (Martel Mills liquidating dividends) — $1,338.75
- 1/2 sh. Sabre-Pinon Corporation (rec'd. as part of 5% stock div.) — 2.88
- 2 shs. Carolina Vend-A-Matic Co — 2,500.00

Purchases:
- 3/10 sh. Sonoco Products Company — 9.10
- 78/100 sh. Monsanto Chemical Company — 42.78
- 96/100 sh. W. R. Grace & Co. — 38.02
- 39/100 sh. Georgia-Pacific Corporation — 21.82
- 35/100 sh. Georgia-Pacific Corporation — 19.73
- 31/100 sh. Georgia-Pacific Corporation — 14.60
- 100 shs. Texize Chemicals, Inc. — 975.00
- 70/100 sh. Monsanto Chemical Company — 31.46

Stock Dividends:
3 & 30/100 shs. Monsanto Chemical Co.
2 & 4/100 shs. W. R. Grace & Co.
3 & 61/100 shs. Georgia-Pacific Corporation.
3 & 65/100 shs. Georgia-Pacific Corporation.
3 & 69/100 shs. Georgia-Pacific Corporation.
3 & 73/100 shs. Georgia-Pacific Corporation.
25 shs. The Peoples National Bank.
2 shs. Sabre-Pinon Corporation (fractional sh. sold). (Now United Nuclear).

Gifts (Donor):
Furman University was given 333 shs. Liberty Life Insurance Company nonvoting stock on 5/11/60.

1961

Sales of fractional shares:
- Sabre-Pinon Corp. (now United Nuclear) 6/10th sh — $3.83
- W. R. Grace & Co.—10/100ths sh — 5.82
- Liberty Life Insurance Company—2/10ths V and 6/10ths NV — 25.21
- Sale of Rights, Criterion Insurance (15) — 31.30

Purchases:
- 100 shs. Television Shares Management Corporation (Later became Supervised Investors Service, Inc.) — 1,475.00
- 15 shs. Government Employees Life Insurance Company — 1,402.50
- ½ sh. Government Employees Life Insurance Company — 52.50
- 100 shs. Class B Union Texas Natural Gas Corporation (Merged into Allied Chem.) — 2,775.00
- 27/100 sh. Georgia-Pacific Corporation — 14.73
- 23/100 sh. Georgia-Pacific Corporation — 16.37
- 19/100 sh. Georgia-Pacific Corporation — 12.70
- 15/100 sh. Georgia-Pacific Corporation — 8.68

Gifts (Donor):
On 12/20/61 gave Furman University 150 NV Liberty Life Insurance Company.

Stock dividends:
3 & 77/100 Georgia-Pacific Corporation shs.
3 & 81/100 Georgia-Pacific Corporation shs.

1961—Continued

Gifts (DonorD—Continued
3 & 85/100 Georgia-Pacific Corporation shs.
3 & 89/100 Georgia-Pacific Corporation shs.
7 & ½ shs. Government Employees Life Insurance Company.
2 shs. W. R. Grace & Co.
259 shs. Liberty Life Insurance Company V stock.
192 shs. Liberty Life Insurance Company NV stock.
3 & 38/100 shs. Monsanto Chemical Company.
2 shares Sabre-Pinon Corp. (Now United Nuclear).

Gifts (receipts):
200 shs. V Liberty Life Insurance Company—Christmas present from Mother.

1962

Sales:
- ½ sh. Dan River Mills — $4.89

Purchases:
- 62/100 sh. Monsanto Chemical Company — 31.91
- 11/100 sh. Georgia-Pacific Corporation — 5.75
- 7/100 sh. Georgia-Pacific Corporation — 3.60
- 3/100 sh. Georgia-Pacific Corporation — 1.06
- 99/100 sh. Georgia-Pacific Corporation — 37.50
- 94/100 sh. Georgia-Pacific Corporation — 35.13
- 4/8 sh. Allied Chemical Corporation — 25.36
- 86/100 W. R. Grace & Co. sh — 71.68
- 2 shs. Government Employees Financial Corp. $15, 7 rts. 4.81 — 19.81
- 200 shs. Carolinas Capital Corporation (Liquidated 1967) — 2,000.00

Stocks Dividends, exchanges, Stock splits:
88 shs. Allied Chemical Corporation acquired by merger with Union Texas Natural Gas—Basis: ⅞ths sh. Allied Chemical for each sh. Union Tex.
1312 shs. Dan River Mills were obtained in exchanged for 350 shs. Woodside.
3 & 93/100 shs. George-Pacific Corporation—dividend.
3 & 97/100 shs. Georgia-Pacific Corporation—dividend.
4 & 1/100 shs. Georgia-Pacific Corporation—dividend.
4 & 6/100 shs. Georgia-Pacific Corporation—dividend.
2 & 14/100 shs. W. R. Grace & Co.—dividend.
3 & 46/100 shs. Mosanto Chemical Company—dividend.
49 shs. The South Carolina National Bank—dividend.
60 shs. J. P. Stevens & Co., Inc.—dividend.
40 shs. Consolidated Oil & Gas, Inc. were obtained by the surrender of 100 shs. of Tekoil Corp.
110 shs. W. R. Grace & Co.—two for one stock split.

Gifts, Receipt:
100 shs. V Liberty Life Insurance Company—Christmas present from Mother.

Gifts, Donor:
200 shs. J. P. Stevens & Co., Inc. given Furman University.

1963

Sales:
- Consolidated Oil & Gas rights — $.40

Purchases:
- 500 shs. Aztec Oil & Gas — 10,187.50
- 200 shs. mutual Savings Life Insurance Company — 2,725.00
- 4 shs. Liberty Life Insurance Company — 160.00
- 54/100 sh. Monsanto Chemical — 26.95
- 46/100 sh. Monsanto Chemical — 25.76
- 89/100 sh. Georgia-Pacific Corporation — 41.83
- 84/100 sh. Georgia-Pacific Corporation — 44.10

1963—Continued

Purchases—Continued

79/100 sh. Georgia-Pacific Corporation ---------- $39.50
74/100 sh. Georgia-Pacific Corporation ---------- 39.87
60/100 sh. W. R. Grace & Co.---- 24.03

Stock dividends, stock splits:

4 & 40/100 shs. W. R. Grace & Co.—dividend.

14 shs. Chrysler Corporation—2 for 1 stock split.

28 shs. Chrysler Corporation—2 for 1 stock split.

4 & 11/100 Georgia-Pacific Corporation—dividend (shares).

4 & 16/100 shs. Georgia-Pacific Corporation—dividend.

4 & 21/100 shs. Georgia-Pacific Corporation—dividend.

4 & 26/100 shs. Georgia-Pacific Corporation—dividend.

23 shs. Government Employees Life Insurance Company—100% stock dividend.

10 shs. The Investment Life and Trust Company—10% stock dividend.

464 shs. Liberty Life Insurance Company V—25% stock dividend.

252 shs. Liberty Life Insurance Company NV—25% stock dividend.

3 & 54/100 shs. Monstanto Chemical Company—stock dividend.

12 & 9/10 shs. Sonoco Products Company—stock dividend.

32 shs. The South Carolina National Bank—stock dividend.

50 shs. White Stag Manufacturing Co.—50% stock dividend (later merged into The Warner Brothers Company).

Gifts, (Receiver):

704 shs. Liberty Life Insurance Company V stock given to me by my Mother.

1964 (Number of Shares & Face Amount of Bonds)

Sales:	*Dollars*
Consolidated Oil & Gas, Inc. (40)	$118.55
North Star Oil Corp. (50)	11.46
Supervised Investors Service, Inc. (100) (formerly Television Shares Management Corp.)	611.51
U.S. Treasury Bills ($40,000.00)	39,067.22
U.S. Treasury Bills (5,000.00)	4,887.50
U.S. Treasury Bills (5,000.00)	4,893.01
U.S. Treasury Bills (30,000.00)	29,385.19
U.S. Treasury Bills (7,000.00)	6,862.10
U.S. Treasury Bills (20,000.00)	19,611.27
U.S. Treasury Bills (50,000.00)	49,178.47
U.S. Treasury Bills (81,000.00)	79,760.09
U.S. Treasury Bills (21,000.00)	20,740.16
U.S. Treasury Bills (11,000.00)	10,989.00
Automatic Retailers of America (14,173) (Exchanged for Carolina Vend-A-Matic)	455,307.63
Purchases:	
Fed. Int. Credit Bonds (130,000)	130,025.00
U.S. Treasury (270,000)	262,948.55
U.S. Treasury (130,000)	129,875.72
Piedmont Park F/D (20,000)	20,387.61
Liberty Life Insurance Company (now The Liberty Corp.) (185)	6,521.25
J. P. Stevens & Co., Inc. (40)	1,499.80
Monsanto Chemical Corp. (19)	1,453.85
Government Employees Life Insurance Company (54)	3,510.00
Government Employees Financial (98)	2,989.00
Carolina Natural Gas (407)	2,856.54
Allied Chemical Corp. (12)	674.63
United Nuclear Corp. (46)	1,183.92
W. R. Grace & Co. (70)	3,851.08
Dan River Mills, Inc. (188)	3,464.69
Chrysler Corporation (44)	2,277.00
Burlington Industries, Inc. (44)	2,071.46

1964 (Number of shares & Face Amount of Bonds)—Continued

Purchases—Continued

The South Carolina National Bank (29)	$1,595.00
Texize Chemical, Inc. (400)	1,800.00
Owens-Corning Fiberglas Corporation (80)	5,782.74
Surety Investment Co. (now part of The Liberty Corp.) (102)	5,712.00
Surety Investment Co. (now part The Lib. Corp.) (112)	6,272.00
Insurance Securities, Inc. (100)	2,556.63
Insurance Securities, Inc. (500)	12,783.15
Insurance Securities Inc. (400)	10,276.76
Surety Investment Co. (now part The Lib. Corp.) (165)	9,240.00
Greater Greenville Sewer District Bonds (4,000)	3,630.96
Nationwide Corp., Class A (500)	7,375.00
Southeastern Broadcasting Co. (formerly WMRC, Inc. now part of Multimedia Corp.) (200)	9,200.00
Insurance Securities (1,000)	28,229.52
Town of Williston SC Waterworks & Sewer Bonds (20,000)	20,420.36
Broadcasting Co. of the South (now part of The Liberty Corp.) (105)	5,250.00
Georgia Pacific Corporation (1,200)	69,374.37
Broadcasting Co. of the South (now Lib. Corp.) (120)	6,000.00
Guaranty Insurance Trust (now part of MGIC) (3,000)	7,500.00
Greenville Waterworks System Rev. Bonds (10,000)	10,636.54
Maryland Casualty Company (200)	12,690.64
(Purchased in—June—in August exchanged for 200 shs. Convertible Preferred Stock and 66⅔ shs common stock of American General Casualty Company)	
Georgia-Pacific Corporation (69/100 sh.)	38.12
Georgia-Pacific Corporation (55/100 sh.)	31.49
Georgia-Pacific Corporation (37/100 sh.)	21.00
W. R. Grace & Co. Corporation (½ sh.)	26.40
Sonoco Products Company (1/10 sh.)	4.50

Stock dividends, Stock splits:

Chrysler Corporation (4 shs.) 4% stock div.

The Broadcasting Company of the South (now part of The Liberty Corp., but for a time it was known as Cosmos Broadcasting Corporation) (56 shs.) 25% stock div.

Georgia-Pacific Corporation (shs) 4 & 31/100 stock dividend.

Georgia-Pacific Corporation (shs) 109 25% stock split.

Georgia-Pacific Corporation (shs) 17 & 45/100 stock dividend.

Georgia-Pacific Corporation (shs) 17 & 63/100 stock dividend.

W. R. Grace & Co. (shs) 3 & 50/100 stock dividend.

The Investment Life and Trust Company (shs) 10 stock dividend.

Main-Oak Corporation formerly Greenville Hotel Company (shs) 31—2 for 1 stock split and 4 for 1 stock dividend. (Old certificate turned in).

Monsanto Chemical Company (shs) 4 stock dividend.

Southeastern Broadcasting Corporation now part of Multimedia Inc. (shs) 990 shs 100% stock dividend.

1964 (Number of shares & Face Amount of Bonds)—Continued

Stock dividends, stock splits—Continued

The Peoples National Bank 50 shs 50% stock dividend.

J. P. Stevens & Co., Inc. 50 shs 10% stock dividend.

Aztec Oil & Gas Company 30 shs 6% stock dividend.

Sale of fractional shares:

The Investment Life & Trust Company (½ sh.)	$2.65
Cosolidated Oil & Gas—proceeds of 3/5 fractional warrant	.90
Consolidated Oil & Gas—proceeds of 1 right	.21
The Broadcasting Company of the South—proceeds of fractional sh. of stock	12.63

Gifts (Receiver):

Liberty Life Insurance Company (531 shs.), Gift from Mother.

Liberty Life Insurance Company (100 shs), Gift from Mother, Xmas.

1965

Sales:	*Dollars*
Aztec Oil & Gas Company (562 shs.)	$9,975.50
Purchases:	
Sperry Rand (400 shs.)	9,067.50
Cost of additional rights to buy W. R. Grace debentures below	3.94
Monsanto Chemical Company (92/100 sh.)	73.44
W. R. Grace & Co. 4¼% Subordinate Deb. ($1,700)	1,700.00
Azetc Oil & Gas Company (20/100 sh.)	3.75
U.S. Treasury Bills ($134,000)	133,110.80
Texize Chemicals, Inc. (1,300 shs.)	6,984.25
Texize Chemicals, Inc. (400 shs.)	2,199.52
Texize Chemicals, Inc. (300 shs.)	1,573.89
Southeastern Broadcasting Co. (now part of Multimedia, Inc.) (100 shs.)	6,550.00
Chrysler Corporation (1 right and 15 shs.)	720.75
Georgia-Pacific Corporation (19/100 sh.)	11.92
Georgia-Pacific Corporation (1/100 sh.)	.64
Georgia-Pacific Corporation (83/100 sh.)	49.07
Georgia-Pacific Corporation (64/100 sh.)	38.88

Stock dividends, Stock splits:

Allied Chemical Corporation, 2 shs. stock dividend.

Burlington Industries, Inc., 200 shs. stock split.

Georgia-Pacific Corporation, 17.81 shs. stock dividend.

Georgia-Pacific Corporation, 17.99 shs. stock dividend.

Georgia-Pacific Corporation, 18.17 shs. stock dividend.

Georgia-Pacific Corporation, 18.36 shs. stock dividend.

Government Employees Life Insurance Company, 2 shs. stock dividend.

The Investment Life and Trust Company, 22 shs. stock dividend.

Liberty Life Insurance Company now The Liberty Corporation 510 shs. stock dividend.

Monsanto Chemical Company, 4.08 shs. stock dividend.

Nationwide Life Insurance Company, 10 shs. 2% stock dividend or 1 share for each 50 owned of Nationwide Corporation.

Sonoco Products Company, 142 shs. stock split.

The South Carolina National Bank, 36 shs. stock dividend.

Azetc Oil & Gas Company, 31.80 shs. stock dividend.

Gifts (receiver):

Liberty Life Insurance Company, 100 shs. Xmas present from Mother.

1966

Sales:
Insurance Securities (100 shs.) -- $500.37
The Investment Life & Trust Company (20-100sh.) -- 1.41
Purchases:
Calhoun-Charleston Tenn. Util. Dist. Bonds ($4,000) -- 4,231.79
Richmond Newspapers, Inc. (200 shs.) -- 4,400.00
Insurance Securities, Inc. (100 shs.) -- 726.63
Allied Chemical Corporation (96-100 sh.) -- 44.74
Warner Brothers Company formerly White Stag (6-7 sh.) -- 33.06
Cole Drug Co. (300 shs.) -- 4,050.00
Government Employees Financial Corporation ($350) -- 350.00
7 $50 5½% convertible subordinated debentures)
(For the above debenture purchase it was necessary to purchase seven rights for -- 1.35
Monsanto Company (82-100 sh.) -- 32.85
Georgia-Pacific Corporation (45-100 sh.) -- 28.74
Georgia-Pacific Corporation (1-2 sh.) -- 22.40
Georgia-Pacific Corporation (57-100 sh.) -- 22.80
Georgia-Pacific Corporation (33-100 sh.) -- 11.43
Stock dividends, Stock splits, Exchanges:
Allied Chemical Corporation, 2.4 shs. stock dividend.
Dan River Mills, 75 shs. stock dividend.
Georgia-Pacific Corporation, 18.55 shs. stock dividend.
Georgia-Pacific Corporation, 468.50 shs. five for four stock split.
Georgia-Pacific Corporation, 23.43 shs. stock dividend.
Georgia-Pacific Corporation, 23.67 shs. stock dividend.
The Investment Life and Trust Company, 24 shs. stock dividend.
Monsanto Chemical Company, 4.18 shs. stock dividend.
Mutual Savings Life Insurance Company, 40 shs. stock dividend.
Nationwide Life Insurance Company, 10 shs. 2% stock dividend or 1 sh. for each 50 owned of Nationwide Corporation.
The Peoples National Bank. On August 2, 1966, old certificates totalling 150 shs. sent in to bank—a stock certificate for 300 shs. was then received in 2 for 1 split.
Warner Brothers Company formerly White Stag 107-1/7 shs. received in exchange for 150 shs. White Stag Mfg. Co.

1967

Texise Chemicals, Inc. (200 shs.) -- $3,648.92
Texize Chemicals, Inc. (100 shs.) -- 1,886.33
Texize Chemicals, Inc. (200 shs.) -- 3,723.16
Texize Chemicals, Inc. (100 shs.) -- 1,799.71
Texize Chemicals, Inc. (400 shs.) -- 7,396.84
Richmond Newspapers, Class A (200 shs.) -- 3,488.12
Warner Bros. Conv. P/d. (108 shs.) -- 3,206.96
Insurance Securities (400 shs.) -- 2,447.00
Insurance Securities (1,500 shs.) -- 8,990.55
Texize Chemicals, Inc. (1,000 shs.) -- 18,739.60
Texize Chemicals, Inc. (500 shs.) -- 9,246.05
Carolinas Capital Corporation liquid distribution, 200 shs. owned. Received: $1,000. cash, 120 shs. Scope, Incorporated, 40 shs. Synalloy.
American General Insurance Company conb. P/d (200 shs.) -- 6,777.74

1967—Continued

Purchases
Greenville County, S.C. Hospital Bonds ($5,000) -- $4,907.99
Southeastern Broadcasting Co. (now part of Multimedia, Inc.) (66 shs.) -- 5,313.00
Rank Organisation, Ltd. (500) -- 4,176.00
International Tel. & Tel. (100) -- 10,849.80
Fairchild Camera & Instrument Corp. (100) -- 10,199.15
Brunswick Corp. (1,000) -- 16,230.00
Allied Chemical Corporation (90/100 sh.) -- 36.12
Ivest Fund, Inc. (728) -- 10,0002.72
Georgia-Pacific Corporation (9/100 sh.) -- $4.21
Leverage Fund of Boston, Inc. (350 shs.) -- 5,250.00
Southern Weaving Company (200 shs.) -- 5,400.00
Liberty Life Insurance Company (.7879480 sh.) -- 14.77
Government Employees Life Insurance Co. (94/100 sh.) -- 45.12
Georgia-Pacific Corporation (85/100 sh.) -- 51.21
Gulf & Western (325 shs.) -- 19,091.62
Georgia-Pacific Corporation (60/100 sh.) -- 36.60
Georgia-Pacific Corporation (35/100 sh.) -- 19.86
Monsanto Chemical Company (72/100 sh.) -- 30.69

Stock dividends:
Allied Chemical Corporation, (2.10 shs).
American General Insurance Company, (134 shs.) com. 200% stock div.
Georgia-Pacific Corporation, (23.91 shs).
Georgia-Pacific Corporation, (24.15 shs).
Georgia-Pacific Corporation, (24.40 shs).
Georgia-Pacific Corporation, (24.65 shs).
Government Employees Financial Corporation, (3 shs).
Government Employees Life Insurance Company, (3.06 shs).
The Investment Life and Trust Company, (26 shs).
Ivest Fund, Inc., (1,309 shs.) dividend.
Ivest Fund, Inc., (31.406 shs.) capital gain.
Liberty Life Insurance Company, (1211.-212520 shs.) stock dividend.
Monsanto Chemical Company, (4.28 shs.) stock dividend.
Southeastern Broadcasting Corporation, now Multimedia, Inc. (586 shs.) stock dividend.
The South Carolina National Bank (63 shs.) stock dividend.
Southern Weaving Company (17 shs.) stock dividend.
The Broadcasting Company of the South later Cosmos Broadcasting and in 1969 became part of The Liberty Corp. (56 shs.) stock dividend.
Gulf & Western Industries (9.75 shs.) stock dividend.
Gifts (Receiver):
Liberty Life Insurance Company (100 shs.) XMAS gift from Mother.

1968

Sales:
Fairchild Camera & Instrument Corp. (100 shs.) -- $6,104.72
U.S. Pipe & Foundry (200 shs.) -- 6,232.80
Carolinas Capital Corporation (Cash) -- 325.37
Final distribution—Liquidation.
Purchases:
Clemson, S.C. General Obligation Sewer Bonds ($5,000) -- $5,055.00
Tenneco, Inc. (200) -- 5,289.12
Fairchild Camera & Instrument Corp. (100) -- 6,858.31
Computer Servicenter, Inc. (500) -- 3,000.00
U.S. Pipe & Foundry (200) -- 5,867.00
Government Employees Financial (7 rights) -- 3.50

1968—Continued

Purchases—Continued
Jefferson-Pilot Corp. (200) -- $8,580.50
Gulf & Western Industries, Inc. (25/100ths sh.) -- 15.16
Georgia-Pacific Corporation (10/100ths sh.) -- 5.85
Georgia-Pacific Corporation (85/100ths sh.) -- 62.90
Georgia-Pacific Corporation (59/100ths sh.) -- 49.63
Georgia-Pacific Corporation (33/100ths sh.) -- 28.92
Government Employees Financial Corporation 11 $50 5¼% Conv. Sub. Debentures ($550) -- 550.00
Government Employees Financial Corporation (94/100ths sh.) -- 31.02
Stock dividends, Splits:
Cole Drug Company, Inc., (300 shs.) 1 additional share for each sh. held 5–7–68.
Georgia-Pacific Corporation (24.90 shs.) stock dividend.
Georgia-Pacific Corporation (25.15 shs.) stock dividend.
Georgia-Pacific Corporation (25.41 shs.) stock dividend.
Georgia-Pacific Corporation (25.67 shs.) stock dividend.
Government Employees Financial Corporation (2.06 shs.) stock dividend.
Gulf & Western Industries (10.05 shs.) stock dividend.
International Tel. & Tel. Corp. (100 shs.) 2 for 1 stock div.
Ivest Fund, Inc. (4.129 shs.) dividend.
Ivest Fund, Inc. (38.081 shs.) capital gains.
Synalloy Corporation (10 shs.) 5 for 4 split.
Exchanges:
Guaranty Insurance Trust, 3000 shs. exchanged on 1–2–68, for 210 shs. Mortgage Guaranty Insurance Corporation, and on 8/21/68 this was exchanged for 630 shs. of MGIC Investment Corporation.
Southeastern Broadcasting Corporation, 2,932 shs. exchanged for: Multimedia, Inc., 2,932 5% conv. cum. pref. and Multimedia, Inc., 11,728 Common.
Carolina Natural Gas Corporation, 500 shs. exchanged for Piedmont Natural Gas Company, Inc., 60 shs. $6 cum. conv. 2nd P/d.
Liberty Life Insurance Company, 7,022 shs. exchanged for The Liberty Corporation, 7,022 shs. 1 for 1 basis.
Gifts, Receiver:
The Liberty Corporation (100 shs.) Xmas present from mother.

1969

Sales: *Dollars*
Synalloy Corporation (½ sh.) -- $6.59
The Investment Life & Trust Co. (2/10 sh.) -- .65
The South Carolina National Bank (9/10 sh.) -- 32.67
[These were occasioned by stock dividends]
Purchases:
The Liberty Corporation (⅓ sh.) -- 8.34
Georgia-Pacific Corporation (7/100 sh.) -- 6.60
Georgia-Pacific Corporation (62/100 sh.) -- 29.76
Gulf-Western Industries (95/100 sh.) -- 38.57
Government Employees Life Ins. Co. (82/100 sh.) -- 42.03
G & W Land & Dev. Corp. (7/10 sh.) 7.00
Stock dividends:
Georgia-Pacific Corporation (25.93 shs.) Stock dividend.
Georgia-Pacific Corporation (2,619 shs.) 2 for 1 stock split.
Georgia-Pacific Corporation (52.38 shs.) Stock dividend.
Govt. Employees Life Ins. Co. (3.18 shs.) Stock dividend.
G & W Land and Development Corp. (17.3 shs.) 1 sh. for each 20 shs. Gulf & Western owned 7–18–69.

1969—Continued

Purchases—Continued

The Investment Life and Trust Co. (29 shs.) Stock dividend.

Jefferson-Pilot Corporation (50 shs.) Stock dividend.

The Peoples National Bank (30 shs.) Stock dividend.

Synalloy Corporation (2 shs.) Stock dividend.

The South Carolina National Bank (69 shs.) Stock dividend.

United Nuclear Corporation (4 shs.) Stock dividend.

Exchanges:

The Broadcasting Company of the South later Cosmos Broadcasting (337 shs.) Exchanged for: The Liberty Corporation (1,011 shs.) Common and (337 shs.) $.40 Voting Preferred conv. series.

Surety Investment Company (379 shs.) Exchanged for The Liberty Corporation (1,389⅔ shs.).

MEMORANDUM

(List of Securities Owned by Clement F. Haynsworth, Jr. from January 1, 1957 to date)

As previously supplied to you, a company by the name of Communications Satellite Corporation was listed as a stock owned by Judge Haynsworth. Subsequent checking indicates that Judge Haynsworth never purchased this particular stock and that the broker in question made an error in listing this particular stock as being sold to him. This error was not discovered until the new chronological list was prepared.

HARRY HAYNSWORTH.

Mr. DOLE. Mr. President, will the Senator from South Carolina yield?

Mr. HOLLINGS. I yield.

Mr. DOLE. Mr. President, let me say at the outset that I am one of those who have not yet determined how to vote on the nomination. But let me ask the Senator from South Carolina if he feels he can get his story told by the liberal press in America, when the nomination was made by a Republican President of a conservative Democrat from the State of South Carolina.

Mr. HOLLINGS. Judge John J. Parker was appointed to the Supreme Court, but not confirmed, some 30 years ago under similar circumstances.

The inference left by the press is that Justice Goldberg disqualified himself on labor decisions. He never did; he disqualified himself on the Darlington case, but he had been their lawyer.

Judge Haynsworth was not Deering-Milliken's lawyer, but that has not been told.

No one contends that Justice Thurgood Marshall should disqualify himself from civil rights cases. But they say Judge Haynsworth has made money on textiles, that he is a textile judge.

I think it is highly important that those who know the judge, and have read every one of his decisions, over a 12-year period, that he has ever participated in, can come here with admiration and support for Judge Haynsworth. I have tried to get that in the papers, but instead, the story has been distorted until he has been made to feel that he was indicted rather than appointed, because they have taken the ball and started running with it toward a predetermined touchdown, saying, "Why has be not withdrawn?"

Mr. DOLE. The Senator's discussion has been very helpful to me as one who has not made a decision, but I believe he will find the press and the media more interested in taking a position than in telling the truth. The press which defended Mr. Fortas would naturally be against a Republican President's nominee for the Supreme Court. It is an unfortunate fact that 90 percent of the media are liberals in their thinking, not looking for a conservative judge or interested in telling the true story to the American people. I think the Senator is making a valiant attempt today; I hope it will be successful.

Mr. HOLLINGS. Mr. President, I yield the floor.

CHINESE THREAT: THE MOST EXPENSIVE ILLUSION OF OUR TIME

Mr. PROXMIRE. Mr. President, this country has devoted a great deal of its enormous military spending to combat the expansion of Communist China.

In Vietnam—perhaps the major reason for our immensely expensive involvement has been to stop Communist expansion. One article in a recent issue of the New York Times characterized President Nixon's strong commitment in Vietnam to be based on the notion that our active military presence constitutes the cork in the bottle that contains Communist expansion.

But Vietnam is only part of a vastly expensive military effort to contain Red China. It includes our many expensively manned far Pacific bases, our hugely expensive aircraft carriers, the other components of our Far Eastern fleets and their reserves, as well as a major Air Force commitment.

The reason for all this is because of the fear that without a vigorous and active military presence Red China would sweep throughout Asia and perhaps extend far beyond.

Mr. President, this is probably the most expensive illusion of our time.

What kind of a threat does mainland China really constitute to this country? How serious a threat does it really represent in Asia? Could China execute a successful invasion elsewhere in Asia? Could she mount a serious attack in the Pacific?

Consider the facts: In spite of the most vigorous sometimes vicious denunciation by Red China of U.S. involvement in Vietnam, there has been no verified report of a single Chinese soldier involved in the Vietnam war. Why? Not because of any moral or peaceful compunction on the part of the Chinese but for the simple reason that China does not have the economic strength to support any military effort except on its borders even in a country as nearby as Vietnam.

China lacks the transportation facilities. It has no navy worthy of the name. It has a pitifully inadequate air force. Its highway system, rail system and rolling stock are so feeble that they are barely adequate to provide border protection.

Within the borders of China its 750 million people widely equipped with small arms would constitute a highly formidable, probably an impossible force to overcome without using massive nuclear arms. But as a world conquering invader, Red China is simply not in the ball game.

China's own nuclear arsenal is primitive bush league compared to that of the United States and Russia.

But most significant of all, Mr. President, China has not been gaining economic strength. She has been losing it.

A couple of years ago our Joint Economic Committee conducted an in-depth study of the economy of China. We commissioned 20 of the leading scholars in the world to do the job. That study showed an erratic course of progress and setback for the Chinese economy.

Without a strong and growing economy, the Chinese threat dissolves in smoke. And the most recent reports from the Chinese Communists celebration of their 20th year in power show how unlikely it is that China will constitute a serious threat in coming years.

Maoist China faces its third decade with massive problems and handicaps. Here is the only major country in the world that has not grown economically in the past 10 years. China's gross national product is probably no higher than it was 10 years ago. But it has an annual population growth of 15 million to 20 million. This has destroyed attempts to raise the standard of living or the military power, except for a rudimentary nuclear power.

Mr. President, the dangerous dispute with the Soviet Union over borders and ideological influence and the continued hostility toward not only the United States but most other countries add to the strains and uncertainties.

Certainly the United States along with other Pacific powers should maintain a constructive military presence in the Pacific. But we are spending far more than can possibly be justified now. And other independent Pacific nations should carry their share of stopping any Red Chinese expansion.

As the New York Times reported Thursday:

Given stability, practical domestic guidelines and policies of peaceful adjustment in foreign relations, the Chinese Communist state would stand a good chance of pulling out of its present slump and making new progress. But these factors appear difficult to assure under a leadership headed by Mr. Mao or any other leader now on the horizon.

Mr. President, I submit, the only justification for our enormous military expenditures lies in the threat of potential enemies. Two nations constitute the overwhelming basis for this threat: the Soviet Union and the mainland Chinese.

The military threat of the Soviet Union like that of China is limited by economic constraints. The Office of Strategic Studies in London tells us that the Soviet spends about half as much on her military operations as the United States. She has half the gross national product of this Nation. She is constrained by an industry and agriculture that simply cannot afford to give up more resources to the military without seriously weakening the Soviet's long-term economic and hence its military power.

But in Red China we confront an even more conspicuously overestimated adversary. And the cost of this overestimate in military overspending, in inflation, in an onerous tax burden, in shamefully inadequate housing and in a series of other

neglected domestic problems is very great indeed.

This country can afford to cut $10 to $15 billion from its military budget now. In fact we cannot afford not to make those cuts.

JUDGE HAYNSWORTH

Mr. YOUNG of Ohio. Mr. President, in my judgment President Nixon should certainly withdraw the nomination of Judge Clement F. Haynsworth as Associate Justice of the U.S. Supreme Court. There are approximately 436 U.S. district court judges and U.S. Court of Appeals judges. It is difficult for me to comprehend how the President selected Judge Haynsworth for nomination to the Supreme Court. Admittedly, that judge has been highly proficient in making a fast buck. If the President thinks it is desirable to appoint a judge who is regarded to hold views considered very conservative there certainly should be a number of judges with this viewpoint, who unlike Judge Haynsworth, cannot be said to have ever rendered judicial decisions favoring segregation and delaying integration as directed by the Supreme Court of the United States.

Surely, of the approximate 436 judges of various Federal courts there are many, many whose judicial careers have been outstanding and, in fact, who are superior as jurists in every respect to Judge Haynsworth. Then, Mr. President, in addition to judges of the U.S. district courts, and of the U.S. Courts of Appeals, there are eminent judges in the supreme courts or in the courts of highest jurisdiction of the 50 States. In fact, in our 50 States, just as is the situation in my State of Ohio, there are trial judges in the various counties of those States who are highly trained and experienced, have served in a most creditable manner, are greatly admired and highly respected for their wisdom, integrity, are known to be devoted to the law and are men of the highest character and of judicial caliber.

Judge Haynsworth in at least two cases clearly violated the canons of judicial ethics—in his vote in 1963 which decided a case for a company which had contracts with a firm in which he owned a one-seventh interest; and in 1967 when he bought 1,000 shares of stock in a company on which he had helped render a favorable legal verdict and before that verdict was announced. In the former he made a profit of some $400,000 on an initial investment in 1950 of approximately $3,000. This from a company in which he was not just a casual investor, but an insider.

Canon 26 of the code of judicial ethics promulgated in 1908 by the Committee on Professional Ethics of the American Bar Association reads:

> A judge should abstain from making personal investments in enterprises which are apt to be involved in litigation in the court, and after his accession to the bench, he should not retain such investments previously made longer than a period sufficient to enable him to dispose of them without serious loss.

Also, United States Code, title 28, section 455 states:

> Any justice or judge of the United States shall disqualify himself in any case in which he has a substantial interest, has been of counsel, is or has been a material witness, or is so related to or connected with any party or his attorney to render it improper, in his opinion, for him to sit on the trial, appeal, or other proceedings therein.

It is crystal clear that Judge Haynsworth violated canon 26 and the United States Code on at least two occasions.

President Nixon on several occasions has stated that he is a strict constructionist in interpreting the Constitution. In his recent announcement reiterating his support of Judge Haynsworth, it is clear that he is far less strict in interpreting the canons of judicial ethics, and that section of the United States Code pertaining to the conduct of Federal judges.

Although Judge Haynsworth has denied any impropriety and has expressed sorrow over these incidents, the fact is that judges of the U.S. courts and especially the Supreme Court of the United States must, like Caesar's wife, be above suspicion. There should be no shadow or taint of impropriety on an Associate Justice of the highest court of our land. This is especially imperative today in view of the conditions which gave rise to the Supreme Court vacancy for which Judge Haynsworth has been nominated—the circumstances which prompted the resignation of Associate Justice Fortas.

As the distinguished junior Senator from Michigan (Mr. GRIFFIN), the assistant minority leader, wrote in an article published by the University of Michigan Law School in April 1969:

> The Senate must not be satisfied with anything less than application of the highest standards, not only as to professional competence but also as to such necessary qualities of character as a sense of restraint and propriety . . . Thus, when the Senate considers a nomination to one of the nine lifetime positions on the Supreme Court of the United States . . . the importance of its determination cannot be compared in any sense to the consideration of a bill for enactment into law. If Congress makes a mistake in the enactment of legislation, it can always return at a later date to correct the error. But once the Senate gives its "advice and consent" to a lifetime appointment to the Supreme Court, there is no such convenient way to correct an error since the nominee is not answerable thereafter to either the Senate or to the American people.

In pressing forward with the Haynsworth nomination, President Nixon is damaging the image of the U.S. Supreme Court in the eyes of millions of Americans. He is further disillusioning many younger Americans over the honesty of today's society and government—of the establishment, so to speak.

Mr. President, for these reasons alone, I shall vote against confirmation of Judge Haynsworth as Associate Justice of the Supreme Court of the United States.

However, there are other compelling reasons for rejecting this nomination.

Judge Haynsworth's decisions in a series of civil rights cases clearly suggest that he is opposed to desegregation. Among our most serious domestic problems are those dealing with civil rights and the problems of minority groups. During the past 15 years, the Supreme Court of the United States has taken leadership in helping redress their grievances and in assuring civil rights and civil liberties to all regardless of their race or creed. It would be unfortunate indeed if millions of citizens believed that the Supreme Court was no longer concerned with equal treatment for all and human dignity. From his past record, Judge Haynsworth's appointment to the Court might well leave that impression and perhaps have grave consequences.

I believe it is significant that in every one of the seven labor cases on which Judge Haynsworth sat that were reviewed by the Supreme Court, he voted against labor. In every one he was reversed by the Supreme Court. In all those cases only one Supreme Court Justice agreed with Judge Haynsworth, and then only once.

The rights and needs of working men and women are too important to entrust to adjudication by a man so out of tune with the law and with the times that his decisions have been reversed in all cases in these areas which were appealed to the Supreme Court.

Mr. President, the American people's sense of what a Supreme Court Justice's reputation and qualifications should be is offended by the revelations made since the nomination of Judge Clement Haynsworth. The standard of ethics that will be established by the Senate in determining his fitness for this high office will be witnessed by all Americans. Those standards should not be lowered for reasons of temporary political expediency. The nomination of Judge Haynsworth should be withdrawn. If it is not, it should be rejected by the Senate forthwith.

Mr. President, yesterday Judge Haynsworth offered to put his extensive financial holdings beyond his personal reach to avoid conflict-of-interest problems. This in itself, coming as it does after numerous revelations of judicial impropriety on his part, is sufficient reason for withdrawal of his nomination. Does this indicate that now Judge Haynsworth may not feel competent to handle his finances without the possibility of a conflict of interest arising? It is a sad commentary on the state of our Nation and of our Federal Government that the only Federal judge in the Nation offering to place his holdings beyond his personal reach has been nominated to be Associate Justice of the highest court of the land.

On Sunday, Vice President AGNEW stated that Judge Haynsworth was "clean as a hound's tooth." If the Vice President's evaluation is any indication of the ethical standards to be followed by this administration, then the Nation is in for a sorrowful 3 years indeed.

Mr. President, the National Observer, published and copyrighted by Dow Jones & Co., and a highly respected publication regarded as a spokesman for that Grand Old Party of which I am not a member, in its issue of Monday, October 6, published an editorial which I believe every Senator should read before he determines how he will vote in the question of confirmation of the nomination of Judge

Haynsworth, unless, of course, that nomination is withdrawn by our President. I ask unanimous consent that this editorial, entitled "Judge Haynsworth's Finances," be inserted at this point in the RECORD.

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

JUDGE HAYNSWORTH'S FINANCES

It would take exceptional courage now for President Nixon to admit that the nomination of Clement F. Haynsworth, Jr., to the U.S. Supreme Court was a mistake: After all, no scandal mars Judge Haynsworth's career, no clear-cut indiscretion tarnishes his record. For the same reason, it would take an exceptional turn of events to prevent his confirmation by the Senate, however vigorous the opposition there. And last week there seemed little chance Judge Haynsworth would bow out; he apparently has a hard time understanding what all the fuss about his personal finances is all about. This innocence, however, is an excellent reason—among others—why this nomination should be withdrawn or defeated.

Judge Haynsworth had vigorous opposition from the start. Civil-rights leaders deplored the choice, often intemperately. Labor leaders were hopping mad, shouting that the judge's record proved him to be pro-business. Neither objection was compelling, and neither certainly argued against confirmation. It wasn't until the opposition began exploring the judge's personal finances that the appointment began to emerge as a boner.

No, Judge Haynsworth broke no laws, nor did he broach the letter of judicial and legal ethics. The record as it unfolded before the Senate Judiciary Committee was one of a series of questionable investments and associations, but not one of them so damaging as to make him an unfit candidate for the High Court. And certainly no single item or even an accumulation of items, was so clearly a violation of good judgment as the conflict of interest that eventually forced Abe Fortas to resign his Supreme Court seat.

HE WAS VERY SORRY

Then came the revelations about the judge's investment in the Brunswick Corp. He bought the stock after his court had reached a decision on an appeal involving Brunswick, and the decision probably would have no effect on the stock's value. Nevertheless, he bought the stock before the court officially handed down the ruling, and the appearance, at least, of impropriety lingers. Judge Haynsworth's evaluation of his own action? He is "very sorry" he bought the stock, but he simply had forgotten when he made the purchase that the Brunswick case was still officially before his court.

The accumulation, then, capped by the Brunswick investment, portrarys a man who is probably a nice fellow, a judge who will gladly keep his nose clean if someone will spell out for him how it is to be done, but a man who is oblivious of the need for a jurist to maintain a singleminded interest in the administration of justice, free of even the hint that his decisions are influenced by anything else.

The appointment, simply, is an embarrassment to the Nixon Administration, which is hardly of great moment, and a potential embarrassment to the Supreme Court, which, in light of the recent Fortas embarrassment, is of great moment.

IT IS BETTER LABELED OPERATION INEPT

Mr. YARBOROUGH. Mr. President, Operation Intercept has now been in effect for 2 weeks and has earned the more appropriate title of "Operation Inept."

Just as no one can quarrel with the need for controlling the traffic in illegal drugs and narcotics, no one can quarrel with the fact that Operation Intercept has done serious, possibly permanent, damage to our relations with Mexico.

The operation is an inept way to deal with another nation. It is an inept way to treat the citizens of a friendly nation. It is an inept way to treat the citizens of this Nation who have visited a great and good neighbor. It is a most inept way to treat the economy of a section of this Nation and of Mexico.

There are also many who say it is an inept way to handle the problem it is supposed to be solving—the inflow of marihuana, dangerous drugs, and hard narcotics into this country.

The President of Mexico, Gustavo Diaz Ordaz, has called Operation Intercept a "bureaucratic error" and has said that it raises a "wall of suspicion" in United States-Mexico relations.

Mr. President, the United States and Mexico have developed good relations through the years. We have many programs of cooperation and friendship. In just 2 weeks of this operation we see serious damage to those relations.

Two border celebrations have already been canceled or postponed because of the action by the Government.

In Texas, Brownsville's "Mr. Amigo" celebration, which was scheduled for October 12, has now been canceled. It is usually an annual event; an event to honor a top Mexican personality and to demonstrate the friendship between the United States and Mexico. Officials of Del Rio and its neighbor city, Ciudad Acuna, have postponed for at least 10 days their annual "friendship festival" because of Operation Intercept.

Mr. President, not only is the operation an inept treatment of good relations; it is an inept way to deal with the economic situation along the border of this Nation with another nation.

Mexican businessmen are being hurt because citizens of this country are canceling trips to border cities. Many Mexican citizens who cross the border every day to work in the United States are having a difficult and sometimes impossible task of getting to their jobs in this country. There are reports some have already lost their jobs.

Just as Mexican businessmen are being hurt, so are businessmen on this side of the border. Many citizens of Mexico come to the United States on buying trips. Businessmen in this country are being hard hit as their customers refuse to suffer the delays and indignities of Operation Intercept. The balance of trade in some sections runs 10 to 1 in favor of the United States. That is true in border cities in California and border cities in Texas. We are the ones who are hurt worst by Operation Intercept. But it was 10 to 1 in favor of the United States before Operation Intercept.

Our businessmen will be hurt further, as Mexico now has started Operation Dignity. This operation urges Mexicans to stop going to the United States and to make all their purchases in Mexico. This operation was started by Mexico because of the affront to Mexico implicit in our Nation's implementation of Operation Intercept without any friendly consultation with a friendly border nation. The border is a border of two nations, not one. Anything done to the border by one nation should be after consultations with the other nation. Mexico was not treated as a friendly neighbor or as a coequal partner in the fellowship of nations in this matter, and Mexico knows it. The long, friendly relations between the two nations, built up on the American side by the successive diligent efforts of Presidents Franklin D. Roosevelt, Truman, Eisenhower, Kennedy, and Johnson is being badly damaged. Thirty-six years of careful building of friendship has now been jolted by this operation.

I live in a border State; I visit Mexico every year, and I think it a very unfair way to treat a good neighbor.

And so the story goes, Mr. President, of this inept operation.

Thousands of dollars in commerce lost. Friendships damaged. Relations with a good neighbor severely strained. And all with even questionable results of the stated purpose of this operation.

After all, Mr. President, when you tell somebody, "We're going to set up something to catch smugglers," the smugglers stop smuggling. It reminds me of the operation of the Secretary of the Interior when he announced he was going to Florida to catch alligator poachers. The alligator poachers shaved and went to church that week—probably the first time in years.

The action of the Treasury Department in this operation reminds me of the farmer who was plagued with rats. After failing with various methods to eradicate these rats from his barn, he set fire to his barn and burned the barn down to get rid of the rats. Let us not burn the barn of profitable international trade and invaluable international relationships to get rid of some lawless individual smugglers.

S. 2997—INTRODUCTION OF A BILL PROVIDING JUDICIAL PROCEDURE FOR OBTAINING EVIDENCE OF IDENTIFYING PHYSICAL CHARACTERISTICS

Mr. McCLELLAN. Mr. President, I introduce for appropriate reference, together with Senators HRUSKA and ALLOTT, S. 2997, a bill to provide a judicial procedure for the obtaining of evidence of identifying physical characteristics. At the outset, however, because this is a new and novel approach to a traditional evidentiary problem facing law enforcement, I am not necessarily committed to the bill, and I am not sure, at this point, that it will receive my wholehearted support. In short, S. 2997 is a bill which I want subjected to close scrutiny and study by all those knowledgeable in the area of criminal law and procedure.

Mr. President, S. 2997 is an outgrowth of the Supreme Court's recent decision in *Davis* v. *Mississippi*, 394 U.S. 721, decided on April 22 of this year. It would be helpful, therefore, to set out briefly the facts in the case.

On December 2, 1965, in Meridian, Miss., an individual was raped by an assailant she could describe only as a young

Negro. Fingerprints on the window through which the assailant entered the victim's home constituted the only investigative lead. The day after the rape occurred, the police began questioning numerous Negro youths. Petitioner, a 14-year-old, was one of several youths questioned, fingerprinted, and released the day following the rape.

On December 14, with neither a warrant nor probable cause, the police confined petitioner in the Meridian jail, a detention which the State during oral argument conceded was constitutionally invalid. During that confinement petitioner was fingerprinted a second time and these prints, along with those of 23 other Negro youths, were sent to the FBI in Washington for comparison with the prints taken from the window of the victim's home. The FBI found the petitioner's fingerprints matched those on the victim's window. Petitioner was then tried and convicted for rape, with the fingerprint evidence being admitted in evidence over petitioner's objection that they should be excluded as the product of an unlawful detention.

On certiorari to the U.S. Supreme Court, the majority in an opinion by Mr. Justice Brennan held that petitioner's illegal detention of December 14, during which the fingerprints used at trial were taken, constituted an unreasonable search and seizure in violation of the fourth amendment to the Constitution. The State had conceded that the fingerprints taken December 14 were taken during an unconstitutional confinement for which there was no warrant or probable cause, but had argued that the December 3 prints were validly obtained and that "it should make no difference in the practical or legal sense which fingerprint card was sent to the FBI for comparison" (394 U.S. at p. 725). The State added that the December 3 detention, while effected without probable cause, was of a type not requiring probable cause because: First, the detention occurred during the investigatory rather than accusatory stage and was not a seizure requiring probable cause; second, detention for the sole purpose of fingerprinting does not require probable cause. The Court's decision rested on a rejection of this argument. It held that "to argue that the fourth amendment does not apply to the investigatory stage is fundamentally to misconceive the purpose of the fourth amendment (394 U.S. at p. 726). The Court continued:

> Investigatory seizures would subject unlimited numbers of innocent persons to the harassment and ignominy incident to involuntary detention. Nothing is more clear than that the fourth amendment was meant to prevent wholesale intrusions upon the personal security of our citizenry whether these intrusions be termed "arrests" or investigatory detentions (394 U.S. at pp. 726, 727).

Citing *Terry* v. *Ohio*, 392 U.S. 1 (1968), the Court indicated that this had been made explicit when the Court there rejected "the notions that the fourth amendment does not come into play at all as a limitation upon police conduct if the officers stop short of something called a 'technical arrest' or a 'full blown search'" (394 U.S. at p. 727). The Court concluded that "detentions for the sole purpose of obtaining fingerprints are no less subject to the constraints of the fourth amendment," and held that petitioner's prints of December 3 were also obtained in violation of the fourth amendment (394 U.S. at pp. 726, 727).

Nevertheless—and this is crucial here—Mr. Justice Brennan, for the majority, devoted the last part of the Court's opinion to discussing possible procedures for constitutionally detaining individuals for purposes of fingerprinting during a criminal investigation when there is no probable cause for arrest in the "traditional sense." The relevant passage from the opinion is as follows at pages 727, 728:

> "It is arguable, however, that because of the unique nature of the fingerprinting process, such detentions might, under narrowly defined circumstances be found to comply with the Fourth Amendment even though there is no probable cause in the traditional sense. See *Camara* v. *Municipal Court*, 387 U.S. 523 (1963). Retention for fingerprinting may constitute a much less serious intrusion upon personal security than other types of police searches and detentions. Fingerprinting involves none of the probing into an individual's private life and thoughts which marks an interrogation or search nor can fingerprint detention be employed repeatedly to harass any individual, since the police need only one set of each person's prints. Furthermore, fingerprinting is an inherently more reliable and effective crime-solving tool than eyewitness identifications or confessions and is not subject to such abuses as the improper line-up and the "third-degree." Finally, because there is no danger of destruction of fingerprints, the limited detention need not come unexpectedly or at an inconvenient time. For this reason, the general requirement that the authorization of a judicial officer be obtained in advance of detention would seem not to admit of any exception in the fingerprinting context.

Mr. President, this language reads almost like an invitation to Congress to enact legislation in this area. Indeed, the opinion goes so far as to set out some of the reasons for enacting such legislation as well as some guidelines to follow to assure its constitutionality.

Broadly speaking, the Court suggestion here rests on the recognition that fingerprint evidence is a type of evidence which the Court itself, for fifth amendment self-incrimination purposes, has classified as evidence of identifying physical or body characteristics. See *Schmerber* v. *California*, 384 U.S. 757, (1966); *United States* v. *Wade*, 388 U.S. 218 (1967); *Gilbert* v. *California*, 388 U.S. 263 (1967). Schmerber, which held that taking a blood sample for purposes of chemical analysis did not violate the fourth, fifth, sixth, or 14th amendments, noted:

> That both federal and state courts have usually held that it [the privilege against self-incrimination] offers no protection against compulsion to submit to fingerprinting, photographing, or measurements, to write or speak for identification, to appear in court, to stand, to assume a stance, to walk, or to make a particular gesture (384 U.S. at p. 764).

Each of these types of evidence, of course, involves information about an individual's bodily characteristics. In discussing various types of evidence, the taking of which has been considered to be outside the scope of the privilege against self-incrimination, the Court has sometimes used the terms "nontestimonial" and "noncommunicative" (See supra, Schmerber, Wade and Gilbert). These terms, however, are somewhat confusing, inasmuch as some types of evidence outside the scope of the privilege are, in fact, testimonial and communicative. In addition, the Court uses essentially negative language to define a positive concept. One common feature that each type of evidence the Court has held to be outside the privilege, is that each type is descriptive of a bodily characteristic. Therefore, for the purpose of this legislation, I have used the term "identifying physical characteristic" (*Wade*, supra, 399 U.S. at pp. 222–223; *Gilbert*, supra, 388 U.S. at p. 667).

Justice Holmes, in *Holt* v. *United States*, 218 U.S. 245, 1910 (pp. 252–253) cited in Schmerber and Wade, defines the scope of the privilege against self-incrimination as follows:

> [T]he prohibition of compelling a man in a criminal court to be a witness against himself is a prohibition of the use of physical or moral compulsion to extort communications from him, not an exclusion of his body as evidence when it may be material.

Each type of evidence which has been included in the bill, and any evidence which the bill would include, is a type which has been invaluable to law enforcement—not only in solving crimes, but in eliminating innocent suspects.

I turn then to a brief description of the value to law enforcement of these types of evidence.

FINGERPRINT, FOOTPRINT, AND PALMPRINT EVIDENCE

Fingerprints are the most positive form of personal identification known. This is based on two long observed and continuously verified facts: First, that the ridge arrangement on every finger of every person is different and, second, that the ridge arrangement is permanent throughout the person's life. This means that the fingerprints of every person are different. The scientific basis of fingerprinting as we know it, was brought to public attention in 1880 by two Englishmen, Henry Faulds and William Herschel. Their initial conclusions in this matter were studied intensively over a long period of time and set on a firm scientific basis by the British Scientist Sir Francis Galton. The use of fingerprints in criminal identification did not become practicable, however, until the invention of a system of classification by Sir Edward Richard Henry, later Commissioner of Scotland Yard. The system was so positive and easy of implementation that it was officially adopted by the British Government in 1901 for the registration of convicted criminals. Thereafter, it spread rapidly throughout the English-speaking world and is the most widely used system of fingerprint classification today. A second system of fingerprint classification was devised by Juan Vucetich, an Argentinian, and is used in most of the Spanish-speaking countries of the world.

The early use of fingerprints in the United States dates from about 1903. On November 2, 1904, the warden of the U.S. Penitentiary at Leavenworth, Kans., was authorized to take fingerprints of

Federal prisoners. Subsequent to that time, the use of fingerprinting was rapidly adopted throughout the country, fostered by the interest of the International Association of Chiefs of Police. In 1924 the growing demand for a central clearinghouse of fingerprint records resulted in the establishment of the FBI's Identification Division in Washington, D.C., with a total of 810,000 fingerprint cards made up of the files of the International Association of Chiefs of Police and the Leavenworth Penitentiary. Fingerprinting has reached its greatest acceptance and utility in the United States. Today the police of every city and hamlet in the United States are cognizant of the value of fingerprints for identification and are familiar with the services of the FBI's Identification Division. In May 1969 the FBI's files contained more than 192 million fingerprint cards representing more than 83,000,000 persons. More than 14,700 law enforcement and governmental agencies throughout the country contribute these records. The civil files of the FBI contain the prints of 65,000,000 persons, while the criminal files contain the prints of only 18,000,000 individuals.

Let me point out here, however, that fingerprinting in the United States bears no criminal stigma. Indeed, it serves many civil purposes. Most Federal employees are required to be fingerprinted; our Armed Forces fingerprint all of their personnel, and several million persons have voluntarily placed their fingerprints on file for emergency identification. Fingerprint identification is not dependent on age, facial, or body appearance, nor on visual recognition by others, but is established solely through the matching of the unchanging and unique ridge formations appearing on each person's fingers.

Compared to other methods of identification, the recording of fingerprints is simplicity itself. Impressions of the ridges are made by coating the fingers with black fingerprint or printer's ink and then placing the fingers on a white record card. The entire operation does not ordinarily require more than 30 minutes' time and may be accomplished in less. The recording of all ridged areas of both hands and feet might, in some cases, require up to an hour's time. The taking of the prints requires no volition on the part of the person being printed, does not require his active participation, nor does the operator participate, other than to see that the prints are completely and legibly recorded. The ink which is placed on the fingers is readily removed with soap and water. In some cases, it is necessary to procure finger, palm, and footprints for comparison purposes.

Fingerprints, along with palm prints and footprints, are of the greatest value in criminal investigative work because they can be positively identified as those of a particular person, even though there are no eyewitnesses to the offense. In several cases, fingerprint evidence alone has been sufficient for conviction of a defendant, so reliable is its nature. Although the 10 fingerprints of a person are used to set up general record files because they offer the maximum pattern material from a technical standpoint, as well as being easily taken, any ridged areas of the hand or foot is unique in every person and can be identified exactly like fingerprints and such identifications have the same legal validity. Palmar impressions are often found on objects at crime scenes and footprints are found in some cases. In many instances fingerprints of suspects in cases are not known to be available, and in most cases palm and foot impressions must be taken of a suspect before any comparison with a crime scene print is possible. The FBI alone receives about 2,500 latent print cases per month and identifies suspects in approximately 250 cases per month. Fingerprinting plays a vital role in every major investigation and can be the positive clue linking the criminal with the crime.

Fingerprints also have a number of humanitarian uses. Foremost among these is the daily identification of persons who are found dead of natural causes in unknown surroundings and those who have been murdered. The great success of the FBI's disaster squad has been achieved through identifications effected with fingerprints contained in its enormous collection of civil fingerprint records. About 80 percent of the disaster victims from whose bodies fingerprints could be obtained, have been identified by that method, despite the fact that the bodies are frequently mutilated, fragmented, and burned beyond visual recognition. Many bodies of unknown deceased persons have been identified by fingerprints even after the bodies have lain exposed to the elements for weeks or months. Missing persons are regularly located through fingerprints; amnesia victims are identified, and the greatest confidence is placed in identification of our war casualties by fingerprints. Footprints may also serve a humanitarian purpose. The Air Force footprints its personnel and it is a common practice for hospitals to footprint the newborn for positive identification, should a case of questioned identity arise. The fingerprints of mothers found on birth records of their children have been used in a number of cases to identify disaster victims. Fingerprints found on the driver's licenses of a few States have also been used to positively identify victims of catastrophes. The identification of more than 2,500 fugitives from justice per month is effected by this means.

In order to use fingerprint identification there must be a known set of a person's prints available with which to compare any questioned print; so if fingerprints are found at a crime scene there must be a known set of palm prints or a known set of footprints with which to compare palm or foot impressions found at the scene of a crime before they can be useful to the investigation. In a number of cases it has been possible to connect a single culprit with several major crimes through fingerprints. With the recent restrictive uses of confessions and admissions, physical evidence is of the greatest importance in prosecuting the subject. It is possible also by fingerprints to show the presence of the victim in a dwelling, automobile, or other location. In comparing prints of any type the expert can say that the prints either are or are not those of a particular person.

While fingerprints are a sure way to connect the criminal with the crime, suspects by the hundreds are constantly eliminated from investigative consideration in criminal cases through showing that their fingerprints do not match those from the crime scene. Many erroneous identifications made by other means have been corrected by fingerprints, resulting in some instances, in the release of persons already under arrest.

HANDWRITING EVIDENCE

The examination of handwriting is one of the older fields of the forensic sciences. Historical references reveal that the practice of forgery and other frauds involving documents evolved almost as early as the development of writing as a medium of communication. As a means of protection against this practice, the need for the detection of forgery arose.

This gave rise to the development of persons skilled in the examination of writings.

With the advance of science in general and an advance in the skill of persons examining writings, recognition was given in the early courts to handwriting experts. After the beginning of the 1800's, the English courts began to accept expert testimony concerning handwriting. *Eagleton and Coventry* v. *Kingston*, 8 Vesey 438 (1803). Earliest introduction of expert handwriting testimony in the United States seems to have been under the Civil Code of Louisiana. *Sauve* v. *Dawson*, 2 Martin 202 (1812).

Many of the rules and regulations concerning handwriting testimony were formulated by court decisions and have been made a part of codified laws. The Congress of the United States on February 26, 1913, vol. 37–1, C79, p. 683, enacted a statutory provision relating to comparisons of handwriting:

> In any proceedng before a court or judicial officer of the United States where the genuineness of the handwriting of any person may be involved, any admitted or proved handwriting of such person shall be competent evidence as a basis for comparison by witnesses, or by the jury, court or officer conducting such proceeding, to prove or disprove such genuineness.

Since that date there has been acceptance of expert testimony involving document matters as expressed in *State* v. *Gummer*, 51 N.D. 445, 200 N.W. 20 (1924), wherein the court stated:

> The study of handwriting has become a scientific matter and, with modern theories as to individual characteristics as expressed in handwriting and the scientific means for measurement and demonstration that have been devised, the status of handwriting evidence has wholly changed. That being the case, the rules of evidence with respect to handwriting have had to be enlarged accordingly. It is another case of the growth and progress of the law to meet modern requirements.

At the time that the FBI Laboratory was established in 1932, the services of only one handwriting expert was needed. Today the FBI Laboratory employs over 30 experts in domument examinations and during the current fiscal year con-

ducted approximately 200,000 examinations involving various types of writing. Other branches of the Federal Government, police agencies in major cities of the United States, and many private examiners throughout the United States are engaged in the examination of handwritings and documents. The courts of the United States and throughout most of the world presently give full acceptance to testimony furnished by document examiners.

In cases such as kidnaping, extortion, interstate transportation of stolen properties, stolen motor vehicles, and practically every type of case investigated by the police and Federal agencies, the examination of handwriting plays a major role in the investigation and subsequent court proceedings.

Since handwriting examination is of such vital importance to a majority of cases investigated, it is essential that the document examiner have available for examination suitable known handwriting standards for comparisons.

IDENTIFICATION PHOTOGRAPHS

Photographs of persons have long been used on identification papers throughout most of the world. For years, the police in the United States and in other countries have photographed individuals who were being fingerprinted as a suspect or as an accused. This practice has received widespread acceptance by the courts and this was recently confirmed by the U.S. Supreme Court in Schmerber against California, supra.

The use of identification photographs plays an important role in investigations conducted by the police. Numerous cases are on record whereby a wanted person has been located through publications of his photograph. As an aid to criminal investigation, an identification photograph is an invaluable tool for the investigating officer.

BLOOD AND OTHER BODY FLUIDS, HAIR, FIBERS, AND CLOTHING EVIDENCE

In cases of violence, such as rape, murder, and assaults, blood, semen, hairs, and fibers are often important evidence in associating a suspect with the crime. For example, during the commission of violent crimes, there is often a transfer of such evidence between the persons or clothing of the victim and the subject. The value of this evidence lies in the comparison of the evidence found on the victim with that emanating from or found on the subject's body or clothing. Thus, it is essential that evidence in possession of the subject be available for examination and comparison purposes.

Following the language of the Davis decision, S. 2997 provides for prior judicial approval before a subpena may be issued. Further, as the Davis case suggests, the detention need not come unexpectedly or at an inconvenient time. The only exceptions to this would seem to be when an individual was about to flee the jurisdiction, or the type of evidence sought could be destroyed. The subpena can specify that the individual involved be detained at a reasonable and convenient time. The detention must be supervised by a designated U.S. magistrate.

During the drafting of the bill a number of questions were brought up, some of a constitutional nature, concerning what provisions should or should not be included. One such issue is whether or not the individual from whom the evidence is to be taken should have a lawyer present when the evidence is taken. A reading of the Wade case suggests that a lawyer need not be present for taking evidence of physical characteristics as a prerequisite to introducing such evidence in court. While discussing fingerprints, blood samples, clothing, hair, and the like, the court stated (388 U.S. pp. 227–228), as follows:

> We think there are differences which preclude such stages being characterized as critical stages at which the accused has the right to the presence of his counsel. Knowledge of the techniques of science and technology is sufficiently available, and the variables in techniques few enough, that the accused has an opportunity for a meaningful confrontation of the Government's case at trial through the ordinary processes of cross-examination of the Government's expert witnesses and the presentation of the evidence of his own experts. The denial of a right to have his counsel present at such analyses does not therefore violate the Sixth Amendment, they are not critical stages since there is minimal risk that his counsel's absence at such stages might derogate his right to a fair trial.

On the other hand, Wade notes that—

> [T]he vagaries of eyewitness identification are well-known—

And that—

> the annals of criminal law are rife with instances of mistaken identification (388 U.S. at p. 228).

The Court points out that there are inherent dangers in eyewitness identification, and an inherent suggestibility within the context of pretrial identification. As a result the Court held that—

> [i]nsofar as the accused's conviction may rest on a courtroom identification in fact the fruit of a suspect's pretrial identification which the accused is helpless to subject to effective scrutiny at trial, the accused is deprived of that right of cross-examination which is an essential safeguard to his right to confront the witnesses against him. (388 U.S. at p. 235).

Noting that the "presence of counsel . . . [at a lineup] can often avert prejudice and insure a meaningful confrontation at trial," the Court concluded that under existing practice a pretrial lineup was a "critical stage of the prosecution" at which an accused is entitled to have counsel present (388 U.S. at pp. 236–237). The Court further noted:

> [l]egislative or other regulations, such as those of local police departments, which eliminate the risks of abuse and unintentional suggestion at lineup proceedings and the impediments to meaningful confrontation at trial may also remove the basis for regarding the stage as "critical" (388 U.S. at p. 238).

Of course, the Wade decision must also be read in the context of section 3502 of title 18 of the United States Code, which was enacted as a part of last year's Omnibus Crime Control Act. The Department of Justice in a memorandum dated June 11, 1969, discusses 18 U.S.C. section 3502 in relation to the Wade decision. (Reprinted in 115 CONGRESSIONAL RECORD 23237, August 11, 1969, daily edition.) At this point, I do not think it is necessary to insert a requirement that counsel be present during the taking of this type of evidence. I would, however, like to see this point thoroughly discussed during the hearing process.

We must also consider in the hearings whether or not, after an appropriate period of time has elapsed, the evidence taken from suspects not prosecuted or convicted, should be eradicated. Under the provisions of the bill, this type of evidence could be easily obtained, under appropriate circumstances. I am not sure, at this point, that expunging records and files of the evidence would serve any purpose. Destroying such evidence might mean that some individuals would have to be picked up several times, rather than just once. At any rate, it is something that can be explored more fully later.

I am sure there are other issues which could be explored and studied. For example, during the drafting of the bill there was some discussion of whether to issue a subpena directing an individual to appear at a certain time for the purpose of obtaining the evidence, or to issue a warrant directing that the individual be brought in for the purpose of taking the evidence. As presently drafted the bill provides for a subpena calling for the forthwith appearance of the individual or an appearance at a designated time and place. The appearance must be before a designated U.S. magistrate. The provision for forthwith appearance would, in most cases, take care of those situations where the individual would be likely to flee the jurisdiction; and for other individuals would mean that a mutually convenient time and place could be designated for obtaining the evidence. One point that was brought out in staff discussion was that in situations where the evidence could be destroyed, such as alcohol in the blood stream, defiance of a subpena calling for a forthwith appearance would not result in the individual being physically taken in for obtaining the evidence, but that the individual would be liable for contempt, which, under the circumstances, would nullify the value and intent of the proposed legislation. Hopefully, that type of situation would not come up frequently. At this point, I believe that the convenience a subpena would afford those persons who may be subjected to the provisions of the bill would offset those few situations where evidence may be destroyed and only a warrant for physical incarceration would suffice. Both the subpena and warrant have their advantages and disadvantages, and I fell sure the hearing process will shed more light on the pros and cons of each.

I urge every Senator to study the bill and give me the benefit of his views and suggestions. I assume that the bill will be referred to the Subcommittee on Criminal Laws and Procedures of the Committee on the Judiciary; in which case I would expect to hold hearings on it and a number of other measures in the crime field following our work in the organized crime area.

Mr. President, I ask unanimous consent to have the text of the bill, which

I now introduce, printed at this point in the RECORD.

The PRESIDING OFFICER. The bill will be received and appropriately referred and, without objection, the bill will be printed in the RECORD.

The bill (S. 2997), to amend title 18, United States Code, to provide for the issuance of subpenas for the limited detention of particularly described or identified individuals for obtaining evidence of identifying physical characteristics in the course of certain criminal investigations, and for other purposes, introduced by Mr. MCCLELLAN (for himself and other Senators), was received, read twice by its title, referred to the Committee on the Judiciary, and ordered to be printed in the RECORD, as follows:

S. 2997

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) chapter 223, title 18, United States Code (relating to witnesses and evidence) is amended by adding at the end thereof the following new section:

"§ 3507. Detention for obtaining evidence of identifying physical characteristics.

"(a) Upon written approval given by the United States Attorney for any judicial district, an investigative officer of any department or agency of the United States who is engaged within the scope of his authority in the investigation within that district of an alleged criminal offense punishable under a statute of the United States by death or by imprisonment for more than one year may make written application upon oath or affirmation to a judge of the district court of the United States for that district for a subpoena authorizing the temporary detention for obtaining evidence of identifying physical characteristics from an identified or particularly described individual residing or found within that judicial district. Such subpoena shall require the presence of such individual before such United States Magistrate as the Court shall direct for obtaining such evidence forthwith or at such other time as the court may direct and at such place as the court may direct. A subpoena may be issued by the court upon showing that—

"(1) reasonable cause exists for belief that a specifically described criminal offense punishable under a statute of the United States by death or imprisonment for more than one year has been committed;

"(2) procurement of evidence of identifying physical characteristics from an identified or particularly described individual may contribute to the identification of the individual who committeed such offense; and

"(3) such evidence apparently cannot be obtained by the investigating officer from any investigative or law enforcement agency of the United States, any State, or any political subdivision of any State.

"(b) Any subpoena issued under this section shall specify—

"(1) the character of the alleged criminal offense which is the subject of the application;

"(2) the specific type of identifying physical characteristic evidence which is sought;

"(3) the relevance of such evidence to the particular investigation;

"(4) the identity or description of the individual who may be detained for obtaining such evidence;

"(5) the name and official status of the investigative officer authorized to effectuate such detention and obtain such evidence;

"(6) the United States Magistrate before whom such evidence shall be obtained;

"(7) the place at which the obtaining of such evidence may be effectuated;

"(8) the period of time, not exceeding 5 hours, during which the named or described individual may be detained for obtaining such evidence; and

"(9) the period of time, not exceeding 15 days, during which the subpoena shall continue in force and effect.

"(c) The subpoena shall be returned to the court not later than 45 days after its date, and it shall be accompanied by a written statement indicating the type of evidence taken. The United States Magistrate before whom the evidence was taken shall give to the person from whom such evidence was taken a copy of the subpoena and a written statement indicating what type of evidence was taken.

"(d) As used in this section, 'identifying physical characteristics' includes, but is not limited to, the fingerprints, palm prints, footprints, measurements, handwriting, hand printing, sound of voice, blood samples, urine samples, saliva samples, hair samples, comparative personal appearance, or photographs of an individual."

(b) The section analysis of chapter 223, title 18, United States Code, is amended by amending by adding at the end thereof the following new item:

"3507. Detention for obtaining evidence of identifying physical characteristics."

SHARPEST MONTHLY INCREASE IN UNEMPLOYMENT IN NEARLY A DECADE

Mr. HARTKE. Mr. President, the bitter fruits of the administration's misguided economic policies have begun to reveal themselves.

The figures published yesterday by the Department of Labor show the sharpest monthly increase in unemployment in nearly a decade, and the 4-percent level of unemployment is the highest since 1967.

Yet we are informed in this morning's newspapers that the administration regards these shocking figures as "a welcome sign" that their policies are working as planned.

I point out that none of the self-congratulating planners is among those who were forced out of a job last month. None will have to endure the anguish of facing a host of unpaid bills with only the pittance of unemployment compensation to sustain them and their families.

That is truly the unforgivable aspect of this grim news. Unemployment is a disaster for those who suffer it, and today almost 3 million Americans are in that category. Yet the men who are chiefly responsible for overseeing the health of the economy are jubilant, and the working people of the Nation are being promised more of the same.

When Secretary of the Treasury Kennedy testified before the Committee on Finance several months ago he warned us that we might have to accept a "modest" increase in unemployment as the price for cooling inflation. I told him at that time that policies which exact that sort of price are unacceptable even if they succeed in their stated objective.

In fact, however, they are not succeeding. Inflation rages on at an almost unprecedented rate. Only last Saturday, officials of the Federal Reserve Board announced that we can look for no relief until at least next spring—if then. Inflation is increasing at the highest rate since 1953, and interest rates are the highest since 1859.

What we are faced with, then, is a situation of soaring prices, crushing taxes, record high interest rates, and mounting unemployment. This, we are told, is this administration's "solution" to our economic problems.

Mr. President, the American people will simply not tolerate this incredible mixture of bungling and callousness which is attempting to pass as a policy. Nor should they tolerate it. They are being pushed beyond the limits of endurance, and they are not endlessly patient.

It takes no gift of prophecy to recognize that our deteriorating economic conditions can only lead, not alone to suffering for millions of individual Americans, but to exacerbation of an already explosive racial situation and to even greater alienation of our young people, who were hardest hit of all by this latest rise in unemployment.

Mr. President, there is no alternative for the administration but to reverse itself while there is still time and adopt policies that will stave off the economic crisis that now confronts us. It must adopt policies that promote expansion rather than constriction; it must move toward lower taxes and lower interest rates; it must remove the shackles it is so obstinately attempting to fasten upon the productive energies of America.

Only in that way will the natural forces of the market be able to lower prices and increase employment, and thereby restore America to its position of economic preeminence in the world.

THE ORGANIZED CRIME BILL

Mr. MCCLELLAN. Mr. President, I wish to report to the Senate that S. 30, which was introduced earlier this year, has now been processed with hearings and staff work to the point where it is now ready for markup sessions by the subcommittee.

For the information of the Senate, I shall now state for the record that substantial provisions have been added to the bill since it was originally introduced. These provisions are now contained in 11 titles. The provisions of eight separate bills that have been introduced are now pending before the subcommittee. All eight of which deal with organized crime.

Mr. President, S. 30 as redrafted and as it will be reprocessed by the committee in the markup proceeding contains 11 titles covering the following subjects: Title I, strengthening the grand jury process; title II, the granting of immunity; title III, contempt; title IV, false statements by witnesses; title V, witness facilities; title VI, depositions of witnesses; title VII, admissibility of statements; title VIII, the suppression of evidence; title IX, syndicated gambling; title X, racketeering in legitimate businesses; and title XI, sentencing.

Mr. President, as we know, the bill we passed last year became known and officially titled the Omnibus Crime Control and Safe Streets Act of 1968. This bill may very well be entitled the omnibus organized crime bill of 1969.

Again, I am glad to report that the bill is now ready for markup and we expect to meet on it within the next week or so. I hope this bill is processed, on the

Senate Calendar soon, and that it will be passed by the Senate so the House can act on it in the near future. However, if we are not able to get to it in time for them to act on it, we will get it ready and the House will have a major crime bill before it which has been passed by the Senate and which would go a long way toward strengthening law enforcement, particularly in the field of organized crime dealing with gangsters and racketeers.

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

The PRESIDING OFFICER (Mr. SPONG in the chair). The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

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

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

EXECUTIVE COMMUNICATIONS, ETC.

The ACTING PRESIDENT pro tempore laid before the Senate the following letters which were referred to as indicated:

REPORTS ON IMPROVEMENT PLANS UNDER THE WATERSHED PROTECTION AND FLOOD PREVENTION ACT

A letter from the Acting Director, Bureau of the Budget, Executive Office of the President, transmitting, pursuant to law, plans for works of improvement which have been prepared under the Watershed Protection and Flood Prevention Act, as amended (16 U.S.C. 1005), and delegated to the Director of the Bureau of the Budget by Executive Order No. 10654 of January 20, 1956 (with accompanying papers); to the Committee on Agriculture and Forestry.

REPORT ON BORROWING AUTHORITY

A letter from the Director, Office of Emergency Preparedness, Executive Office of the President, transmitting, pursuant to law, a report on borrowing authority for the period ending June 30, 1969 (with an accompanying report); to the Committee on Banking and Currency.

REPORTS ON IMPROVEMENT PLANS UNDER THE WATERSHED PROTECTION AND FLOOD PREVENTION ACT

A letter from the Acting Director, Bureau of the Budget, Executive Office of the President, transmitting, pursuant to law, plans for works of improvement which have been prepared under the Watershed Protection and Flood Prevention Act, as amended (16 U.S.C. 1005), and delegated to the Director of the Bureau of the Budget by Executive Order No. 10654 of January 20, 1956 with accompanying papers); to the Committee on Public Works.

EXECUTIVE REPORTS OF COMMITTEES

As in executive session, the following favorable reports of nominations were submitted:

By Mr. TYDINGS from the Committee on the District of Columbia:

Henry S. Robinson, Jr., of the District of Columbia, to be a member of the District of Columbia Council for the remainder of the term expiring February 1, 1970.

By Mr. FULBRIGHT from the Committee on Foreign Relations:

Clinton E. Knox, of New York, a Foreign Service officer of class 1, to be Ambassador Extraordinary and Plentipotentiary to Haiti;

Claude G. Ross, of California, a Foreign Service officer of the class of career minister, to be Ambassador Extraordinary and Plenipotentiary to the United Republic of Tanzania; and

Hewson A. Ryan, of Massachusetts, a Foreign Service information officer of the class of career minister for information, to be Ambassador Extraordinary and Plenipotentiary to Honduras.

PETITION

The ACTING PRESIDENT pro tempore laid before the Senate a joint resolution adopted by the Congress of Micronesia, which was referred to the Committee on Interior and Insular Affairs, as follows:

HOUSE JOINT RESOLUTION 62

A house joint resolution unequivocally stating the sense of the Congress of Micronesia regarding the plight of the Eniwetokian Micronesians and strongly urging the President of the United States to effect immediate cessation of the reported use of Eniwetok Atoll, Marshall Islands District, by the U.S. Department of Defense for tests of biological warfare agents

Whereas, being the Administering Authority for all Micronesia, the United States of America freely and willingly accepted on July 18, 1947, the responsibility to "promote to the utmost" the well-being of all Micronesians, including the Eniwetokian Micronesians; and

Whereas, the United States in discharging this responsibility must act in full accordance with the Charter of the United Nations, the International Trusteeship Agreement, and the Trusteeship Agreement for these islands; and

Whereas, on December 1, 1947, only five months after the United States had become the trustees for the Micronesians, this same trustee closed Eniwetok to the whole world in order that "necessary experiments relating to nuclear fusion" could be conducted there; and

Whereas, on December 21, 1947, only twenty days after Eniwetok was closed to the whole world, the Eniwetokian Micronesians were forcibly relocated in order that nuclear tests for their trustee's own security and peace would commence at once; and

Whereas, for the last twenty-two years of trusteeship the United States as the trustee for the Eniwetokian Micronesians has arrogantly ignored its responsibilities bestowed upon it to guarantee the peace and the security of the beneficiaries of the trusteeship by its continuous use of their beloved home island for nuclear related tests, while the same trustee knowingly left the said beneficiaries to exist almost on the verge of starvation on an alien island; and

Whereas, the contract entered into by the said Micronesians with the United States of America, their trustee, is not morally and legally binding because the said contract was never translated into the vernacular language and as a result the said Eniwetokian Micronesians never understood well what they were signing; and

Whereas, the said Micronesians have pleaded for mercy and help from trustees by sending their pleas through the Congress of Micronesia and by petitioning the United Nations; and

Whereas, the United States has agreed to give only a token compensation to the said Micronesians for the loss of some of their islands, twenty-two years of absence from their home island of Eniwetok, and an existence of near starvation; and

Whereas, the Honorable Richard D. McCarthy of New York has recently disclosed that he has discovered that the U.S. Department of Defense may be using the Eniwetok Atoll for test of biological warfare agents; and

Whereas, any existence of such activities in Micronesia is highly questionable in the light of the Trusteeship Agreement and the U.S. policy which does not permit such activities within its own boundaries; and

Whereas, such activities pose dangers of catastrophic magnitude and scope to not only the peoples but also to the land and sea resources of Micronesia and territories and nations throughout the Pacific Basin; and

Whereas, such additional use of Eniwetok Atoll by U.S. Department of Defense dims the prospects of the earliest possible return of the said Micronesians to their beloved home islands; now, therefore,

Be it resolved by the House of Representatives of the Third Congress of Micronesia, Second Regular Session, 1969, the Senate concurring, that it is the unequivocal sense of the Congress of Micronesia that the Eniwetokian Micronesians have contrbuted more than their share, as called for in the Trusteeship Agreement, toward "the maintenance of international peace and security"; and

Be it further resolved that the President of the United States of America, the trustee of these islands, including the Eniwetok Atoll, is hereby strongly urged to effect immediate cessation of the reported use of the Eniwetok Atoll for the testing of biological warfare agents; and

Be it further resolved that the President of the United States is hereby also strongly urged to take immediate steps to return the Eniwetokian Micronesians, now existing on the island of Ujelang, to their beloved home islands; and

Be it further resolved that certified copies of this Joint Resolution be transmitted to the President of the United States of America; the President and Speaker of the U.S. Congress; the President of the U.N. Security Council; U.N. Secretary General; the President of the Trusteeship Council; the Prime Minister of Japan; the President of the Republic of the Philippines; the Chairman of the Senate Foreign Relations Committee; the Chairman of both Senate and House Interior and Insular Affairs Committees; Representative Richard D. McCarthy; Senators Mike Mansfield, Edward M. Kennedy and William Proxmire; and Representative Patsy Mink.

Adopted August 26, 1969.

Attest:

BETHWEL HENRY,
Speaker, House of Representatives.
CARL HEINE,
Clerk, House of Representatives.
AMATA KABUA,
President of the Senate.
VICTORIO UHERBELAU,
Clerk of the Senate.

BILLS AND JOINT RESOLUTIONS INTRODUCED

Bills and joint resolutions were introduced, read the first time and, by unanimous consent, the second time, and referred as follows:

By Mr. HOLLINGS:

S. 2994. A bill to amend Title 28, section 455, U.S. Code; to the Committee on the Judiciary.

(The remarks of Mr. HOLLINGS when he introduced the bill appear earlier in the RECORD when Mr. HOLLINGS addressed the Senate on the nomination of Judge Haynsworth to be an Associate Justice of the Supreme Court.)

By Mr. PROXMIRE:

S. 2995. A bill for the relief of Tunde Oberding; and

S. 2996. A bill for the relief of Eucaris Brizuela; to the Committee on the Judiciary.

By Mr. MCCLELLAN (for himself, Mr. HRUSKA and Mr. ALLOTT):

S. 2997. A bill to amend title 18, United States Code, to provide for the issuance of subpenas for the limited detention of particularly described or identified individu-

als for obtaining evidence of identifying physical characteristics in the course of certain criminal investigations, and for other purposes; to the Committee on the Judiciary.

(The remarks of Mr. McCLELLAN when he introduced the bill appear earlier in the RECORD, under the appropriate heading.)

By Mr. GOODELL:

S. 2998. A bill to provide that the United States District Court for the Eastern District of New York shall be held at Brooklyn, Mineola, and Hempstead; to the Committee on the Judiciary.

By Mr. GOODELL (for himself, Mr. BIBLE, Mr. EAGLETON, Mr. MATHIAS, Mr. PROUTY, Mr. SPONG, and Mr. TYDINGS):

S. 2999. A bill to authorize, in the District of Columbia, the gift of all or part of a human body after death for specified purposes; to the Committee on the District of Columbia.

(The remarks of Mr. GOODELL when he introduced the bill appear later in the RECORD under the appropriate heading.)

By Mr. GOODELL:

S. 3000. A bill to amend the Foreign Assistance Act of 1961; to the Committee on Foreign Relations.

By Mr. FULBRIGHT:

S.J. Res. 157. A joint resolution to establish a Commission on Organizational Development, and the U.S. Information Agency; to the Committee on Foreign Relations.

(The remarks of Mr. FULBRIGHT when he introduced the joint resolution appear later in the RECORD under the appropriate heading.)

By Mr. BENNETT (for himself and Mr. SPARKMAN):

S.J. Res. 158. A joint resolution to authorize the minting of clad silverless dollars bearing the likeness of the late President of the United States, Dwight David Eisenhower; to the Committee on Banking and Currency.

S. 2999—INTRODUCTION OF THE DISTRICT OF COLUMBIA ANATOMICAL GIFT ACT

Mr. GOODELL. Mr. President, medical science today is constantly on the threshold of discovery and achievement. There are really no limits to the possibilities for devising new ways to prolong life or cure illness.

However, breakthroughs in medical technology do not occur in a vacuum. Moving from experimentation in the laboratory to treatment of a patient with these new techniques in and of itself creates a plethora of other problems. We then must deal with the legal, ethical, sociological, economic, and political aspects of the medical advancement as well. In so doing, we must exercise the same degree of care and imagination in resolving these issues as we do in assuring that a "medical discovery" becomes a widely accepted "cure." When appropriate, legislation must be enacted to achieve these goals.

It is for this reason that today I introduce the District of Columbia Anatomical Gift Act. I am delighted that all the members of the Senate District Committee: Senators BIBLE, EAGLETON, MATHIAS, PROUTY, SPONG, and TYDINGS are joining me in cosponsoring this legislation. The executive board of the Medical Society of the District of Columbia has given its full endorsement to this proposal.

One of the revolutionary areas of medical technology is that of organ transplantation. Although the exact effectiveness of certain areas of this method of treatment is not yet determined, there is no doubt that transplantation is one means of medical treatment whose potential has only begun to be explored Vast experience is being accumulated in surgical techniques and great improvements have been made in tissue matching and the suppression of immune reactions. Transplantation is now a recognized therapeutic procedure in treating kidney disease, and other tissues which have been successfully transplanted for varying lengths of time include skin, cartilage, bone, tendon, nerve, artery, heart valve, liver, and lung. Organ donation is not only used in transplantation. Human organs and tissue are required for research into such problems as the cause of cancer.

There has been widespread public interest in the possibilities of organ donation and transplantation, largely brought about by dramatic advances in the field. However, a broad public campaign of information and education should be undertaken in order to dispel myths and encourage more people to donate. The mechanics by which organs can be quickly matched up between donor and recipient are undeveloped in most areas of the country, although hospitals are starting to work together in this regard. The National Institutes of Health and the American College of Surgeons are moving forward in developing a registry for physicians and others to research vitally needed statistical information on transplantation. A registry has been operating in Boston for several years to collect basic data from around the world on kidney transplantation.

One of the most obvious and needed improvements has been in laws governing organ donation for transplantation and other medical purposes. Until recently, the individual donor and the physician able and willing to undertake a transplantation have been hampered by serious legal restrictions.

Laws relating to the disposition of a dead body and to the donation of organs for transplantation are under State jurisdiction. Existing law in this area used to be a confusing mixture of the common law, dating back to the 17th century, and numerous State statutes governing autopsies, unclaimed bodies, and medical examiners. With the success of corneal transplantation and improvements in kidney transplants in the 1950's, some 40 States and the District of Columbia were stimulated to enact some type of legislation giving an individual the authority to donate an organ for medical purposes upon his death. Four other States provided for the donation of eyes only. Nonetheless, it was generally recognized that these individual State statutes were largely inadequate and incomplete.

On July 30, 1968, after 3 years of study by a special committee, the National Conference of Commissions on Uniform State Laws gave final approval to a uniform donation statute known as the Uniform Anatomical Gift Act. This proposal was drawn up to serve as a model for all States in order to provide a uniform, favorable legal environment for the donation and use of organs and tissue for medical research, education, and therapy. The act was endorsed by the American Bar Association on August 7, 1968. It has since been approved by the American Medical Association, the American Heart Association, the National Kidney Foundation, the Eye Banks Association of America, the National Pituitary Agency, the Committee on Tissue Transplantation of the National Research Council, the Fifth Bethesda Conference sponsored by the American College of Cardiology, and the Public Affairs Committee of the Federation of American Societies for Experimental Biology.

To date, the following 38 States have passed new legislation based directly on this act during the past year: Alabama, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, Nevada, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming. To my knowledge, no other uniform act has been passed in as many States during the first year of its introduction into State legislatures as the Anatomical Gift Act. It is currently being considered in Delaware, Nebraska, New Hampshire, New York, Pennsylvania, and West Virginia.

In an article in the December 9, 1968, issue of the Journal of the American Medical Association, entitled "The Uniform Anatomical Gift Act: A Model for Reform," Dr. Alfred M. Sadler, Jr., Blair L. Sadler, and Prof. E. Blythe Stason have succinctly set forth the purposes of the act and explained its major provisions. Dr. Stason, a professor at the School of Law, Vanderbilt University, was chairman of the national conference's special committee which drafted this act. Dr. Sadler and Mr. Sadler served as consultants on the act to the national conference. An explanation and summary of the act, excerpted from their article, follows:

EXPLANATION AND SUMMARY OF MAJOR PROVISIONS OF THE UNIFORM ANATOMICAL GIFT ACT

The Uniform Act is based on the belief that an individual should be able to control the disposition of his own body after death and that his wishes should not be frustrated by his next of kin. To encourage donations and to help meet the increasing need for organs and tissue, unnecessary and cumbersome formalities should be eliminated and only those safeguards required to protect the other varied interests involved should be included. The rights of the appropriate next of kin should be clearly provided, physicians working in this area should be protected, and the public interests in a dead body, as represented by the medical examiner, should be maintained. With this philosophy in mind, an analysis of the Uniform Act follows with emphasis on its 13 most important provisions:

1. *Individual authority to donate.*—The core of the Uniform Act grants authority to any individual of sound mind and 18 years of age or more to give all or part of his body for any purpose specified later in the Act, the gift to take effect upon death. This crucial provision provides the donation authority which does not exist under common

law. Under common law, the next of kin have the right and the authority to control the disposition of a dead body.

2. *Next of kin authority to donate.*—The Uniform Act specifically provides that the next of kin may donate the body or parts of the deceased and enumerates an order or priority beginning with the surviving spouse. It is important to include this in the statute since donation authority of the next of kin based on common law is vague and unclear.

3. *Possible conflict between donor and next of kin.*—A statement is needed concerning priorities between the donor and his next of kin and concerning conflicting wishes between next of kin to avoid the uncertainty that would confront physicians. Uncertainty could arise in the following situations: (1) The deceased expressed the desire not to have his body or parts donated. Under the Uniform Act the wishes of the deceased would prevail. (2) The deceased made a valid donation under the statute and the next of kin object. The Uniform Act provides that the donation by the deceased is paramount to the wishes of the next of kin. (3) Conflicts between next of kin. The Uniform Act creates six classes of next of kin who may donate, in order of priority beginning with the surviving spouse. If it is known that a gift by a member of a class is opposed by a member of the same or a prior class, the gift shall not be accepted.

4. *Donees.*—Permissible donees.—Existing statutes reveal considerable diversity concerning possible donees. It is desirable to limit donees to those persons or institutions licensed or authorized to practice medicine and to engage in tissue banking or related matters. The Uniform Act is comprehensive and includes tissue banks, specified persons, licensed hospitals, and accredited medical and dental schools.

Obligations of the donee.—Although the donee should be under no obligation to accept a gift, most statutes are silent on this point. The Uniform Act provides that the donee may reject the gift and requires that, following the removal of the part named, custody of the remaining parts shall be transferred to the next of kin or other persons under obligation to dispose of the body.

The open-ended donation and the unavailable donee.—The Uniform Act provides that if the gift is open ended and no donee is named, it may be accepted and used by the attending physician. If a donee is designated but is not readily available at the time and place of death, the attending physician may accept and use the gift.

5. *Purposes for which donations can be made.*—The provisions of the Uniform Act are comprehensive and include medical and dental education, research, advancement of medical or dental science, therapy, and transplantation.

6. *Mechanism of gifts—Wills.*—Some of the statutes, particularly those first enacted, are based on laws relating to wills. Consequently, many donations are not valid unless they have been made in accordance with highly restrictive notarization, recording, and filing requirements, which severly reduce the number of donations and limit their effectiveness. The Uniform Act eliminates these requirements and provides that the gift is effective immediately upon death without waiting for probate.

7. *Mechanism of gift—Other written instruments.*—Many statutes also provide that any written instrument is valid if witnessed by two persons. This represents a considerable improvement because it provides much greater flexibility by eliminating many of the procedural technicalities of wills. It may not be helpful in the accident situation, however, where time is frequently very limited, the prospective donor unconscious, and existence of a written donation instrument unknown.

8. *Mechanism of gift—Cards.*—In light of these problems, it would be highly desirable if an easily carried card could serve as a valid mechanism. The Uniform Act specifically provides that a properly executed card carried on the donor's person or in his effects will suffice.

9. *Mechanism of gift by next of kin—Recorded telephonic consent.*—The Uniform Act simplifies the gift procedure dealing with donations by the next of kin in two important ways. First, the requirements for witnesses are eliminated. Second, consent may be given by telegraphic, recorded telephonic, or other recorded message. The advantage of obtaining consent from next of kin by telegraph or recorded telephone message is clear when the deceased and the next of kin are far apart and time is very limited.

10. *Revocation or amendment of gift.*—In the interests of respecting the final wishes of the donor, every reasonable means for changing one's intent should be made available. The Uniform Act lists six ways in which a donation can be modified, including an oral statement witnessed by two persons.

11. *Protection from liability for physicians and others acting in accordance with the statute.*—The Uniform Act protects all persons concerned, including physicians, next of kin, funeral directors, and medical examiners. The protection applies to both civil and criminal proceedings.

12. *The problem of conflict of laws.*—Until the Uniform Act is universally adopted, conflicts between the diverse donation laws of various states are inevitable. For example, a resident of state A makes a valid gift under the donation statute in state A and then dies in state B which either has no donation statute or has one that differs significantly from that of state A. Which law should apply? There are no cases on this point. The Uniform Act protects the physician in this situation by insulating him from liability if he acts in good faith and in accordance with the terms of either of the relevant state laws.

13. *The time of death.*—The problem of defining death has received considerable attention in recent months and was the subject of lengthy discussion by the Commissioners on Uniform State Laws. There are presently no laws in the United States which attempt to define death. The moment of death has traditionally been regarded as a question for medical determination and not the proper subject for codification by law. The commissioners have chosen to maintain this policy and unanimously concluded that it would be unwise to incorporate a definition of death into the Uniform Act. Medical authorities are currently seeking a consensus on relevant criteria for a definition of death and suitable medical guidelines are being proposed.

The commissioners believed that it was appropriate to deal with the possible conflict of interest which could arise if one physician were to care for both a potential donor and potential recipient of a transplantable organ. On the other hand, they recognized the importance of maintaining adequate channels of communication between those physicians representing the donor and those physicians administering to the recipient. Effective communication is essential to the successful transplantation of a vital organ. Consequently, the Uniform Act provides that "the time of death shall be determined by a physician who attends the donor at his death, or if none, the physician who certifies the death. This physician shall not participate in the procedures for removing or transplanting a part."

Today I introduce this model statute for Senate consideration as legislation for the District of Columbia. I think it is extremely important that District residents are also covered by this more comprehensive legal framework. Organ donation and transplantation in the District are now provided for by the District of Columbia Human Tissue Bank Act of 1962, as amended. This law was passed to encourage and aid the development of reconstructive medicine and surgery and the development of medico-surgical research by authorizing the licensing of tissue banks in the District, and to facilitate ante mortem and post mortem donations of human tissue for tissue bank purposes. At the time of its passage it was considered one of the more comprehensive laws of its kind, and even today goes far beyond some existing State statutes.

The Uniform Act clarifies some of the provisions covered by this law and covers other aspects not presently dealt with. Under the provisions of District of Columbia law, any next of kin after the surviving spouse, can veto the wishes of all of the next of kin. The Uniform Act sets up classes of next of kin who can donate, in order of priority, beginning with the surviving spouse.

The District law does not specify how the next of kin can make a donation, whereas the Uniform Act provides for such donation by any written instrument or telephonic device.

The District law is silent on the questions of whether an individual's wishes are paramount to the wishes of his family. Individual consent to donate is a fundamental principle of the Uniform Act.

There is no provision in existing District law for a specific device such as a card or form which an individual could sign in advance and perhaps carry on his person. The bill which I am introducing today contains a suggested model card or form which might be considered as a valid form of donation and which could be carried by an individual. Some States have included such forms in the laws they have enacted. It is important I think that we strive toward some method of simplifying the donation procedure.

With regard to who can make a donation, existing District law states:

> Any person who, under the law of the District of Columbia, has capacity to make a valid will may by will, codicil or any written statement donate his tissue for purposes of this chapter.

Laws in the District regarding the making of a will provide that a female may do so at the age of 18, but a male must be 21. The Uniform Act, on the other hand, provides that "any individual of sound mind and 18 years of age or more" can give his consent to donate. I would strongly agree with the Commissioners on Uniform State Laws that a person of 18 has attained sufficient maturity to comprehend the implications of making such a donation. It should be noted that the great majority of States which have passed the act have made 18 the donation age even though in certain instances State laws regarding wills differed. Therefore, I will urge that this provision be adopted as it is now written.

There are other points not now provided for by existing District law but covered in some way by the Uniform Act: how a gift can be revoked or amended

if the donee wishes to change his mind; what protection from civil or criminal liability is afforded physicians to protect them in carrying out a transplant; the question of conflicts of laws between States; and a statement on the determination of the time of death.

This bill would also amend certain sections of the District law in order to conform the definitions in the two statutes and allow the Uniform Act to supersede existing law where it is not as comprehensive.

The Uniform Act does not attempt to answer all of the questions raised by organ donation and transplantation. There are a number of issues which the Commissioners on Uniform State Laws decided would be better dealt with by the medical profession or by individual States. These have been enumerated by Messrs. Stason, Sadler, and Sadler, as follows:

Time of death;
Payment for gifts;
Logistics and coordination of hospitals for donation and transplantation;
Information exchange and the establishment of registries of recipients;
Need for quality control in tissue banking;
Allocation of resources;
Jurisdiction of the medical examiner;
Transportation across State lines.

The last item—requirements for transportation of bodies and organs across State lines—is of particular importance to the District of Columbia and the surrounding States of Maryland and Virginia because of their close proximity. The Commissioners correctly refrained from dealing with this matter because they felt that this issue should not be considered under the purview of a donation statute. When using organs or tissue which have crossed State lines; these transportation requirements must be considered.

This need is not an academic one. For example, the Health Services and Mental Health Administration of the Department of Health, Education, and Welfare has recently developed a number of contracts to demonstrate the feasibility of cooperative kidney procurement and sharing programs. The major objective of these contracts is to facilitate maximum utilization of kidneys on a local and/or regional level and, eventually, on a national level. These programs have been made possible by the research supported by the National Institutes of Health in tissue typing and organ transplantation. I personally feel that the individual States will have to begin to more closely examine their laws in this area with these new medical developments in mind.

Mr. President, I wish to commend the special committee of the National Conference of Commissioners on Uniform State Laws for the excellence of the results of their 3 years of study. Dr. Sadler, Mr. Sadler, and Professor Stason should be particularly complimented for their singular efforts in working so tirelessly for the adoption of this act throughout the United States and, indeed, in many foreign countries. A number of other countries have used this act as the basis for their own laws in this area.

Medicine can go forward to help people, but people cannot be helped without adequate protection from the law. An imbalance between law and medicine is detrimental to all concerned. In this era of burgeoning medical advancement we all have a stake in the utilization of this new knowledge. For these reasons, I would hope for swift passage of the District of Columbia Anatomical Gift Act so that the people who live in our Nation's Capital are full beneficiaries of the benefits of our medical revolution.

Mr. President, I ask unanimous consent that the text of this bill, the full report of the National Conference of Commissioners on Uniform State Laws, and an incisive article from the New England Journal of Medicine, April 17, 1969, on the philosophical arguments surrounding the approach which the Commissioners took, entitled "Transplantation—A Case for Consent," by Alfred M. Sadler, Blair L. Sadler, E. Blythe Stason, and Delford L. Stickel, be printed here in the RECORD.

The PRESIDING OFFICER. The bill will be received and appropriately referred; and, without objection, the text of the bill, together with the report and article, will be printed in the RECORD.

The bill (S. 2999), to authorize, in the District of Columbia, the gift of all or part of a human body after death for specified purposes, introduced by Mr. GOODELL (for himself and other Senators), was received, read twice by its title, referred to the Committee on the District of Columbia, and ordered to be printed in the RECORD, as follows:

S. 2999

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

DEFINITIONS; SHORT TITLE

Section 1. (a) As used in this Act, the term—

(1) "bank or storage facility" means a facility licensed, accredited or approved under the laws of any State for storage of human bodies or parts thereof;

(2) "decedent" means a deceased individual and includes a stillborn infant or fetus;

(3) "donor" means an individual who makes a gift of all or part of his body;

(4) "hospital" means a hospital licensed, accredited or approved under the laws of any State and includes a hospital operated by the United States Government, a State, or a subdivision thereof, although not required to be licensed under State laws;

(5) "part" includes organs, tissues, eyes, bones, arteries, blood, other fluids and other portions of a human body, and "part" includes "parts";

(6) "person" means an individual, corporation, government or governmental subdivision or agency, business trust, estate, trust, partnership or association or any other legal entity;

(7) "physician" or "surgeon" means a physician or surgeon licensed or authorized to practice under the laws of any State; and

(8) "State" includes any State, district, commonwealth, territory, insular possession, the District of Columbia, and any other area subject to the legislative authority of the United States of America.

(b) Sections 1 through 8 of this Act shall be known as the "District of Columbia Anatomical Gift Act".

PERSONS WHO MAY EXECUTE AN ANATOMICAL GIFT

SEC. 2. (a) Any individual of sound mind and 18 years of age or more may give all or any part of his body for any purposes specified in section 3, the gift to take effect upon death.

(b) Any of the following persons, in order of priority stated, when persons in prior classes are not available at the time of death, and in the absence of actual notice of contrary indications by the decedent, or actual notice of opposition by a member of the same or a prior class, may give all or any part of the decedent's body for any purposes specified in section 3:

(1) the spouse,
(2) an adult son or daughter,
(3) either parent,
(4) an adult brother or sister,
(5) a guardian of the person of the decedent at the time of his death, or
(6) any other person authorized or under obligation to dispose of the body.

(c) If the donee has actual notice of contrary indications by the decedent, or that a gift by a member of a class is opposed by a number of the same or a prior class, the donee shall not accept the gift. The persons authorized by subsection (b) may make the gift after death or immediately before death.

(d) A gift of all or part of a body authorizes any examination necessary to assure medical acceptability of the gift for the purposes intended.

(e) The rights of the donee created by the gift are paramount to the rights of others except as provided by section 7(d).

PERSONS WHO MAY BECOME DONEES, AND PURPOSES FOR WHICH ANATOMICAL GIFTS MAY BE MADE

SEC. 3. The following persons may become donees of gifts of bodies or parts thereof for the purposes stated:

(1) any hospital, surgeon, or physician, for medical or dental education, research, advancement of medical or dental science, therapy or transplantation; or

(2) any accredited medical or dental school, college or university for education, research, advancement of medical or dental science or therapy; or

(3) any bank or storage facility, for medical or dental education, research, advancement of medical or dental science, therapy or transplantation; or

(4) any specified individual for therapy or transplantation needed by him.

MANNER OF EXECUTING ANATOMICAL GIFTS

SEC. 4. (a) A gift of all or part of the body under section 2(a) may be made by will. The gift becomes effective upon the death of the testator without waiting for probate. If the will is not probated, or if it is declared invalid for testamentary purposes, the gift, to the extent that it has been acted upon in good faith, is nevertheless valid and effective.

(b)(1) A gift of all or part of the body under section 2(a) may also be made by document other than a will. The gift becomes effective upon death of the donor. The document, which may be a card designed to be carried on the person, must be signed by the donor, in the presence of 2 witnesses who must sign the document in his presence. If the donor cannot sign, the document may be signed for him at his direction and in his presence, and in the presence of 2 witnesses who must sign the document in his presence. Delivery of the document of gift during the donor's lifetime is not necessary to make the gift valid.

(2) Any such document referred to in paragraph (1) of this subsection may be in the following form and contain the following information:

Anatomical donor card of

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print or type name of donor

In the hope that my gift may help others, I hereby make this anatomical gift to take effect upon my death. The words and marks below indicate my desires.

I give: (a)—any needed organs or parts
(b)—only the following organs or parts

---

specify the organ(s) or part(s)
(c)—my entire body for anatomical study

For the purposes of transplantation, therapy, medical research or education

Limitations:

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specify limitations, if any

This is a legal document under the Uniform Anatomical Gift Act or similar law.

(other side of card)

Signed by the Donor in the presence of the following two (2) witnesses:

Witness

Witness

Signature of donor

Date of birth

Date signed

(c) The gift may be made to a specified donee or without specifying a donee. If the latter, the gift may be accepted by the attending physician as donee upon or following death. If the gift is made to a specified donee who is not available at the time and place of death, the attending physician upon or following death, in the absence of any expressed indication that the donor desired otherwise, may accept the gift as donee. The physician who becomes a donee under this subsection shall not participate in the procedures for removing or transplanting a part.

(d) Notwithstanding section 7(b), the donor may designate in his will, card or other document of gift the surgeon or physician to carry out the appropriate procedures. In the absence of a designation, or if the designee is not available, the donee or other person authorized to accept the gift may employ or authorize any surgeon or physician for the purpose.

(e) Any gift by a person designated in section 2(b) shall be made by a document signed by him, or made by his telegraphic, recorded telephonic or other recorded message.

DELIVERY OF DOCUMENT OF GIFT

SEC. 5. If the gift is made by the donor to a specified donee, the will, card or other document, or an executed copy thereof, may be delivered to the donee to expedite the appropriate procedures immediately after death, but delivery is not necessary to the validity of the gift. The will, card or other document, or an executed copy thereof, may be deposited in any hospital, bank or storage facility or registry office that accepts them for safekeeping or for facilitation of procedures after death. On request of any interested party upon or after the donor's death, the person in possession shall produce the document for examination.

AMENDMENT OR REVOCATION OF THE GIFT

SEC. 6. (a) If the will, card or other document or executed copy thereof, has been delivered to a specified donee, the donor may amend or revoke the gift by—

(1) the execution and delivery to the donee of a signed statement, or

(2) an oral statement made in the presence of 2 persons and communicated to the donee, or

(3) a statement during a terminal illness or injury addressed to an attending physician and communicated to the donee, or

(4) a signed card or document found on his person or in his effects.

(b) Any document of gift which has not been delivered to the donee may be revoked by the donor in the manner set out in subsection (a) or by destruction, cancellation, or mutilation of the document and all executed copies thereof.

(c) Any gift made by a will may also be amended or revoked in the manner provided for amendment or revocation of wills, or as provided in subsection (a).

RIGHTS AND DUTIES AT DEATH

SEC. 7. (a) The donee may accept or reject the gift. If the donee accepts a gift of the entire body, he may, subject to the terms of the gift, authorize embalming and the use of the body in funeral services. If the gift is of a part of the body, the donee, upon the death of the donor and prior to embalming, shall cause the part to be removed without unnecessary mutilation. After removal of the part, custody of the remainder of the body vests in the surviving spouse, next of kin or other persons under obligation to dispose of the body.

(b) The time of death shall be determined by a physician who attends the donor at his death, or, if none, the physician who certifies the death. This physician shall not participate in the procedures for removing or transplanting a part.

(c) A person who acts in good faith in accord with the terms of this Act, or under the anatomical gift laws or another State is not liable for damages in any civil action or subject to prosecution in any criminal proceeding for his act.

(d) The provisions of this Act are subject to the laws of the District of Columbia prescribing powers and duties with respect to autopsies.

UNIFORMITY OF INTERPRETATION

SEC. 8. This Act shall be so construed as to effectuate its general purpose to make uniform the law of those States which enact it.

SEC. 9. (a) That part of secton 3 of the District of Columbia Tissue Bank Act (D.C. Code, sec. 2–252) which follows the definition of the term "Commissioners" is amended to read as follows:

" 'Donor' means any persons who, in accordance with the provisions of the District of Columbia Anatomical Gift Act, bequeaths or donates his tissue for removal after death in furtherance of the purposes of such Act, and also means any deceased person whose tissue is donated or disposed of for the purposes of this Act, the District of Columbia Anatomcal Gift Act, or sections 675, 676, and 683 of the Act of March 3, 1901, as amended (D.C. Code, sec. 27–119a and sec. 27–125).

" 'Tissue' means any body of a dead human or any portion thereof, including organs, tissues, eyes, bones, arteries, blood and other fluids.

" 'Tissue bank' means a facility for procuring, removing, and disposing of tissue for the purposes set forth in the District of Columbia Anatomical Gift Act, and for the purposes of reconstructive medicine and surgery, and research and teaching in reconstructive medicine and surgery."

(b) Sections 6, 7 and 8 of the District of Columbia Tissue Bank Act are hereby repealed.

(c) Subsection (b) of section 9 of the District of Columbia Tissue Bank Act is amended to read as follows:

"(b) The Coroner of the District of Columbia may, in his discretion, allow tissue to be removed from any dead human body in his custody or under his jurisdiction, if such tissue removal shall not interfere with other functions of the Office of the Coroner, and the person who, in accordance with section 2(b) of the District of Columbia Anatomical Gift Act, is authorized to donate tissue therefrom, shall first authorize such tissue removal."

(d) Section 683 of the Act of March 8, 1901 (D.C. Code, sec. 27–125), is amended by deleting "may be removed by or under the supervision of a person licensed under the authority of section 4 of such Act for preservation in a tissue bank operating pursuant to such Act," and inserting in lieu thereof the following: "or the District of Columbia Anatomical Gift Act may be removed by or under the supervision of a person licensed under the authority of section 4 of the District of Columbia Tissue Bank Act for preservation in a tissue bank operating pursuant to such Act, or for use in accordance with the provisions of the District of Columbia Anatomical Gift Act,".

(e) Sections 675 and 676 of the Act of March 3, 1901 (D.C. Code, sec. 27–119a), is amended by inserting immediately after "such Act" the following: "or the District of Columbia Anatomical Gift Act."

The material furnished by Mr. GOODELL follows:

UNIFORM ANATOMICAL GIFT ACT

(Drafted by the National Conference of Commissioners on Uniform State Laws and by it Approved and Recommended for Enactment in All the States at its Annual Conference Meeting in its Seventy-Seventh Year, Philadelphia, Pennsylvania, July 22–August 1, 1968, With Prefatory Note and Comments)

PREFATORY NOTE

Human bodies and parts thereof are used in many aspects of medical science, including teaching, research, therapy and transplantation. It is a rapidly expanding branch of medical technology. Transplantation of parts may involve skin grafts, bones, blood, corneas, kidneys, livers, arteries and even hearts. It was said that 6,000 to 10,000 lives could be saved each year by renal transplants if a sufficient supply of kidneys were available.

Transplantation may be effected within narrow limits from one living person to another living person. In such case, all that is required is an appropriate "informed consent" authorizing the surgical removal on the one hand, and the implantation on the other. Tissues and organs from the dead can also be used to bring health and years of life to the living. From this source the potential supply is very great. But, if utilization of bodies and parts of bodies is to be effectuated, a number of competing interests in a dead body must be harmonized, and several troublesome legal questions must be answered.

The principal competing interests are: (1) the wishes of the deceased during his lifetime concerning the disposition of his body; (2) the desires of the surviving spouse or next of kin; (3) the interest of the state in determining by autopsy the cause of death in cases involving crime or violence; (4) the need of autopsy to determine the cause of death when private legal rights are dependent upon such cause; and (5) the need of society for bodies, tissues and organs for medical education, research, therapy and transplantation. These interests compete with one another to a greater or less extent and this creates problems.

The principal legal questions arising from these various interests are: (1) who may during his lifetime make a legally effective gift of his body or a part thereof; (2) what is the right of the next of kin, either to set aside the decedent's expressed wishes, or themselves to make the anatomical gifts from the dead body; (3) who may legally become donees of anatomical gifts; (4) for what purposes may such gifts be made; (5) how may gifts be made, can it be done by will, by writing, by a card carried on the

person, or by telegraphic or recorded telephonic communication; (6) how may a gift be revoked by the donor during his lifetime; (7) what are the rights of survivors in the body after removal of donated parts; (8) what protection from legal liability should be afforded to surgeons and others involved in carrying out anatomical gifts; (9) should such protection be afforded regardless of the state in which the document of gift is executed; (10) what should be the effect of an anatomical gift be in case of conflict with laws concerning autopsies; (11) should the time of death be defined by law in any way; (12) should the interest in preserving life by the physician in charge of a decedent preclude him from participating in the transplant procedure by which donated tissues or organs are transferred to a new host. These are the principal legal questions that should be covered in an anatomical gift act. The Uniform Anatomical Gift Act covers them.

The laws now on the statute books do not, in general, deal with these legal questions in a complete or adequate manner. The laws are a confusing mixture of old common law dating back to the seventeenth century and state statutes that have been enacted from time to time. Some 39 states and the District of Columbia have donation statutes that deal in a variety of ways with some, but by no means all, of the above listed legal questions. Four other states have statutes providing for the gift of eyes only.

These statutes differ from each other in a variety of respects, both as to content and coverage. They differ in their enumeration of permissible donees (some require that donees be specified, others permit gifts to be made to any hospital or physician in charge at death); they vary as to acceptable purposes for anatomical gifts (some, for example, do not include licensed tissue banks); they prescribe a variety of minimum ages for the donors; others differ as to the manner of execution of gifts and the manner of revocation. Some require delivery of the instrument of gift or filing in a public office, or both, as a condition of validity; others make no such provision. Since the statutes differ in important respects, a gift adequate in one state may or may not protect the surgeon in another state who relies upon the law in effect where the transplant takes place. In short, both the common law and the present statutory picture is one of confusion, diversity and inadequacy. This tends to discourage anatomical gifts and to create difficulties for physicians, especially for transplant surgeons.

In view of the foregoing, the need of a comprehensive act and an act applicable in all states is apparent. The Uniform Anatomical Gift Act herewith presented by the National Conference of Commissioners on Uniform State Laws carefully weighs the numerous conflicting interests and legal problems. Wherever adopted it will encourage the making of anatomical gifts, thus facilitating therapy involving such procedures. When generally adopted, even if the place of death, or the residence of the donor, or the place of use of the gift occurs in a state other than that of the execution of the gift, uncertainty as to the applicable law will be eliminated and all parties will be protected. At the same time the Act will serve the needs of the several conflicting interests in a manner consistent with prevailing customs and desires in this country respecting dignified disposition of dead bodies. It will provide a useful and uniform legal environment throughout the country for this new frontier of modern medicine.

UNIFORM ANATOMICAL GIFT ACT

An act authorizing the gift of all or part of a human body after death for specified purposes.

SECTION 1. (*Definitions.*)

(a) "Bank or storage facility" means a facility licensed, accredited, or approved under the laws of any state for storage of human bodies or parts thereof.

(b) "Decedent" means a deceased individual and includes a stillborn infant or fetus.

(c) "Donor" means an individual who makes a gift of all or part of his body.

(d) "Hospital" means a hospital licensed, accredited, or approved under the laws of any state; includes a hospital operated by the United States government, a state, or a subdivision thereof, although not required to be licensed under state laws.

(e) "Part" means organs, tissues, eyes, bones, arteries, blood, other fluids and any other portions of a human body.

(f) "Person" means an individual, corporation, government or governmental subdivision or agency, business trust, estate, trust, partnership or association, or any other legal entity.

(g) "Physician" or "surgeon" means a physician or surgeon licensed or authorized to practice under the laws of any state.

(h) "State" includes any state, district, commonwealth, territory, insular possession, and any other area subject to the legislative authority of the United States of America.

COMMENT

Subsection (f) is taken verbatim from the Uniform Statutory Construction Act, section 26(4). In any state that has adopted the Uniform Act or its equivalent, this subsection will be unnecessary.

Subsection (h) is taken from section 26(9) of the Uniform Statutory Construction Act.

SECTION 2

SEC. 2. (*Persons who may execute an anatomical gift.*)

(a) Any individual of sound mind and 18 years of age or more may give all or any part of his body for any purpose specified in section 3, the gift to take effect upon death.

(b) Any of the following persons, in order of priority stated, when persons in prior classes are not available at the time of death, and in the absence of actual notice of contrary indications by the decedent or actual notice of opposition by a member of the same or a prior class, may give all or any part of the decedent's body for any purpose specified in section 3:

(1) the spouse,

(2) an adult son or daughter,

(3) either parent,

(4) an adult brother or sister,

(5) a guardian of the person of the decedent at the time of his death,

(6) any other person authorized or under obligation to dispose of the body.

(c) If the donee has actual notice of contrary indications by the decedent or that a gift by a member of a class is opposed by a member of the same or a prior class, the donee shall not accept the gift. The persons authorized by subsection (b) may make the gift after or immediately before death.

(d) A gift of all or part of a body authorizes any examination necessary to assure medical acceptability of the gift for the purposes intended.

(e) The rights of the donee created by the gift are paramount to the rights of others except as provided by Section 7(d).

COMMENT

Existing state statues differ in their respective standards establishing the donor's competence to execute an anatomical gift.

"Competence to execute a will" is used as the standard in ten states. "Legal age" and sound mind is required in five states. "Twenty-one years and sound mind" is the stated standard in the statutes of ten states. In four states a person who is eighteen years of age or older may make the gift, and in six states "any person" may do so. One state requires twenty-one years accompanied by a certificate of a physician that the donor is "of sound mind and not under the influence of narcotic drugs."

To minimize confusion there is merit in having a uniform provision throughout the country. Also it is desirable to enlarge the class of possible donors as much as possible. Subsection (a) of Section 2, providing that any person of sound mind and 18 years or more of age may execute a gift, will afford both nationwide uniformity and a desirable enlargement of the class of donors. Persons 18 years of age or more are of sufficient maturity to make the required decisions and the Uniform Act takes advantage of this fact.

Subsection (b) spells out the right of survivors to make the gift. Taking into account the very limited time available following death for the successful removal of such critical tissues as the kidney, the liver, and the heart, it seems desirable to eliminate all possible question by specifically stating the rights of and the priorities among the survivors.

Also, Section 2 (b) provides for the effect of indicated objections by the decedent, and differences of view among the survivors. Finally it authorizes the survivors to execute the necessary documents even prior to death. In view of the fact that persons under 18 years of age are excluded from subsection (a), it is especially desirable to cover with care the status of survivors, so younger decedents may be included.

Subsection (d) is added at the suggestion of members of the medical profession who regard a post mortem examination, to the extent necessary to ascertain freedom from disease that might cause injury to the new host for transplanted parts, as essential to good medical practice.

Subsection (e) recognizes and gives legal effect to the right of the individual to dispose of his own body without subsequent veto by others.

SECTION 3

SEC. 3. (*Persons who may become donees; Purposes for which anatomical gifts may be made.*)

The following persons may become donees of gifts of bodies or parts thereof for the purposes stated:

(1) any hospital, surgeon, or physician, for medical or dental education, research, advancement of medical or dental science, therapy, or transplantation; or

(2) any accredited medical or dental school, college or university for education, research, advancement of medical or dental science, or therapy; or

(3) any bank or storage facility, for medical or dental education, research, advancement of medical or dental science, therapy, or transplantation; or

(4) any specified individual for therapy or transplantation needed by him.

COMMENT

Existing state statutes reveal great diversity of provisions concerning possible donees and the purposes for which anatomical gifts may be made.

As to donees, the lists include licensed hospitals, storage banks, teaching institutions, universities, colleges, medical schools, state public health and anatomy boards, and institutions approved by the state department of health. Some of the statutes are detailed and comprehensive. Others are limited, brief and general. A few do not seek in any way to name or limit the donees. The Uniform Act attempts to achieve a maximum of clarity and precision by carefully naming the permissible donees.

The statutes in a few states specify that no donor shall ask compensation and no donee shall receive it. Several statutes provide that storage banks shall be non-profit organizations. On the other hand, most of the states have chosen not to deal with this

question. The Uniform Act follows the latter course in this regard.

As to purposes, again there is great diversity among the statutes. The list of purposes includes teaching, research, advancement of medical science, therapy, transplantation, rehabilitation, and scientific uses. Again some of the statutes are detailed, and others are brief and general. A few statutes contain no limitation whatsoever—merely naming the donees, thus assuring that gifts will not be made to undesirable persons or organizations, and then they are inclusive in naming the purposes in broad terms, thus assuring flexibility. The Uniform Act follows this course.

SECTION 4

SEC. 4. (*Manner of executing anatomical gifts.*)

(a) A gift of all or part of the body under Section 2 (a) may be made by will. The gift becomes effective upon the death of the testator without waiting for probate. If the will is not probated, or if it is declared invalid for testamentary purposes, the gift, to the extent that it has been acted upon in good faith, is nevertheless valid and effective.

(b) A gift of all or part of the body under Section 2 (a) may also be made by document other than a will. The gift becomes effective upon the death of the donor. The document, which may be a card designed to be carried on the person, must be signed by the donor in the presence of 2 witnesses who must sign the document in his presence. If the donor cannot sign, the document may be signed for him at his direction and in his presence in the presence of 2 witnesses who must sign the document in his presence. Delivery of the document of gift during the donor's lifetime is not necessary to make the gift valid.

(c) The gift may be made to a specified donee or without specifying a donee. If the latter, the gift may be accepted by the attending physician as donee upon or following death. If the gift is made to a specified donee who is not available at the time and place of death, the attending physician upon or following death, in the absence of any expressed indication that the donor desired otherwise, may accept the gift as donee. The physician who becomes a donee under this subsection shall not participate in the procedure for removing or transplanting a part.

(d) Notwithstanding Section 7(b), the donor may designate in his will, card, or other document of gift the surgeon or physician to carry out the appropriate procedures. In the absence of a designation or if the designee is not available, the donee or other person authorized to accept the gift may employ or authorize any surgeon or physician for the purpose.

(e) Any gift by a person designated in Section 2(b) shall be made by a document signed by him or made by his telegraphic, recorded telephonic, or other recorded message.

COMMENT

Most existing state statutes authorizing anatomical gifts provide for doing so either by will or by other document in writing. The number of witnesses varies from state to state, but the majority require two witnesses. The Uniform Act requires two witnesses to validate a gift during the donor's lifetime, but witnesses are relatively unnecessary in the case of a gift by next of kin since they are available in person. Hence, none are required in such cases. To facilitate availability of evidence of the gift, a card may be carried on the person, a practice commonly and successfully followed in connection with gifts of eyes. This is an important provision, for we are a peripatetic people and the advantages of a card carried on the person stating the donor's intention to donate is apparent.

Also important are the provisions of Subsection (c) that permit the attending physician upon or following death to be the donee when no donee is named or when the named donee is not available. The donee physician cannot participate personally in removing or transplanting a part, but he can, of course, make a further gift to another person for any authorized purpose.

Attention should also be called to Subsection (e) authorizing the next of kin to make gifts by "telegraphic, recorded telephonic, or other recorded message." Frequently the next of kin are far away, and this provision, not found in any existing statute, has the advantage of expediting the procedure where time for effective action is short.

As the Uniform Act becomes widely accepted it will prove helpful if the forms by which gifts are made are similar in each of the participating states. Such forms should be as simple and understandable as possible. The following forms are suggested for the purpose:

Anatomical gift by a living donor

I am of sound mind and 18 years or more of age.

I hereby make this anatomical gift to take effect upon my death. The marks in the appropriate squares and words filled into the blanks below indicate my desires.

I give: my body; any needed organs or parts; the following organs or parts ———; to the following person (or institution):

The physicians in attendance at my death; the hospital in which I die; the following named physician, hospital, storage bank or other medical institution ——— the following individual for treatment ———; for the following purposes: any purpose authorized by law; transplantation; therapy; research; medical education.

Dated ——— City and State ———.

Signed by the Donor in the presence of the following who sign as witnesses:

Signature of Donor; Address of Donor; Witness; Witness.

Anatomical gift by next of kin or other authorized person

I hereby make this anatomical gift of or from the body of ——— who died on ——— at the ——— in ———. The marks in the appropriate squares and the words filled into the blanks below indicate my relationship to the deceased and my desires respecting the gift.

I am the surviving: spouse; adult son or daughter; parent; adult brother or sister; guardian, authorized to dispose of the body;

I give the body of deceased; any needed organs or parts; the following organs or parts ———; to the following person (or institution) (insert the name of a physician, hospital, research or educational institution, storage bank or individual), for the following purposes: any purpose authorized by law; transplantation; therapy; research; medical education.

Dated ——— City and State ———.

Signature of survivor ——— Address of Survivor ———.

SECTION 5

SEC. 5. (*Delivery of document of gift.*)

If the gift is made by the donor to a specified donee, the will, card, or other document, or an executed copy thereof, may be delivered to the donee to expedite the appropriate procedures immediatly after death. Delivery is not necessary to the validity of the gift. The will, card, or other document, or an executed copy thereof, may be deposited in any hospital, bank or storage facility or registry office that accepts it for safekeeping or for facilitation of procedures after death. On request of any interested party upon or after the donor's death, the person in possession shall produce the document for examination.

COMMENT

Some of the statutes make rather formal mandatory provisions for filing of documents of gift. Thus in two states the gift must be "filed for record in the office of the judge of probate." In another the document must be filed either before death or within 60 hours after death with the State Department of Health. In another the instrument must be filed for record "in the office of the clerk of the district court of the parish wherein the person making the gift resides." In still another the instrument must be filed in the probate court. In two states it is provided that the instrument shall be delivered by the donor to the donee. On the other hand, in the great majority of the states, no provision is made for filing, recording or delivery to the donee. The gift is by implication effective without such formality. Section 5 of the Uniform Act follows the majority permissive practice, but includes permissive filing provisions to expedite postmortem procedures.

SECTION 6

SEC. 6. (*Amendment or revocation of the gift.*)

(a) If the will, card, or other document or executed copy thereof, has been delivered to a specified donee, the donor may amend or revoke the gift by:

(1) the execution and delivery to the donee of a signed statement, or

(2) an oral statement made in the presence of 2 persons and communicated to the donee, or

(3) a statement during a terminal illness or injury addressed to an attending physician and communicated to the donee, or

(4) a signed card or document found on his person or in his effects.

(b) Any document of gift which has not been delivered to the donee may be revoked by the donor in the manner set out in subsection (a), or by destruction, cancellation, or mutilation of the document and all executed copies thereof.

(c) Any gift made by a will may also be amended or revoked in the manner provided for amendment or revocation of wills, or as provided in subsection (a).

COMMENT

In about one half of the states no provision is made for revocation. However, in the interest of carrying out the ultimate desires of the donor, there is good reason for facilitating revocation. Accordingly, about half of the states make affirmative provisions concerning the matter. Usually it is provided that revocation may be accomplished by executing a "like instrument" filed in the manner provided for the instrument of gift and delivered to the donee. In a few states revocation is accomplished by demanding return of the document of gift. There is merit in making revocation both simple and easy to accomplish. Prospective donors are more likely to look with favor on making anatomical gifts if they realize that revocation is readily possible. The Uniform Act makes careful and complete provision for revocation under various contingencies. However, if a donor has deposited an executed copy of an undelivered document of gift as authorized by Section 5, and if the donor desires to revoke the gift, he must see to it that the executed copy which has been deposited is destroyed.

SECTION 7

SEC. 7. (*Rights and duties at death.*)

(a) The donee may accept or reject the gift. If the donee accepts a gift of the entire body, he may, subject to the terms of the gift, authorize embalming and the use of the body in funeral services. If the gift is of a part of the body, the donee, upon the death of the donor and prior to embalming, shall cause the part to be removed without unnecessary multilation. After removal of the part, custody of the remainder of the body vests in the surviving spouse, next of kin, or other persons under obligation to dispose of the body.

(b) The time of death shall be determined by a physician who tends the donor at his death, or, if none, the physician who cer-

tifies the death. The physician shall not participate in the procedures for removing or transplanting a part.

(c) A person who acts in good faith in accord with the terms of this Act or with the anatomical gift laws of another state [or a foreign country] is not liable for damages in any civil action or subject to prosecution in any criminal proceeding for his act.

(d) The provisions of this Act are subject to the laws of this state prescribing powers and duties with respect to autopsies.

COMMENT

Section 7 contains several important provisions. The donee may of course, reject the gift if he deems it best to do so. If he accepts the gift, all possible provision is made for taking account of the interests of the survivors in dignified memorial ceremonies. Also if the donee accepts the gift, absolute ownership vests in him. He may, if he so desires, transfer his ownership to another person, whether the gift be of the whole body or merely a part. He may "cause the part to be removed" either by himself or by another person. The only restrictions are that the part must be removed without mutilation and the remainder of the body vests in the next of kin.

Subsection (b) leaves the determination of the time of death to the attending or certifying physician. No attempt is made to define the uncertain point in time when life terminates. This point is not subject to clear cut definition and medical authorities are currently working toward a consensus on the matter. Modern methods of cardiac pacing, artificial respiration, artificial blood circulation and cardiac stimulation can continue certain bodily systems and metabolism far beyond spontaneous limits. The real question is when have irreversible changes taken place that preclude return to normal brain activity and self sustaining bodily functions. No reasonable statutory definition is possible. The answer depends upon many variables, differing from case to case. Reliance must be placed upon the judgment of the physician in attendance. The Uniform Act so provides.

However, because time is short following death for a transplant to be successful, the transplant team needs to remove the critical organ as soon as possible. Hence there is a possible conflict of interest between the attending physician and the transplant team, and accordingly subsection (b) excludes the attending physician from any part in the transplant procedures. Such a provision isolates the conflict of interest and is eminently desirable. However, the language of the provision does not prevent the donor's attending physician from communicating with the transplant team or other relevant donees. This communication is essential to permit the transfer of important knowledge concerning the donor, for example, the nature of the disease processes affecting the donor or the results of studies carried out for tissue matching and other immunological data.

Subsection (d) is necessary to preclude the frustration of the important medical examiners duties in cases of death by suspected crime or violence. However, since such cases often can provide transplants of value to living persons, it may prove desirable in many if not most states to reexamine and amend, the medical examiner statutes to authorize and direct medical examiners to expedite their autopsy procedures in cases in which the public interest will not suffer.

The entire section 7 merits genuinely liberal interpretation to effectuate the purpose and intent of the Uniform Act, that is, to encourage and facilitate the important and ever increasing need for human tissue and organs for medical research, education and therapy, including transplantation.

SECTION 8

SEC. 8. (*Uniformity of interpretation.*)

This Act shall be so construed as to effectuate its general purpose to make uniform the law of those states which enact it.

SEC. 9. (Short Title.)

This Act may be cited as the Uniform Anatomical Gift Act.

SEC. 10. (Repeal.) The following acts and parts of acts are repealed:

(1)

(2)

(3)

SEC. 11. (Time of taking effect.)

SEC. 8. (Uniformity of interpretation.)

TRANSPLANTATION—A CASE FOR CONSENT

(By Alfred M. Sadler, Jr., M.D., Blair L. Sadler, LL.B., E. Blythe Stason, J.D., and Delford L. Stickel, M.D.)

ABSTRACT

The Uniform Anatomical Gift Act, drafted by the Commissioners on Uniform State Laws, provides a comprehensive and modern legal framework for the donation of human organs for medical research, education and therapy. Widespread adoption of the Act, which eliminates existing unnecessary legal formalities, will make available more human tissue for medical purposes.

In building the Act on the principles of consent and voluntary donation, the Commissioners recognized and protected other important interests in a dead body. They further recognized that many nonlegal impediments to the procurement of organs exist that cannot be overcome by legislation but must be resolved.

Because of this approach, the Act is widely supported by the medical and legal communities and the general public and will soon probably become the law of most states. Such acceptance obviates the need for more radical legislative measures that would eliminate the principles of consent and voluntary donation. Finally, legislation that disregards the other interests in a dead body would encourage public disfavor toward organ donation.

Transplantation, particularly cardiac transplantation, has brought widespread public attention to the archaic and cumbersome laws that control the disposition of all or part of a body after death. Since the medical needs for organs and tissue far exceed the supply, and since these needs will undoubtedly increase, appropriate and satisfactory legal reform is essential.

A great potential has been created for improving the quality of many human lives. But numerous complex problems have been revealed that must be solved before this sizable potential will become a practical reality. In part, the complexity of these problems stems from their multidisciplinary composition, which includes medicine, law, ethics, sociology, religion, economics and politics. This article will concentrate on an examination of existing medicolegal impediments to adequate procurement and use of human organs and tissue and will focus on what responsible reform legislation can realistically accomplish.

Before these impediments are examined, two points deserve mention. In the first place, responsible legal reform in this area must be predicated on a comprehensive understanding of related medical and other realities. Secondly, such reform for purposes of transplantation will be publicly acceptable only if other important, and sometimes competing, legal interests are respected.

At the outset, it is important to emphasize our belief that the Uniform Anatomical Gift Act prepared by the Commissioners on Uniform State Laws represents a responsible and realistic model for reform that not only is badly needed but will be widely accepted. We further believe that, *when obtaining organs of tissue for transplantation, the fundamental principle of informed consent should be maintained, and that, if the present consent framework is adequately streamlined and modernized (as is done in the Uniform Anatomical Gift Act), the principle legal constraints will be eliminated without compromising other important rights and sensitivities.*

After analyzing the existing legal impediments to transplantation and their resolution by the Act, this article briefly examines medical and other related factors directly relevant to an adequate understanding of the Act. The article concludes with an analysis of an alternative proposal to that of improving consent procedures (namely, eliminating consent), which we believe is both unnecessary and unwise.

EXISTING LAW AND THE UNIFORM ANATOMICAL GIFT ACT

When use of an organ or tissue after death of the donor is required, many questions arise as a result of several very important, but frequently competing interests that the law has endeavored to recognize: the need for organs, tissue and cadavers for medical education, research and therapy, including transplantation; the wishes of the deceased; the wishes of the surviving spouse and other appropriate next of kin; and the need of society to determine the cause of death in certain circumstances.[1] The present laws pertaining to these interests are an unwieldy morass of old common law dating back to the seventeenth century and numerous state statutes governing autopsies, unclaimed bodies and medical examiners.[1] These laws were not designed to deal with the problems of tissue donation.

With the advent of transplantation, donation statutes have been enacted in 44 jurisdictions (including the District of Columbia) that specifically provide the authority for an adult to donate all or part of his body for medical, scientific or therapeutic purposes. Four other states (Alaska, Georgia, Maine and West Virginia) permit the donation of eyes only. Three states (New Hampshire, Utah and Vermont) have no donation statutes.[2] Although these donation laws were designed to eliminate many of the uncertainties of the common law and to fill the void left by other statutes relating to autopsies, unclaimed bodies and medical examiners, they are largely inadequate to meet current needs. In response to these legislative inadequacies and in the light of the increasing need for human tissue, the National Conference of Commissioners on Uniform State Laws drafted a uniform donation statute that serves as a model for all states and provides a uniform, favorable legal environment for the donation and use of organs and tissue for medical research and therapy. This group is composed of law professors, lawyers and judges, representing every state, whose function is to help make state laws more uniform and up to date. After three years of study by a drafting committee, the model statute, titled the Uniform Anatomical Gift Act, received the final approval of the Commissioners on July 30, 1968, and was endorsed by the American Bar Association on August 7. It has since received the support of many medical groups and is being considered by the individual states for passage during the current legislative sessions.

The numerous provisions of the Act and the present laws have been examined in detail elsewhere and will not be repeated extensively here.[2] However, it is essential to review briefly the principal existing legal restrictions to organ and tissue procurement and the manner in which they are resolved by the Act.

RIGHT OF A PERSON TO DONATE

According to English common law, the next of kin have traditionally had the right to possession of the body for the purpose of burial. The body was considered incapable of being owned in the commercial sense and thus could not be bought or sold. This found expression in the doctrine that there

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were no "property rights" in a dead body, that it was not part of the deceased's estate and that thus a person could not direct the disposition of his body.[3] [4] As mentioned previously, 44 jurisdictions have now passed statutes that grant to a person the authority to donate all or part of his body after death for medical research, education or therapy. In the remaining jurisdictions, it is not clear whether he has this donation authority. The Uniform Anatomical Gift Act provides that any person of sound mind and 18 years of age or more may give all or part of his body for any purpose later specified in the Act, the gift to take effect after death (Section 2[a]).

RIGHT OF THE NEXT OF KIN TO DONATE

It is not inherently clear how the rights of the next of kin to donate stemming from the common law are affected by a statute that gives donation authority to the deceased. Nor is it clear which next of kin are eligible to donate or whether all possible relatives must give consent before a physician is assured that he can proceed. Only 19 statutes answer any of these questions, and thus uncertainty remains in most jurisdictions. Since donation authorization is obtained from the next of kin rather than from the deceased (before death) in the great majority of transplant situations, these uncertainties must be clarified. The Act provides that specified next of kin have donation authority, and it includes an enumerated order of priority beginning with the surviving spouse (Section 2[b]).

POSSIBLE CONFLICT BETWEEN WISHES OF DONOR AND NEXT OF KIN

Another uncertainty that may confront physicians results from a possible conflict between the wishes of the donor and his next of kin or between next of kin. Twenty existing statutes indicate that the wishes of the donor are paramount to those of relatives. The Act so provides (Section 2[e]), and the specified order of priority removes the confusion that would result if certain of the next of kin disagreed (Section 2[b]). Although it remains a question of medical ethics and practical public relations whether a physician would wish to proceed if any relative raised objections, the legal uncertainties and the physician's legal responsibility have been clarified.

DONEES AND PURPOSES FOR WHICH DONATIONS MAY BE MADE

Many statutes do not contain sufficiently comprehensive provisions relating to the types of donee institutions that may receive a gift, the problems which arise if no donee is named or a named donee is unavailable, or the purposes for which a gift may be made. The Uniform Anatomical Gift Act deals adequately with all these questions (Section S3, 4[c], 4[d]).

RIGHT OF THE DONEE TO MAKE EXAMINATIONS NECESSARY TO DETERMINE ACCEPTABILITY OF THE GIFT

The great majority of statutes are silent on this point. Under the Act, a donation of a part also authorizes "any examination necessary to assure medical acceptability of the gift for the purposes intended" (Section 2[d]). This is essential for an adequate evaluation of the donor's condition and to prevent the transmission of any disease from donor to recipient.[5]

DOCUMENTS OF GIFTS WILLS, WRITTEN INSTRUMENTS AND CARDS

One of the greatest legal constraints to adequate donation is the cumbersome and restrictive formality that is frequently required before a gift is legally valid. For example, in Massachusetts, a donation instrument must be witnessed by three persons, and any person affiliated with the donee institution is diqualified from serving as a witness.[6] Thus, if a hospital patient wishes to make a donation to that hospital, the Massachusetts statute could be construed to prohibit all hospital personnel from witnessing the donation instrument. A gift is also ineffective in Massachusetts "unless a certificate of a registered physician is attached thereto to the effect that . . . the donor was, in the opinion of the said physician, of sound mind and not under the influence of narcotic drugs." [6] The Uniform Anatomical Gift Act provides that a gift may be made by will or any written instrument if witnessed by two persons (Section 4[a], 4[b]). All other formalities have been eliminated. In addition, the Act provides that a card that may be carried on the donor's person may serve as evidence of a valid donation (Section 4[b]). The card device is vital to protecting and expediting the wishes of the donee in an emergency situation when time is frequently very limited, the prospective donor unconscious and the existence of another written donation instrument unknown.[2]

CONSENT BY NEXT OF KIN—RECORDED TELEPHONE MESSAGES

Even with improved donation procedures for the person making the gift and the vastly increased public awareness of the humanitarian benefits of donation, the great majority of donations are still made by next of kin. For example, 65 kidney transplants have been performed in Tennessee, and consent was obtained from next of kin in every case,[7] although under Tennessee law, an individual has authority to donate before death.[8] This is typical of the experience of other major transplant centers throughout the nation. Thus, it is imperative that next-of-kin donation procedures also be streamlined.

The Act provides that the specified relative may authorize a gift by any document signed by him. No witnesses are required. In addition, consent may be obtained by telegraphic, recorded telephonic or other recorded message (Section 4[e]). The considerable advantages of these consent procedures over existing witnessed, written instruments are clear.[1]

ADEQUATE PROTECTION FROM LIABILITY

Although several existing statutes contain provisions that protect the physician who removes the donated organ or tissue, only eight extend this coverage to include criminal proceedings. The protection provision of the Uniform Anatomical Gift Act covers both civil and criminal proceedings and applies to all persons concerned, including physicians, next of kin, medical examiners and funeral directors (Section 7[c]).

PROBLEM OF CONFLICTS OF LAWS

Until statutes based on the Act are universally adopted, conflicts between diverse donation laws will arise when a donation instrument is prepared in one state and the donor dies in another. At present, there is no clear answer to this question, and time pressures in transplant procedures preclude solution by the courts. Aware that the conflicts-of-laws problem is primarily one of protecting uncertain physicians under the pressure of time, the Commissioners extended the protection provision to include any person who acts in good faith in accord with the terms of the law where the donation was made or where the tissue would be removed (Section 7[c]).[2]

TIME OF DEATH

The problem of determining the moment of death has probably been the most controversial and widely discussed public issue related to transplantation. The need for the development of new criteria of death in the light of recent scientific advances is clear, and the Commissioners considered the wisdom of incorporating criteria into the Uniform Anatomical Gift Act. After extensive discussion, they concluded it would not be wise to include a definition of death in the Act, since in the transplant setting, the answer to this question depends largely on medical judgment and since criteria should be flexible to take account of new medical advances as they are made. To freeze a definition into a statute could seriously impede future medical progress.

The Commissioners realized that it was desirable to avoid the possible conflict of interest that might arise if the same physician were to treat both a potential donor and a potential recipient of a transplantable organ.[9] On the other hand, they recognized the importance of maintaining adequate channels of communication between physicians caring for the donor and those administering to the recipient. Consequently, the Act provides that "the time of death shall be determined by a physician who attends the donor at his death, or, if none, the physician who certifies the death. This physician shall not participate in the procedures for removing or transplanting a part" (Section 7[b]).

UNRESOLVED PROBLEMS

As the above analysis demonstrates, the Uniform Anatomical Gift Act represents a sensitive and successful solution to many of the existing legal restrictions related to the donation and procurement of human organs and tissue for medical research and therapy. At the same time, it respects other relevant and important interests in a dead body, such as the wishes of the next of kin for funeral services and the need of society to determine the cause of death under certain circumstances. The Commissioners wisely chose not to legislate certain additional questions that are more properly within the province of medicine, ethics and other disciplines or better dealt with by the individual states. Included here are the criteria for selection of donors and recipients, the determination of time of death, the need for quality control in tissue banking and state transportation requirements that may unnecessarily inhibit the transfer of a body across state lines.[2]

The proper role of the medical examiner or coroner has raised considerable controversy and deserves special mention. Although the medical examiner could be an ideal person to authorize the procurement of organs or tissue from victims of fatal accidents or other cases over which he has jurisdiction, his authority under most statutes is limited to performing an autopsy, and this does not include the donation of organs and tissue for transplantation or medical research.[10] Consequently, such a donation made by a medical examiner without consent from the next of kin might be successfully challenged. Although Virginia [11] has recently joined California [12] and Hawaii [13] in extending medical-examiner authority in the transplant setting, strong criticisms have been expressed in Virginia, and it is far from clear that the climate for this extension is favorable elsewhere. As a gift statute, the Commissioners properly limited the Uniform Anatomical Gift Act to the voluntary donation of tissue.[2] The medical-examiner question calls for separate study. The Act specifies that its provisions are subject to the autopsy laws of each state. Thus, it respects existing medical-examiner powers and duties and recognizes the need for tissue for examination in certain specified circumstances (Section 7[d]).

In 1968 donation statutes based on the second tentative draft of the Act were passed in Kansas, Maryland, Louisiana and California. It is virtually unprecedented for a state to enact a uniform act before it is finally approved by the National Conference of Commissioners on Uniform State Laws. In addition, the following states have already passed new donation legislation based on the Act this year: Arkansas, North Carolina, Oklahoma, Wyoming, Idaho and North Dakota. This response demonstrates the great need for and acceptability of this reform legislation.

At a meeting of members of the medical and scientific community held on Septem-

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ber 30, 1968, sponsored by the National Research Council, there was enthusiastic support for the Act by the representatives of the 35 states who attended. The Act has also received the support of numerous medical groups, including the American Medical Association, the American Heart Association, the National Kidney Foundation, the Eye Banks Association of America, the National Pituitary Agency, the Committee on Tissue Transplantation of the National Research Council,[14] the Fifth Bethesda Conference sponsored by the American College of Cardiology,[15] the Public Affairs Committee of the Federation of American Societies for Experimental Biology and others.[16] In the light of such broad-based legal and medical endorsement, and in the absence of any sizable opposition, prospects for widespread enactment of the Uniform Anatomical Gift Act are excellent.

CURRENT MEDICAL AND RELATED IMPEDIMENTS TO WIDESPREAD TRANSPLANTATION

Legal reform in this area must be carried out with an awareness of developments in medicine and related fields that determine the availability of vital organs for all who could possibly benefit from them. A central issue in much of the discussion has been the question of when death occurs. There is a clear need to revise criteria for a definition of death in the light of the widespread availability of methods to support cardiac and respiratory function artificially.

Criteria based on neurologic findings measured clinically and by the electroencephalogram have been proposed by several groups. An ad hoc committee of the Harvard Medical School to examine the definition of brain death has recently issued a definition of irreversible coma. The following criteria were proposed as defining a permanently non-functioning brain: unreceptivity and unresponsiveness to externally applied stimuli and inner need; no spontaneous muscular movement or spontaneous breathing; no reflexes; flat electroencephalogram (all repeated at least 24 hours later with no change).[17] The presence of hypothermia or central-nervous-system depressants invalidates these criteria.

Acceptance of declaration of death based on such neurologic criteria will improve the ability of physicians to maintain whole-organ perfusion after death. As was stated at the Fifth Bethesda Conference of the American College of Cardiology, such a declaration "recognizes that a person can, by a physician with sound medical judgment and with moral and ethical justification, be declared dead while the parenchymatous cellular functions of many organs continue and while the heart may maintain a pulsatile flow."[15]

In addition, improved whole-organ preservation will enable many organs that are now lost through rapid degeneration to be used for transplantation. Adequate tissue matching and donor and recipient selection are also important determinants to successful transplantation. Proper matching requires a large regional or even nationwide pool of recipients.[18] The question of the logistics needed to effectuate such a national program are formidable. Furthermore, the problems of providing enough trained transplant teams and facilities and of meeting the cost of this very expensive mode of therapy prevents the widespread use of this therapeutic method. Even a plethora of cadaver kidneys and hearts will not solve these many difficult problems.

Increased governmental financial support for all aspects of transplantation will come only after successful competition with other important public needs. Decisions regarding overall priorities for public funds inevitably become involved in the political process and therefore are very responsive to public attitudes. Public attitudes regarding donation of organs for transplantation are favorable. A Gallup poll taken on January 17, 1968, stated that seven persons in every 10, or a projected 80,000,000 Americans, indicate they would be willing to have their heart or other vital organs donated to medical science after death.[19] This poll did not, however, seek the public opinion about bearing the extraordinarily large costs from the public treasury.

The above discussion demonstrates the many obstacles to the widespread application of organ transplantation. Any proposal for responsible legal reform in this area must take cognizance of these problems.

AN ALTERNATIVE PROPOSAL—TO ELIMINATE CONSENT

An alternative approach to streamlining consent procedures has been proposed by Dukeminier and Sanders,[20] who suggest that the principles of consent and voluntary donation should be discarded in favor of allowing tissue removed by a physician without his having to give notice to anyone. They propose that a surgeon should be allowed to remove cadaver organs "routinely . . . unless there were some objection entered before removal. The burden of action would be on the person who did not want the organs removed to enter his objection."[20] Under this system, the donor could object during life to the taking of his organs after death. The next of kin could also object to the use of a deceased's organs before removal, provided that the deceased did not specifically authorize donation.

The question, as they see it, is where the burden of action should rest: with the surgeon to obtain consent, or with the next of kin to object. They believe that only by shifting the burden to the next of kin will an adequate quantity of organs be obtained.

This argument is dubious for several reasons. The first is that, in the system proposed, the burden actually remains with the responsible surgeon to assure himself that no objection has been raised either by the deceased himself before death or by the next of kin after death. To absolve himself of this burden adequately would require an inquiry tantamount to obtaining consent itself.

Moreover, it is certain that there are some people who would object to tissue use on religious grounds (as recognized by Dukeminier and Sanders)[20] or because of other beliefs. Such people, if not immediately available at the time of death of a relative, might object strongly and vigorously after the fact. They could forcefully argue that, because they did not know of the demise of their next of kin, they could not exercise their authority to enter an objection to tissue removal. Any system based on this premise would need to include a method of registering objection in a manner to make this information readily available to the interested surgeon. Otherwise, grave constitutional questions, such as the abridgement of religious freedom or the denial of due process, could invalidate the system. Yet the authors describe no such mechanism for recording. To create a registry of objections that would be comprehensive enough to cover all situations would be considerably more cumbersome than the simplified consent procedures specified in the Uniform Anatomical Gift Act.

Dukeminier and Sanders[20] assert that the "bereaved survivors usually do not want to know what has happened to the body of the deceased in the hospital" and to ask a relative of someone who is about to die "for the kidneys may seem a ghoulish request." We submit that current medical practice strongly shows that this kind of request is usually not offensive when properly presented and the need sensitivity raised. Many people regard such a donation as an opportunity to look beyond their loss and to help someone who may be near death.[2] To obtain permission for the removal of an organ is hardly "ghoulish"—it shows respect for the wishes and rights of others involved. Not to be told of such a removal or to be informed only after the fact would be "ghoulish" indeed.

As further support for their argument of telling nothing to the next of kin, they cite an example of a detailed description of autopsy procedures or embalming technics as being the usual practice in obtaining permission for autopsy.[20] These authors confuse the obtaining of adequate "informed consent" for such procedures with a detailed technical explanation of them. One asks for an autopsy but does not describe the fine points of the procedure in intimate detail. Similarly, one asks for permission to remove an organ for transplantation without enumerating every nuance of surgical technic. Properly informed consent is admittedly difficult to define, but a discussion of it must be based on currently accepted medical practice.

Their only reference to the Uniform Anatomical Gift Act occurs in connection with the concept of a wallet-sized donation card, which they dismiss with the question: "Yet is not there something macabre about a society where people walk around with little cards saying they have donated their organs on death to so-and-so?"[20] It is impossible to reconcile such an assertion with current reality. As stated earlier, it has been estimated that seven out of 10 (or approximately 80,000,000) Americans would be willing to donate all or parts of their bodies for medical purposes. With attitudes of the public so clearly favorable to donation, it is difficult to justify taking the decision-making authority away from them.

In a subsequent letter to this *Journal*, Dukeminier and Sanders[21] equate long waiting lists for kidney transplants with defects in statutory law. As discussed above, there are many factors that determine the availability of kidneys or other vital organs for transplantation for all who could possibly benefit from them. To reason that because there are many who need a kidney transplant indicates that it is necessary to eliminate the principles of consent and voluntary donation, demonstrates a lack of appreciation for these other determinants.

They also suggest in the same letter that "experience with other donation statutes indicates that the prior-consent approach will not produce the number of organs needed for transplantation."[21] But experience with previous donation legislation has little to tell us about the potential success of the Uniform Act. Current legislation is admittedly inadequate and addresses itself to only a portion of the questions handled by the Act. The streamlined consent procedures designed for the next of kin, coupled with modern criteria for determining the moment of death, provide a framework for expeditious donation that did not exist before.

In contrast to the above proposal, the Uniform Anatomical Gift Act represents a balanced approach that recognizes the many and conflicting interests and concerns relevant to the transplant setting. The needs of medical science are not relegated to second place. Instead, responsible legal measures have been taken to encourage the successful progress of transplantation and thereby to save human life. Future advances in medical science will raise many issues to be considered by other disciplines. The challenge for the law will be, as it has been here, to respond in a manner that will permit legitimate accomplishments without compromising the sensitivities and rights of other affected parties.

FOOTNOTES

[1] Sadler, A. M., Jr., Sadler, B. L., and Stason, E. B. Uniform Anatomical Gift Act: model for reform. *J.A.M.A.* 206:2501–2506, 1968.

[2] Sadler, A. M., Jr., and Sadler, B. L. Transplantation and law: need for organized sensitivity. *Georgetown Law J.* 57:5–54, 1968.

[3] Stevenson, R. E., et al. Medical aspects of

tissue transplantation. In *Report to the Commitee on Tissue Transplantation of the National Academy of Sciences-National Research Council from the Ad Hoc Committee on Medical-Legal Problems*. Pp. 1–43, 1968. P. 3.

[4] Stason, E. B. Role of law in medical progress. *Law & Contemp. Prob.* 32:563–596, 1967.

[5] Stickel, D. L. Ethical and moral aspects of transplantation. *Monogr. in Surg. Sc.* 3:267–301, 1966.

[6] Mass. Gen. Laws. Ch. 113 § 7 (Supp. 1967).

[7] Zukoski, C. F. Personal communication.

[8] Tenn. Code Ann. §§ 32–601 (Supp. 1967).

[9] Stickel, D. L. Organ transplantation in medical and legal perspectives. *Law & Contemp. Prob.* 32:597–619, 1967.

[10] Stevenson et al.[3] Pp. 4–5.

[11] Va. Code Ann. §§ 19.1–46.1 (Add. Supp. 1968).

[12] Cal. Health & Safety Code Ann. § 7133 (West 1955).

[13] No. 188, § 2, 1967 Hawaii Sess. Laws 183, *amending* Hawaii Rev. Laws § 260–14 (1955).

[14] Stevenson et al.[3] P. 19.

[15] Moore, F. D., et al. Cardiac and other organ transplantation in setting of transplant science as national effort. *Am. J. Cardiol.* 22:896–912, 1968. (Also, *J.A.M.A.* 206:2489–2500, 1968).

[16] Curran, W. J. Law-Medicine notes: Uniform Anatomical Gift Act. *New Eng. J. Med.* 280:36, 1969.

[17] Definition of irreversible coma: report of Ad Hoc Committee of Harvard Medical School to Examine Definition of Brain Death. *J.A.M.A.* 205:337–340, 1968.

[18] Terasaki, P. I., Mickey, M. R., Singal, D. R., Mittal, K. M., and Patel, R. Serotyping for homotransplantation—XX. Selection of recipients for cadaver donor transplants. *New Eng. J. Med.* 279:1101–1103, 1968.

[19] *New York Times*, December 4, 1967. § A, p. 1.

[20] Dukeminier, J., Jr., and Sanders, D. Organ transplantation: proposal for routine salvaging of cadaver organs. *New Eng. J. Med.* 279:413–419, 1968.

[21] *Idem*. Salvage of cadaver organs. *New Eng. J. Med.* 279:1117, 1968.

SENATE JOINT RESOLUTION 157—INTRODUCTION OF A JOINT RESOLUTION ESTABLISHING A COMMISSION ON ORGANIZATIONAL REFORMS

Mr. FULBRIGHT. Mr. President, on May 22, 1968, I made a statement on the floor of the Senate in which I said that I believed that the time had come for a thorough, realistic, and objective examination of the operation, in the United States and abroad, of the Foreign Service, the Department of State, the Agency for International Development and the U.S. Information Agency. I suggested that such an examination should be conducted by a blue ribbon Presidential Commission composed of people who have had broad, relevant experience and whose only interest would be in seeing that the United States has the best possible organization to conduct its foreign relations. I introduced a joint resolution, subsequently entitled Senate Joint Resolution 173, which provided for the establishment of such a Commission to be composed of 12 members—two from the Senate, two from the House of Representatives, and eight to be appointed by the President. I said at the time that I did not intend to press the resolution to a vote because I did not believe that the appointment of such a Commission should be one of the last acts of an outgoing administration. I added that I believed that the appointment of such a commission should, however, be one of the first acts of a new administration.

Mr. President, I ask unanimous consent that the full text of the statement I made on May 22, 1968, be printed in the RECORD at the conclusion of my remarks.

The PRESIDING OFFICER. Without objection, it so ordered.

(See exhibit 1.)

Mr. FULBRIGHT. I would like to note that since making that statement a year and a half ago, I have noticed a number of articles in the press and in journals which lead me to believe that there may, in fact, be even greater need for the kind of study I proposed. Writing in the Nation on February 3 of this year, Smith Simpson, author of "Anatomy of the State Department," wrote:

> I have known the State Department and its Foreign Service for some forty years and never have I seen them in such a shambles.

Mr. Smith went on to observe:

> A part of the crisis which the diplomatic agency presents to Mr. Nixon arises from its astonishing failure to redefine diplomacy itself in up-to-date terms, so that it might have a clear idea of the kind of people it should be recruiting, the kinds of education and training it should be providing its officers, the criteria it should be following for assignments and promotions, the blend of policy, diplomacy and management it should be developing—all to effect a widespread improvement in our international performance . . .
>
> In such an "anti-organization" department, morale is deplorable. In forty years of observation, I have never known State Department morale to be good, but it is now the worst that I have ever seen it . . .
>
> Morale affects performance; so also do attitudes. They subtly penetrate and influence every view, every decision, every approach to a decision. They are the unspoken premises which cause men to assume they know things they do not know, understand situations they do not understand, are "managing crises" when they are only tinkering with them, disposing of problems when they are only postponing them to reappear in more aggravated form. . . .
>
> An extraordinary cynicism pervades the diplomatic establishment. Even its liberals found themselves welcoming the outcome of the Presidential election. "Nothing could possibly be worse," they said; "a change—any change—just might bring relief." They did not remember that this same hope was engendered in 1932, 1952 and 1960, and gave way to souring frustration. It is not merely change that is needed—it is reform: organizational reform, procedural reform, attitudinal reform, educational and training reform, conceptual reform. That is what confronts Mr. Nixon as he prepares for his seventh crisis.

In the spring 1969 issue of the Virginia Quarterly Review, Charles Maechling, in an article entitled "Our Foreign Affairs Establishment: The Need for Reform," said:

> The foreign affairs establishment cannot be streamlined or invigorated by half-measures confined to the State Department. Individual changes in the Department's organization, personnel system, training programs, and programming methods are going to yield only minimal and probably undiscernible results in terms of improved policy performance unless the Department's role is re-examined within the context of the whole foreign affairs field and especially the missions of other agencies—Defense, CIA, USIA, AID, and Treasury.

I am well aware of the fact that a group of "Young Turks" in the Foreign Service has been seeking to achieve reform from within the State Department. I gather that they feel somewhat frustrated in these efforts which does not surprise me for, as I said a year and a half ago:

> I am convinced that those in the executive branch departments and agencies concerned—either the top non-career level in these departments and agencies or the administrative specialists with vested interests in the results to whom such a task ends up being delegated—cannot alone institute the needed reforms.

I said then, and I still believe, that a view from the outside is also needed—a broad and objective view, unencumbered by political considerations or by the obligations that executive branch officers have toward the interests of the particular department or agency in which they serve.

In this connection, I noticed an article, on the front page of the New York Times on August 28, which reported that the "Young Turks" were "showing some impatience with the Nixon administration's pace on reforming the service." The article then went on to report, according to sources in the Foreign Service, that many junior and middle grade were dissatisfied with their lack of responsibility, with promotion policies and with the assignments which they received, and that there had been a large and increasing number of resignations from the Foreign Service.

I ask unanimous consent that the full text of the above article from the New York Times, the texts of the articles by Mr. Simpson and Mr. Maechling from which I have quoted, and the text of an article by William A. Bell which appeared in the Washington Monthly in July, entitled "The Cost of Cowardice: Silence in The Foreign Service," also be printed in the RECORD at the conclusion of my remarks.

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

(See exhibit 2.)

Mr. FULBRIGHT. Not only do outside observers and critics argue that there is acute need for organizational reform. Many in the Foreign Service share this view. I was struck by several remarks made by Idar Rimestad, Deputy Under Secretary of State for Administration since February 1967, at an appearance before the Committee on Foreign Relations earlier this session. The occasion for the hearing was the President's nomination of Mr. Rimestad to an ambassadorial position. But in the course of the hearing, while discussing Mr. Rimestad's previous service in the State Department's top administrative position, I asked him about the recommendations by the "Young Turks" in the Foreign Service. In response, among other things, he told the committee that under 20 percent of the personnel in our large Embassies are from the State Department and pointed

to one case in which that figure was 8 percent. The others are from other Government agencies. Mr. Rimestad went on to note that as the size of foreign missions are reduced, the State Department's role is further diminished and that over the years the State Department has "lost a great deal of momentum in the foreign affairs area." He concluded:

Something is in order, whether it is—as you suggested—a Plowden report . . . to take a look at our foreign establishment to see where this direction should come from.

The point made by Mr. Rimestad provides another, and I believe most important, argument in favor of an examination of the kind I have proposed.

Thus, for the reasons set forth in my statement of May 22, 1968, and in my statement today, I hereby introduce a joint resolution, identical to Senate Joint Resolution 173, 90th Congress, second session, which would establish a Commission on Organizational Reforms in the Department of State, the Agency for International Development, and the United States Information Agency. I intend to urge the Committee on Foreign Relations to adopt this resolution, and I ask unanimous consent that the text of the joint resolution be printed in the RECORD at this point.

The PRESIDING OFFICER. The joint resolution will be received and appropriately referred; and, without objection, the text of the joint resolution will be printed in the RECORD.

The joint resolution (S.J. Res. 157), to establish a Commission on Organizational Reforms in the Department of State, the Agency for International Development, and the U.S. Information Agency, introduced by Mr. FULBRIGHT, was received, read twice by its title, referred to the Committee on Foreign Relations, and ordered to be printed in the RECORD, as follows:

S.J. RES. 157

Whereas there is an obvious need to insure that the United States conducts all aspects of its foreign relations in the most effective possible manner; and

Whereas toward this end, it is appropriate to provide for an independent study of the present operation and organization of the Department of State, including the Foreign Service, the Agency for International Development, and the United States Information Agency with a view to determining and proposing needed institutional reforms: Therefore be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That there is hereby created a commission to be known as the Commission on Organizational Reforms in the Department of State, the Agency for International Development, and the United States Information Agency (hereinafter referred to as the "Commission"). It shall be the duty of the Commission to make a comprehensive study in the United States and abroad and to report to the President and to the Congress on needed organizational reforms in the Department of State, including the Foreign Service, the Agency for International Development, and the United States Information Agency, with a view to determining the most efficient and effective means for the administration and operation of the United States programs and activities in the field of foreign relations.

SEC. 2. The Commission shall consist of twelve members, as follows:

(1) Two members of the Commission, to be appointed by the President of the Senate, who shall be Members of the Senate, of whom at least one shall be a member of the Committee on Foreign Relations.

(2) Two members of the Commission, to be appointed by the Speaker of the House of Representatives, who shall be Members of the House of Representatives, of whom at least one shall be a member of the Committee on Foreign Affairs.

(3) Eight members of the Commission, to be appointed by the President, who shall not be individuals presently serving in any capacity in any branch of the Federal Government other than in an advisory capacity.

SEC. 3. The President shall also appoint the Chairman of the Commission from among the members he appoints to the Commission. The Commission shall elect a Vice Chairman from among its members.

SEC. 4. No member of the Commission shall receive compensation for his service on the Commission, but each shall be reimbursed for his travel, subsistence, and other necessary expenses incurred in carrying out his duties as a member of the Commission.

SEC. 5. (a) The Commission shall have power to appoint and fix the compensation of such personnel as it deems advisable, in accordance with the provisions of title 5, United States Code, governing appointments in the competitive service, and chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates.

(b) The Commission may procure temporary and intermittent services to the same extent as is authorized for the departments by section 3109 of title 5, United States Code, but at rates not to exceed $100 a day for individuals.

SEC. 6. (a) The Commission shall conduct its study in the United States and abroad and shall report to the President and to the Congress not later than eighteen months after its appointment upon the results of its study, together with such recommendations as it may deem advisable.

(b) Upon the submission of its report under subsection (a) of this section, the Commission shall cease to exist.

SEC. 7. The Commission is authorized to secure directly from any executive department, bureau, agency, board, commission, office, independent establishment, or instrumentality information, suggestions, estimates, and statistics for the purpose of this Commission, office, establishment, or instrumentality and shall furnish such information, suggestions, estimates and statistics directly to the Commission, upon request made by the Chairman or Vice Chairman.

SEC. 8. There is authorized to be appropriated not to exceed $500,000 to carry out this joint resolution.

EXHIBIT 1

SENATE JOINT RESOLUTION 173—INTRODUCTION OF JOINT RESOLUTION RELATING TO CONDUCTING FOREIGN RELATIONS IN THE 1970'S

Mr. FULBRIGHT. Mr. President—

"Foreign policy will be dynamic or inert, steadfast or aimless, in proportion to the character and unity of those who serve it."

So began the report of the Secretary of State's Public Committee on Personnel published in June 1954. The report, entitled "Toward a Stronger Foreign Service"[1] but known popularly as the Wriston report, after the name of the chairman of the committee, continued by saying several paragraphs later:

"The internal morale of a Government institution and public confidence in that institution are inseparable parts of an organic process. The one replenishes or depletes the other."

Footnotes at end of article.

How is the internal morale and unity of those who serve our foreign policy today—14 years after the Wriston report, 22 years after the Foreign Service Act of 1946, which revised and modernized the Foreign Service, and 44 years after the Rogers Act of 1924, which first established a permanent career Foreign Service? Is the Foreign Service vigorous, inventive, and unified, willing and able to produce a dynamic and steadfast foreign policy? Do the men and women in the Department of State meet the formula of Lord Strang, former Permanent Under Secretary of State in the British Foreign Office, for Foreign Office effectiveness which is to be "on their toes and happy to be on their toes"?[2] And what of those in the other Government agencies who also serve our foreign policy?

From everything I have heard and read and seen, I have regretfully concluded that the internal morale in the Foreign Service and the Department of State, as well as in the Agency for International Development and in the U.S. Information Agency, is poor. As the Wriston report has pointed out, it follows that there is, or will soon be, less public confidence in these institutions. For a country as rich in human resources as the United States, facing the enormous problems in the field of foreign relations that this country faces, I suggest that this is not only an undesirable but an intolerable state of affairs.

On what do I base my contention that morale is low and that the effectiveness of the institutions involved is therefore impaired? Proof is readily available not only in what the members of the institutions themselves say privately but also in what they say publicly. For example, the February issue of the Foreign Service Journal contained an article entitled "Is the Foreign Service Losing Its Best Young Officers?" Summarizing the results of a survey of recently resigned junior officers, the article observed that the typical resignee:

". . . leaves the service primarily because he feels that his work has not been sufficiently challenging and he has seen little to reassure him regarding his future prospects . . . he feels that his present job provides him with greater challenge than he would have had had he remained in the Foreign Service."

A tabulation in the article, showing the reasons these officers left the Foreign Service, indicates that the principal factors were dissatisfaction with the personnel system, a lack of anticipated challenge, dim prospects for responsibility and general frustration with the bureaucracy. The least important reasons, mentioned in only a few cases and never as a primary reason, were low pay, dissatisfaction with supervisors and a slow rate of promotion.

Undoubtedly this is the sort of feeling that led a Foreign Service association "spokesman" to tell a New York Times reporter last September that the election of a write-in ticket to control of the association "reflected a general mood of grievance and concern, a sense of frustration and malaise about the state of morale at the State Department and among career officers at the Agency for International Development and the U.S. Information Agency."[3] Even Under Secretary of State Katzenbach, whose interest in the problems of the Foreign Service has been commendable and whose influence has been salutary, has referred, in a public speech, to some of the concern and frustration in the Foreign Service, the kind of acknowledgment of personnel problems that rarely comes from the higher reaches of any Government department. In addressing the Foreign Service Day Conference at the Department of State on November 2, 1967, Mr. Katzenbach said that able younger men in the Foreign Service "complain that their talents are underutilized," and the Under Secretary went on to admit that, while such complaints might be exaggerated "the un-

derutilization of a talented body of men is paradoxical, harmful, and even tragic."

One of the most distinguished alumni of the Foreign Service, when asked recently on a national television program whether he would advise a young man to go into the Foreign Service today, replied:

If he was ambitious, if he wanted to get ahead and if it was going to cause him pain if anyone got promoted ahead of him, I would tell him not to go into it. If he wants to live abroad, keep his eyes open and broaden his horizons intellectually then I would say go right ahead.

That distinguished alumnus was Ambassador George F. Kennan who was saying,[4] it seemed to me, that a young man might serve his own limited short-range interests in the Foreign Service but that his prospects for making a useful contribution, as the institution is now organized, were dim.

Ambassador Kennan is not alone in his views. In a recent letter to the editor of the Foreign Service Journal, another distinguished Foreign Service alumnus, Ambassador Charles W. Yost, wrote that his own experience with many promising young officers who had either resigned or "dispiritedly accommodated themselves" confirmed that these young officers in the Foreign Service often felt that they faced a lack of challenge and an unsatisfactory personnel system.[5] Ambassador Yost added that there was no reason why a personnel system "should be, or should seem, bureaucratic, unresponsive, and unimaginative." Ambassador Yost concluded his letter by saying:

"It would be a very great tragedy if the Foreign Service, just when the country needs it most and when it offers in fact the most brilliant opportunities, should be eroded at the base through failure to take advantage of the zeal, ambition and expectations of its best qualified and best trained young officers."

I am reasonably confident that these comments could be made just as aptly for young officers in the Agency for International Development and the U.S. Information Agency.

Bureaucracies have a tendency to grow, as we all know. In fact, a recent program in the Foreign Service to reduce the size of embassies that had grown unreasonably large was nicknamed "Operation Topsy," a name that strikes me as whimsically accurate. Someone brought to my attention a recent article in the London Daily Telegraph magazine by the renowned C. Northcote Parkinson pointing out that in the period from 1914 to 1967, while the total number of vessels in commission in the British navy fell from 542 to 114, and the number of officers and men in the Royal Navy from 125,000 to 84,000, the number of Admiralty officials and clerical staff rose from 4,366 to 33,574.[6] And while Britain's colonies almost disappeared between 1935 and 1954, in that period the Colonial Office grew from 372 to 1,661 employees.

I suspect, again on the basis of what I have heard from those in the Department of State as well as what I have read, that administrative proliferation has also reached a rather acute stage in our foreign affairs agencies and that too many people are kept busy reading unnecessary reports written by too many other people who have nothing else to do. If this were not so, the recent decision to reduce the size of all embassies overseas in order to reduce our balance-of-payments deficits would not have been made. Surely, we could not afford to cut any essential activities abroad any more than we could not afford not to cut unessential activities.

In "Farewell to Foggy Bottom," Ambassador Ellis Briggs wrote in 1964:

"Foreign Affairs would prosper if the 1960's could become known as the decade in which the American Foreign Service was not reorganized."[7]

Ambassador Briggs has had his wish in some ways and has not had it in others because the Foreign Service has been reorganized—not on a grand scale but piecemeal—with the results that those observers and participants I have quoted have described. And these piecemeal reorganizations have also taken place in the Agency for International Development and in the U.S. Information Agency. But the 1960's are almost over. The question now is what should the Foreign Service, and the other foreign affairs agencies, be like in the 1970's?

I believe that the time has come for a thorough, realistic, and objective examination of the operation in the United States and abroad of the Foreign Service, the Department of State, the Agency for International Development and the U.S. Information Agency—the principal agencies which conduct this Nation's foreign relations at home and abroad. In October 1966 I wrote the President and suggested the appointment of a blue-ribbon Presidential Commission to perform this function and to suggest reforms that should be made, a commission to be composed of people who have had broad, relevant experience and whose only interest would be in seeing that the United States has the best possible organization to conduct its foreign relations. The executive branch, while not denying my assertions that fundamental and far-reaching changes were needed in the Department of State and other agencies with important responsibilities in the field of foreign affairs, indicated a belief that the needed reforms could be instituted more effectively without outside assistance by the top noncareer level of the Department of State. Two years have now passed and, despite the best efforts of the top noncareer level of the State Department, I do not think that the situation has improved.

It has been argued that such commissions as the one I proposed have been appointed several times in the past and that there is thus no need to repeat the experience. I would disagree. The Hoover Commission examined the entire organization of the Government, including the Department of State, but this examination was conducted over 20 years ago and is now out of date. The so-called Wriston Committee, chaired by President Wriston of Brown University, was appointed by the Secretary of State in 1954. Its deliberations took only 2 months, and its members did not inspect operations in the field. It issued a relatively brief report whose principal recommendation was to consolidate the Department of State and Foreign Service personnel systems—a consolidation which has been gradually unraveling ever since.

The most recent attempt in this field was by a Committee on Foreign Affairs Personnel established late in 1961 under the auspices of the Carnegie Endowment for International Peace and headed by former Secretary of State Christian Herter. Its deliberation appeared to be thorough. It devoted a year to its task, its members visited 32 posts abroad, and it took formal evidence from 18 witnesses. It issued a report with 43 recommendations.[8]

Many of the Herter Committee's recommendations were, however, so general that they were almost truisms. For example, one recommendation was that the Department's leadership capabilities should be strengthened, which is certainly a more desirable goal than weakened leadership. Another was that the State Department, USIA, and AID should "tap more systematically the most promising sources of highly qualified candidates," which, again, is certainly preferable to the unsystematic recruitment of less well qualified candidates. Other recommendations of the Herter Committee were ignored. The committee's second recommendation, for example, was that a position of Executive Under Secretary of State be established. Still other recommendations were contradicted subsequently by Departmental decisions—the fate, for example, of the committee's recommendation 27 that "selection out for time in class should be eliminated"—or have had to be abandoned because the Congress, for one reason or another, has not been willing to pass the necessary legislation.

The United States is, of course, not alone in facing the problem of how best to organize the conduct of foreign relations. Six years ago, the British Government decided to conduct a thorough review of the purpose, structure, and operation of its foreign affairs establishment.

I am impressed by the British Government's approach in this case. The Prime Minister appointed a distinguished "Committee on Representational Services Overseas" headed by Lord Plowden. I should emphasize that the committee was appointed by the Prime Minister, not by the Secretary of State, as was the Wriston Committee, or under the auspices of a private foundation, as was the Herter Committee. The members of the committee included two members of the House of Commons, one Labor Party member and one Conservative, in contrast to the Wriston Committee and the Herter Committee, neither of which included members of the Congress. The Plowden Committee spent a year and a half in its task, visited 42 posts abroad, took formal evidence from 75 witnesses and issued a 176-page report with 52 recommendations.[9]

How has the Plowden Committee report of 1964 fared compared to the Herter Committee of 1962? According to John E. Harr, a Department of State official who, incidentally, had served on the staff of the Herter Committee, while there has been "very slow progress" in implementing the Herter report, the Plowden report was "implemented almost in its entirety, and needed action was taken swiftly and decisively."[10] Mr. Harr termed the report an "overall success" and said that, in the opinion of those in the Foreign Office whom he had interviewed, the amalgamation of the Foreign Service, Commonwealth Relations Service and Trade Commission Service into one diplomatic service, as recommended in the Plowden report, "has indeed given British overseas representation a much needed shot in the arm." He concluded that the British appear to be "moving ahead very progressively" with their Diplomatic Service's administrative problems.

I have felt for several years that while the British do not have the answer to every problem, they may well have the answer to the one I am discussing today. I am convinced that the executive branch departments and agencies concerned—either the top noncareer level of these departments and agencies or the administrative specialists with vested interests in the results to whom such a task ends up being delegated—cannot alone institute the needed reforms. A view from the outside is also needed—a broad and objective view, unencumbered by political considerations or by the obligations that executive branch officers have toward the interests of the particular department or agency in which they serve.

The United States has many distinguished citizens who have served in high positions in the Government, here and abroad, and in the private sector as well. We should put the best available minds among them to work on this problem. To suggest just one example of such a man, I would point to the distinguished career of Douglas Dillon who has served in both Republican and Democratic administrations, in the State Department and in an embassy abroad, in the Treasury Department and in the private sector as well. There are many other men whose experience, while perhaps not as

Footnotes at end of article.

broad, would enable them to bring knowledge and perspective to the work of such a commission which could draw its staff not only from various Government departments and agencies but from foundations and universities, and also from corporations, banks and management consulting firms with large foreign operations of their own.

I am therefore submitting today a joint congressional resolution providing for the establishment of such commission to be composed of 12 members—two from the Senate, two from the House of Representatives and eight to be appointed by the President. The joint resolution stipulates that the members appointed by the President should not, at the time of their appointment, be serving in any governmental position other than in an advisory capacity.

I do not intend to press this joint resolution to a vote at this time because I do not believe that the appointment of such a commission should be one of the last acts of a retiring administration. But I do believe that the appointment of such a commission should be one of the first acts of a new administration. I am introducing the joint resolution today so that the candidates for the office of the Presidency, and Members of the House and the Senate, will have time to think about it. I will introduce the joint resolution again at the beginning of the next Congress and I will then do my utmost to achieve its adoption.

FOOTNOTES

[1] "Toward a Stronger Foreign Service," Department of State Publication 5458, released June, 1954.

[2] Lord Strang, *The Diplomatic Career* (London, Andre Deutsch, 1962).

[3] "Diplomats' Group Elects Activists," *New York Times*, September 29, 1967.

[4] On "Meet the Press," November 5, 1967.

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[7] Ellis Briggs, *Farewell to Foggy Bottom*, (New York: David McKay Company, Inc., 1964).

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[9] "Report of the Committee on Representational Services Over-Seas Appointed by the Prime Minister Under the Chairmanship of Lord Plowden 1962–63," published by Her Majesty's Stationery Office, London, 1964.

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[From the New York Times, Aug. 27, 1969]

EXHIBIT 2

GROUP IN FOREIGN SERVICE SEEKS TO BARGAIN ON PERSONNEL AFFAIRS

(By Richard Halloran)

WASHINGTON, August 27.—A group of "Young Turk" Foreign Service officers, showing some impatience with the Nixon Administration's pace on reforming the service, are planning to ask the State Department to recognize their professional association as the exclusive agent with which the department would bargain on a wide range of personnel matters.

Sources close to the group said they wanted the department to recognize the Foreign Service Association, a nonofficial organization, as the sole bargaining agent and to sign a contract giving the association this authority.

Although an Executive order permits Government employees to form such bargaining units, one source called the proposal "revolutionary" for the usually circumspect Foreign Service.

Leaders of the group are scheduled to meet with the Under Secretary of State, Elliot L. Richardson, tomorrow to discuss the union proposal and other dissatisfactions among Foreign Service officers. Mr. Richardson is responsible for the administration of the Foreign Service.

The delegation will be led by Lannon Walker, chairman of the Foreign Service Association. Mr. Walker declined to reveal details of the planned meeting and would say only that "we want to see where we stand" with the department's senior officers.

Other sources close to the group, however, indicated that they felt the Nixon Administration "has been around a while now and it's time to see some action." One source said that the impetus for reform must come from the Foreign Service itself, that "it's time we took a good hard look at ourselves."

Various task forces, the sources said, have been working on position papers to use as talking points with the top management.

Some of the Foreign Service officers said they believed that Mr. Richardson also thinks the time has come for action.

A member of the Under Secretary's staff said that Mr. Richardson feels reform of the Foreign Service to be among his major responsibilities but that each recommendation should be considered on its merits. The source said that Mr. Richardson had met with the association leaders several times since he took office and thought it important to keep the lines of communication with them open.

The dissensions within the Foreign Service began long before the Nixon Administration took office. The sources said that many junior and middle-range officers were dissatisfied with their lack of responsibility, with promotion policies and with the assignments they receive.

These sources pointed to the large and increasing numbers of resignations from the Foreign Service. During the fiscal year that ended on June 30, about 270 officers resigned while only about 60 new appointments were made. The number of Foreign Service officers has dropped from 3,489 to 3,273, as of July 1.

Some sources expressed the fear that the service would gradually drop to about 2,500 officers. They said the Nixon Administration must make up its mind whether it wants to have a career, professional service or "see the whole thing go down the drain."

The sources were almost unanimous in saying that they were encouraged during the early days of the new Administration by the attitude and by the initial steps taken to reform the Foreign Service.

But they indicated that dissatisfaction had returned recently due to the 10 per cent cutbacks ordered in personnel both in Washington and overseas.

The sources said that many professionals were encouraged when Mr. Richardson issued a memorandum on May 2 committing the Administration to "a thorough re-examination of the foreign affairs establishment with a view to a more effective use of the unique human forces found there."

Some, however, charged that the new Administration had instituted criteria for promotion that were unacceptable. One such is the stipulation that no specialist could be promoted beyond, FSO–3, an upper middle grade, unless he had exceptional ability.

The sources complained that the definition of specialist was not made clear and that, moreover, many people in the increasingly complicated profession of diplomacy are required to become specialists in a country, an area of a particular field such as economics.

[From the Nation, Feb. 3, 1969]

NIXON'S SEVENTH CRISIS: DIPLOMATS IN DISARRAY

(By Smith Simpson)

NOTE.—Mr. Simpson, a retired Foreign Service officer with twenty years' experience in and around the diplomatic Establishment, is the author of Anatomy of the State Department (Houghton Mifflin). He is also editor of the recent issue, "Resources and Needs of American Diplomacy," of The Annals, American Academy of Political and Social Science.

It seems that President Nixon did not relish as Secretary of State a man of great experience and skill in foreign affairs, one familiar with the State Department, the federal foreign affairs community, our foreign policies and the navigational skills which keep those policies afloat. There are such men in his party, some of them part of the Atlantic seaboard reservoir so often tapped for foreign affairs and defense appointments. But, for the first time in years, a President-elect shied away from the Eastern establishment. The indications are that Mr. Nixon did not even seek the advice of the Lovetts, McCloys, Dillons, et al.

Plainly, also, he had no inclination to resort to older precedent and appoint one of those who had challenged him for his party's nomination. "Forward together" is for national consumption, not for party politics, at least as far as foreign affairs are concerned. Instead of pursuing precedent, Mr. Nixon did something quite novel—novel, anyway, since 1925, when Calvin Coolidge appointed Frank Billings Kellogg as head of the diplomatic bureaucracy. This suggests that the slogan in foreign affairs is to be "Keep Cool with Nixon."

But another possible meaning to the appointment of William P. Rogers seems to have escaped the commentators. It is well known that Mr. Nixon has turned to this skillful lawyer during three of the six major crises which he says have beset his political career. By calling upon Rogers now for this particular position, does Mr. Nixon suggest that the diplomatic establishment has begun to loom in his mind as a seventh crisis?

Well it might. I have known the State Department and its Foreign Service for some forty years and never have I seen them in such a shambles. Policy planning in the State Department is still of a scatter-shot variety and diplomatic planning is nonexistent. There is no overall management, and therefore operations are not tied together, gaps are not filled, lapses are not anticipated, improvements are not systematically pressed. Even promotions, which should be one of the simpler operations, at least from the numerical standpoint, have been chaotic and without reference to need. Education and training are scandalously neglected, procedures fritter away experience, officers are frustrated rather than developed by conditions of service. Responsibilities, especially in the lower ranks, are vague and unchallenging. There is, in a word, no systematic control; only endless improvisation in administration, endless battling with momentary need, endless reaction to events—as in our diplomacy itself—rather than good, tight, dynamic leadership.

I hate to mention Vietnam in this connection, for it would seem to have been threshed down to the last grain, but several basic elements which it shares with everything else the Department does are being overlooked. One is the failure to bring to bear upon the Vietnamese experience the processes of research, analysis and planning. No systematic analysis of this involvement has been made by the State Department or any contractee of the Department. Hence, the Department has been, and still is, unable to deal profoundly with the problem of intervention, isolating the issues it presents or generalizing from the breakthroughs of technique and the constructive results which here and there ingenious diplomatic, military and aid officers have achieved. Further, there has been no attempt to systematize the errors of this venture for the instruction of future policy steerers and diplomatic pilots. From this failure, we risk not only losing in our negotiations the few precious

accomplishments of intervention but of repeating our mistakes in the future. That future, as Thailand and Laos are trying to whisper in our ear, may come sooner than we think. If there is one way to insure a continuation of blunders in Southeast Asia, with their corroding effects on America's world position, this is it.

The *Pueblo* affair is another example of the State Department's chronic inability to subject its diplomacy to any kind of rigorous analysis. No methodical attention has ever been given to this type of spy operation, great though its impact is upon our diplomacy. This neglect led to the U–2 imbroglio in 1960; it will lead to others. The disjointed diplomatic agency has simply not prepared itself to cope with military and intelligence operations which affect the nation's general international efforts. Of course, diplomats would first have to be educated and trained in this area, and one of the more obscure but melancholy aspects of the U–2, Bay of Pigs and *Pueblo* affairs is that our diplomatic officers are not adequately prepared to run any phase of a modern diplomatic operation.

A part of the crisis which the diplomatic agency presents to Mr. Nixon arises from its astonishing failure to redefine diplomacy itself in up-to-date terms, so that it might have a clear idea of the kind of people it should be recruiting, the kinds of education and training it should be providing its officers, the criteria it should be following for assignments and promotions, the blend of policy, diplomacy and management it should be developing—all to effect a widespread improvement in our international performance.

Good management would encourage a contagion of know-how from the better-run to the sloppy offices, thus stimulating and bolstering the Department in areas where it is weakest. But lack of management isolates office from office, bureau from bureau. There is no means, for example, whereby the concepts and techniques of analysis and management employed by Covey T. Oliver to improve performance in Latin American relations can be transmitted to other areas. Nor is there any assurance that the gains in that bureau will be passed on to and developed by the Assistant Secretary who replaces Mr. Oliver.

In such an "anti-organization" department, morale is deplorable. In forty years of observation, I have never known State Department morale to be good, but it is now the worse that I have ever seen it.

Morale affects performance; so also do attitudes. They subtly penetrate and influence every view, every decision, every approach to a decision. They are the unspoken premises which cause men to assume they know things they do not know, understand situations they do not understand, are "managing crises" when they are only tinkering with them, disposing of problems when they are only postponing them to reappear in more aggravated form. They give rise, or are themselves generated by, cliches and myths. If Mr. Nixon wants to avoid his seventh crisis he had better put someone in a managerial position in State who knows what the prevailing attitudes are, their sources and their cures. Otherwise, both he and his Secretary of State, however shrewd and competent they may be as politician and lawyer, will be stymied.

A Middle East crisis is rising to one of its periodic crests and Messrs. Nixon and Rogers would do well to recall what lack of State Department management did to President Johnson and Dean Rusk on the last crest. For four and a half months, as that 1966–67 storm quietly gathered, the position of Assistant Secretary of State for Near Eastern Affairs remained vacant. Career diplomat Raymond Hare resigned in November, 1966, and could not be induced to remain. He was worn out; furthermore, he had given a year's notice of his departure. But no replacement had been prepared. The only one available when the time came, it was said, was Lucius D. Battle, then serving as ambassador in Cairo. But there was no seasoned successor for Battle, and one had therefore to be improvised. At the urging of Under Secretary Katzenbach who, like Mr. Rogers, had served as Attorney General and was not exactly sophisticated in the deployment of diplomatic personnel, the Department appointed as ambassador Richard Nolte, an intelligent, academic type not likely to have much influence on Nasser. Nolte's remark at the Cairo airport remains a classic. Asked by a journalist what he thought of the Middle East crisis, he replied: "What crisis?" He soon found out.

Congressional penny-pinching aggravates the shortcomings of management and planning. Secretarial vacancies cannot be filled; officers become increasingly distracted by clerical duties. Supplies are so parsimoniously inventoried that even telephone directories must be scrounged. The library—unlike those at the CIA and the Pentagon—is so understaffed that it cannot meet requests for service, cannot acquire needed materials, cannot shelve promptly what it gets, cannot bind what it shelves. This is a particularly illuminating situation, for it not only exemplifies the anti-intellectual attitude of the administrators who parcel out the Department's appropriated funds but shows also how really false is a lot of the economizing. Unbound periodicals stray; they must be replaced; and back copies cost more than the original subscription numbers. Furthermore, when funds at last become available for binding, costs have increased. The State Department is a perfect demonstration, top to bottom, from people to paper clips, that penny-pinching always results in waste.

An extraordinary cynicism pervades the diplomatic establishment. Even its liberals found themselves welcoming the outcome of the Presidential election. "Nothing could possibly be worse," they said; "a change—any change—just might bring relief." They did not remember that this same hope was engendered in 1932, 1952 and 1960, and gave way to souring frustration. It is not merely change that is needed—it is reform; organizational reform, procedural reform, attitudinal reform, educational and training reform, conceptual reform. That is what confronts Mr. Nixon as he prepares for his seventh crisis.

That being so, one of Nixon's most extraordinary pre-inaugural decisions was his choice of Secretary of State. William P. Rogers is by all reports a good lawyer; he is a former Attorney General of the United States, a good negotiator in a domestic context, perhaps a good one in an international legal context, a staunch upholder of civil rights, an upright citizen, a loyal friend and counselor of the President, a cool man. These attributes are splendid, but how completely do they meet the varied diplomatic needs of the President? How sufficient are they for a successful Secretary of State?

Mr. Rogers is not totally without exposure to foreign affairs. He served in 1967 as the United States delegate on the UN's fourteennation *ad hoc* Committee on South West Africa. Seven years earlier he headed the American delegation to the independence ceremonies for Togo, and took the occasion to visit the Mali Federation (then Mali, Guinea and Senegal) and Nigeria. He met a number of leaders in those countries (most of whom have since been ousted or assassinated). During the Hungarian revolution of November, 1956, he accompanied Mr. Nixon to Austria to investigate the plight of refugees. Another brief mission took him abroad in 1955 as chief American delegate to a UN conference on prison conditions.

That's about it and it is not very much. No continuous professional experience; not even a sustained professional interest. No background whatever with respect to the State Department or the Foreign Service. No experience or known interest in any coordinating machinery in the government's foreign affairs.

This lack of central involvement or even interest in his new area of responsibility becomes the more painfully evident when one sets Mr. Rogers' training alongside the preparation of some of his Cabinet associates. The Secretary of Agriculture has had extensive experience with agricultural matters. The Secretary of Labor has been a student of labor problems for decades, much involved in labor-management contentions, thoughtfully coping for years with the very challenges he will face in his Cabinet assignment. Both Clifford M. Hardin in Agriculture and George Shultz in Labor are seasoned experts in their fields.

In fact, Mr. Hardin seems to qualify better for the position of Secretary of State than does Mr. Rogers. His extensive international experience began in 1947 when he was sent to Europe by Michigan State University to explore the broad question of what roles universities and farm groups might play in the Marshall Plan. The following year, in furtherance of Point Four, President Truman included him in groups to study development possibilities in South America. His interest in this area has continued, and has led to his appointment as a member of the Council on Higher Education of American Republics, which takes him to a different country of South America each year. In 1950, as dean of MSU's School of Agriculture, Hardin helped found the University of the Ryukyus on Okinawa, and that added the Pacific area to his international involvement. Four years later, he became chancellor of the University of Nebraska and introduced in that one-time bastion of Midwest isolationism a Latin American studies program and a Far Eastern Institute; he also continued Nebraska's sponsorship of the new Ataturk University in Turkey which, among other things, has brought to Lincoln more than 200 Turkish professors for advanced study. He has also been involved in educational development in sub-Sahara Africa. This depth of familiarity with the country's overseas objectives and commitments suggested to President Kennedy that Hardin be added to the Clay committee to study the entire foreign aid program. Finally, Hardin thinks in imaginative terms. One of his pet interests is promoting "a massive, long-range innovative effort unprecedented in human history" to solve the world's food and population problem.

Compared with all this, Mr. Rogers and the man he has picked as his deputy are rank amateurs. Neither can innovate because they do not know where to start. Neither can reform because they do not know what is wrong. Neither can appreciate the need for any "massive, long-range, innovative effort" to bring our diplomatic establishment up to date because they have yet to learn in what respects it is out of date. As they gradually become enlightened, they will tinker, as all unprepared innovators do. Moreover, they will by then have become overwhelmed by current crises.

Melvin Laird was smarter than Mr. Rogers. Realizing that as Secretary of Defense he would be handicapped by his managerial inexperience, he picked an expert manager for the second spot at the Pentagon. Rogers picked a man in his own image. Mr. Richardson is also a lawyer, also an Attorney General, also inexperienced in management, also a novice in foreign affairs, in the State Department, in the Foreign Service in diplomacy.

This, together with the fact that Laird has been deeply involved in the problems and issues of the Defense Department for fifteen years, with a fairly clear idea of how it operates—its weaknesses, its mistakes, its needs—means that Defense will continue to

have an edge over State. In the light of the last eight years, I need emphasize what this means in our foreign policies and diplomacy. There is little likelihood that a "massive, long-range, innovative effort" will tip the scales back to civilian initiative and control.

Both Mr. Rogers and Mr. Richardson may be expected to think that as lawyers and pragmatists they have much to offer American diplomacy. I wish this were so, but I fear that lawyers are poor managers and even slow to see the need for effective management. As a profession, they are given to the belief that all they need are the facts; by rigorous analysis, they can then deduce the answers. Furthermore, since they are trained to argue from briefs prepared by their staff, Mr. Rogers and Mr. Richardson will no doubt believe that they can satisfactorily counsel the President and Congress, as well as the public and officials of other governments, from the "briefs" provided by a State Department staff. If so, they are naive.

"Facts" are hard to come by in foreign affairs. Information is elusively concealed in the manner of its presentation. It is subtly permeated with the drafters' personal impressions, interpretations, hunches. A formidable husk of subjectivity surrounds every "fact." The greatest bulk of our dossiers on other peoples and their government leaders, their cultures and their needs, is comprised of what we *think* we know, and that is precisely what has bedeviled the government's handling of Vietnam. The "information" and calculations available in Washington have been treated by the Secretary of State and other Presidential advisers as reliable "facts"—and we have strayed deeper and deeper into a swamp of conjecture. Because of the man he has selected as Secretary of State and the deputy Mr. Rogers has picked for himself, this can happen to Mr. Nixon in countless situations.

As for pragmatism, we have about come to the end of that road. Within limits, it is a good approach, but relying on it almost exclusively, we have exhausted its possibilities, and our continuing faith in it is leading us into a performance of diminishing returns. Faced with the necessity to synthesize foreign and domestic resources and policies, we are required to make a more fundamental assessment of foreign affairs than we have so far attempted. For this, some philosophy is needed—something akin to the careful, systematic, basic thinking that went into the Declaration of Independence and the Constitution. And it requires, as those statements of policy and principle did not, a consideration of world responsibilities. Who is to lead in this "massive, long-range, innovative" effort?

Perhaps, someone may suggest, the number-three man in the Department, he being a career diplomat. But he also is a pragmatist. A smart operator, a man of keen insight into the reactions of foreigners, Alexis Johnson has never acquired any reputation as a thinker, a planner or a manager. And as he has shown throughout the Vietnam years—during much of which he served as a political adviser to the Secretary—he is a follower, not an innovator.

If none of these three men has what it takes to reform the Department, the situation is not yet entirely hopeless. Six other strategic positions remain to be filled: Deputy Under Secretary for Administration, Deputy Assistant Secretary for Organization and Management, Deputy Assistant Secretary for Personnel, Director General of the Foreign Service, Director of the Foreign Service Institute and Deputy Assistant Secretary of Operations.

If Mr. Rogers can be as smart as Mr. Laird, he can still bail himself out of his limitations and, by the men he selects for these positions, spare the President another major crisis. To do this he must clearly perceive three things: the necessity for superior management of the diplomatic establishment; the requirement that managers be familiar not only with management concepts but also with foreign policy and diplomacy; and the need to delegate adequate managerial powers to such men.

These six officers of the Department must create a program of management (which means, in effect, a program of reform, since the State Department now totally lacks management), and they must become a team to carry it out.

In view of Mr. Rogers' and his deputy's unfamiliarity with the State Department, the filling of this prescription is so difficult as to be unlikely. But there is a remote possibility that it will be done. Several studies of the State Department and Foreign Service of recent date are available for the launching of such a program. If the six are appointed from the career diplomatic service well in advance of vacancies, sent off to a suitable university to be trained in management concepts and techniques and to distill a program for the approval of Messrs. Nixon and Rogers, and if they are delegated adequate managerial powers, the job can be done. There is no other way to do it. If Mr. Nixon really sees the diplomatic establishment as threatening him with his seventh crisis—and whether he does or not, that, in my opinion, is the situation—he would do well to persuade his Secretary of State to take this course. It would be good politics—if Mr. Nixon gives any thought at all to 1972. And, of course, it would be a step toward insuring that there is still a nation to hold elections in 1972.

[From the Virginia Quarterly Review, Spring 1969]

Our Foreign Affairs Establishment: The Need for Reform

(By Charles Maechling, Jr.)

Before the Second World War it was customary to lay the blame for the more flagrant mistakes of American foreign policy on the President and the party in power. Until relatively recently, the major foreign policy problems that confronted each Administration were few in number and generally translatable into simply political issues. As late as the Roosevelt era it was almost unheard of for the press or Congress to ascribe mistakes of policy or deficiencies in program execution to advisers, department heads, or the machinery of government. In the absence of some glaring and well-publicized delinquency on the part of a subordinate, the President or Secretary of State carried the full burden of responsibility for the success or failure of their policies.

With the rise of big government, and the expansion of American involvement in world affairs at every level and in every quarter of the globe, these premises have undergone a subtle change. The President and the Secretary of State are now in some respects exculpated for policy mistakes and breakdowns in program execution. The sudden elevation in 1945 of an inexperienced President to the political leadership of the Western world, and the inability of even the most inveterate opponents of American wartime policy to hold him responsible for the Cold War and the postwar disappointments in Eastern Europe and the Far East, accentuated this trend. For a while, it became the fashion to arraign policy advisers, Cabinet officers, and even interpreters and part-time consultants, for policy failures or program breakdowns. More recently the tendency has been to avoid personalities and focus on the system.

Since the nineteen forties most of the criticism has centered on the Department of State. This is the price of the Department's pre-eminence and high visibility in the field of foreign affairs, and of a consequent propensity on the part of the public and other branches of the government to hold it responsible for unfavorable developments. Out of this chorus of annoyance and recrimination, four specific complaints stand out. It is alleged that too often the Department has proved unable to provide clear-cut definitions of the national interest in advance of specific crises situations. It has been charged that the Department often seems incapable of translating its generalized statements of national goals into specific action programs or into crisply phrased alternative courses from which decisions can be made. It is said that the Department hedges its political estimates to the point of inconclusiveness and obscurity. And, moving from policy formulation to policy execution, it has been alleged that the Department does not exercise effective leadership over the other departments and agencies of the foreign affairs establishment, with the result that programs either fail to reflect policy or are so deficient in direction and co-ordination that they unwittingly frustrate and vitiate it. Readers may remember the epithet, "bowl of jelly," attributed to President Kennedy by Arthur Schlesinger, as perhaps epitomizing these strictures.

The best evidence of the truth behind these charges is the way Presidents have consistently tinkered with the foreign affairs establishment in an effort to cure or at least mitigate some of its deficiencies. Depending on the temperament and philosophy of the incumbent, the problem has been viewed either in terms of personalities or in terms of organization. Broadly speaking, these efforts have fallen into four categories.

The first has been organizational change, some of it real, much of it fictitious. New jobs have been created and old ones abolished; presidential functions have been delegated and redelegated; the chain of command has been realigned; people and offices have been given new labels. Some of the changes have been motivated by the need to re-tailor functions to fit personalities; some of them to achieve *bona fide* changes of responsibility; and perhaps most to satisfy demands for a new look. In recent history, none has been fundamental enough to alter the basic structure and operation of the Department.

A second approach—really a variant of the first—has been to stiffen State's backbone by giving it more authority. This has usually taken the form of re-emphasizing the Department's "leadership" role within the Executive Branch. President Kennedy's letter of May, 1961, placing all United States Government activities in a foreign country under the supervision and control of the Ambassador, is perhaps the best known of these efforts. However, its practical effects have been minimal. The scope of the letter was necessarily limited to activities under the immediate control of the Ambassador and could not alter the legal effect of agency responsibilities in the slightest. A later directive of President Johnson (NSAM 341 of April, 1966), placing all overseas interdepartmental programs and activities under the supervision and control of the Secretary of State, was an attempt to extend this concept to Washintgon. As we shall see, it suffered from similar legal disabilities.

State has also experimented with the interdepartmental committee device to establish control over the overseas programs of other agencies. These have usually been set up under State chairmanship within the framework of a State regional bureau. Some recent examples are the Vietnam Task Force, the former Cuban Co-ordinating Committee, the now defunct Latin American and African Policy Committees, and the new Interdepartmental Regional Groups (IRGs). The effectiveness of these State-sponsored, interdepartmental committees has tended to mirror the willingness and capacity of the regional Assistant Secretaries to make use of them.

A third approach has involved efforts to make the Department, especially the Foreign Service, more responsive to changing conditions by improving its personnel. These have included broadening the selection base, changing promotion criteria, and trying to integrate civil service personnel from the Department and other agencies into the Foreign Service. Among the means employed to achieve these ends have been financial incentives for early retirement; proposed legislation to integrate autonomous agencies like AID and USIA into the Department; and opening—and later closing—the career ranks to lateral entry from the outside. Whether these reforms have actually improved our diplomatic performance is a matter of endless, and inconclusive, debate.

Finally should be mentioned recent attempts to introduce modern systems analysis and data processing techniques into the machinery. These have included personnel planning, country programming systems, and the so-called PPB method of relating objectives to costs and then projecting the latter for a five-year period. Most of these programs have been allowed to fall into desuetude before there was time to permit objective evaluation in terms of results.

Each of these approaches has been aimed at enhancing State's "leadership" of the foreign affairs establishment. Yet none seem to have had any real effect on the quality of American diplomacy. Persons brought in as "new brooms" have exhausted themselves in piecemeal attacks on the problem and futile efforts to cut through bureaucratic redtape. As soon as they depart, the jungle takes over.

II

The foreign affairs establishment cannot be streamlined or invigorated by half-measures confined to the State Department. Individual changes in the Department's organization, personnel system, training programs, and programming methods are going to yield only minimal and probably undiscernible results in terms of improved policy performance unless the Department's rôle is re-examined within the context of the whole foreign affairs field and especially the missions of other agencies—Defense, CIA, USIA, AID, and Treasury. Moreover, the effectiveness of the machinery must be measured in terms of the realities of contemporary international life—not in terms of traditional concepts of the diplomatic function dating back to the days when statecraft chiefly involved political relations between governments.

The task must begin with a realistic appraisal of the real power of the Secretary of State as compared with his mythical power. Ostensibly, the Secretary is the President's principal adviser on foreign affairs, and the Department of State, with its 25,000 employees overseas and in Washington, is his ancillary and supporting arm. The Secretary is also the prime executant of United States foreign policy—but only in the sense that he translates the President's policy decisions into instructions for Ambassadors and other United States representatives abroad, and acts as a conduit of communication between the United States and foreign governments. In addition, the Department exercises a policy advisory function for the rest of the government by furnishing other agencies engaged in overseas operations with what is termed political guidance. The Secretary and the Department do not, of course, make policy; that is the President's function.

In these capacities, the State Department's actual role has always been cloudy and cannot really be understood except in an historical context. The concept of a department of foreign affairs dates from an era when the relations between sovereign independent states were confined to a narrow range of political and economic matters, and were the exclusive province of the monarch or chief of state; the first foreign ministries were small bureaus of specialized clerks attached to the royal household who later expanded their functions to handle the routine concerns of foreign embassies and provide staff and clerical support for the King's Ambassadors. The narrow view held by many Foreign Service officers that the Department's functions should be confined to the conduct of diplomatic relations between heads of governments is therefore the *bona fide* legacy of an earlier age. A more pernicious part of the tradition is the conviction that all the manifold relations between states—economic, financial, strategic, technological, cultural—are unimportant until elevated to the level of political relations between governments.

This limited outlook is reinforced by the values built into the Foreign Service promotion system which put a premium on political reporting and the handling of intergovernmental communications. The Department abounds with political generalists parading a sham expertise in the specialities of other agencies—politico-military "experts" who have never worn a uniform, technological "experts" with no scientific background, and economic negotiators who are neither ex-bankers no ex-businessmen—whose careers depend on the pre-eminence of the political factor over other elements of the foreign affairs equation. In background and experience most of them are bureaucrats rather than diplomatists. They have lost the foreign area familiarity, language fluency, and cosmopolitan outlook of the traditional diplomat, without acquiring the assurance, versatility, and professional skill that goes with a sound professional or business background.

More important is that in recent years the Secretary of State's real authority has suffered serious dilution. The expansion of United States interests overseas, the proliferation of relations with allies and adversaries at every level, and the growth of United States overseas programs in support of these responsibilities and relationships have multiplied the voices entitled to give advice and orders on matters of foreign policy. The Secretary is now only one of several cabinet officers and agency heads carrying heavy responsibilities in the field of foreign affairs.

Thus, in the sphere of policy formulation, the Director of Central Intelligence, the Secretary of Defense, the Secretary of the Treasury, and the Chairman of the Joint Chiefs of Staff each make a contribution on specialized aspects of foreign policy that is often more essential to the decision process than the generalized political "input" of the Secretary of State. The effort of the Department to label all important matters political, on the ground that a synthesis of these different elements is required, or to reduce them to a political formulation simply because governments are involved, is a transparent artifice to retain control. It is also a dangerous one. No President can afford to have his analyses of vital problems distorted to gratify the jurisdictional vanity of one department, or to have vital information filtered through a sieve of inexpert generalists.

Even when a Secretary of State enjoys the complete confidence of the President and plays a leading role in policy formulation, his Department does not necessarily partake of his influence within the Executive Branch. Much depends on the person stature and influence of the other members of the Cabinet. Not that the heads of other Departments and Presidential appointees are inherently rivals of the Secretary of State or are out to undermine him. On the broad outlines of foreign policy, they usually take great pains to defer to him. But in matters of policy execution the Secretary's pre-eminence as the President's principal adviser on foreign affairs is very largely a fiction for the very good reason that policy execution is action far more than words. The verbal notification, however skillfully phrased, is only the official message.

Even the State Department's authentic diplomatic function of representing the United States in negotiations and conferences is now often a formality. When the main ingredients of an agenda are military, economic, financial, technological, or legal, the harassed generalists of the Department can usually contribute so little in the way of substance that they are hopelessly dependent on the experts of other departments. If they try to play a more active part, the consequences are likely to be disastrous: a career diplomat will frequently trade off important technical advantages, whose significance escapes him, in favor of some ephemeral political advantage.

The most striking example of the Department's limitations in policy execution, however, is its lack of control over the overseas programs and activities that are now the real instruments of policy execution.

Since the end of World War II, the deployment overseas of large United States land, sea, and air forces has been both a major instrument of policy implementation and a source of involvement in foreign internal affairs. Our military and economic assistance programs—now chiefly centered in the less developed countries—are also important arms of policy and sources of overseas involvement. Covert assistance programs and the use of modern electronic and satellite technology for intelligence collection have enmeshed the United States in an ominous web of subterranean relationships with foreign government personalities and political factions. Even the anodyne public information function of the United States Information Agency has been broadened to include a technical assistance function aimed at helping shaky governments to program political broadcasts for strengthening their ties with disaffected rural areas.

Few of these programs and activities are under the operational control of the State Department. All the important ones are the statutory responsibility of other powerful autonomous departments and agencies. Many are the subject of special and sometimes complex legislation. Appropriations for these programs and activities are often hedged about with special requirements and restrictions, some of them specifically designed to protect them from outside interference or control.

President Johnson's directive of April, 1966, already mentioned, ostensibly endowed the Secretary of State with responsibility for the overall direction, co-ordination, and supervision of interdepartmental programs and activities overseas. In fact, the directive was legally powerless to affect the program responsibilities of the departments and agencies concerned, each of which is acutely conscious of its unique mission and prerogatives. At least two other agencies—Defense and CIA—are fully the equals of State in power and influence, not only within the Executive Branch but on Capitol Hill; while AID, USIA, and the Disarmament Agency, although nominally part of State, are in fact semi-autonomous organizations, with separate budgets, personnel hierarchies, and top-level management by energetic, independently-minded political appointees.

In theory, the Department of State has the authority and prestige to synchonize these multifarious activities and programs and make them conform to policy. Every overseas program of the other departments and agencies is subject to the Department's political guidance. But this guidance (usually furnished at "bureau level") is often general to the point of abstraction. Its formulations are difficult to apply to concrete program situations. Often the guidance is susceptible to such a wide range of interpretations that it justifies the most aberrant departures in program execution.

All too often, the Department's solution to this embarrassing anomaly is a tacit ar-

rangement whereby acquiescence in the program decisions of other agencies is traded off for lip-service compliance with the Department's political guidance. This usually works until the moment when vital agency interests are engaged or when there are real differences of opinion on questions of policy implementation, at which time the compact tends to come apart. Since the Department cannot afford to endanger the Secretary's prestige by engaging his authority in every wrangle, the result is usually a disguised surrender, in which the program at issue is either redefined to bring it into conformity with policy, however it may diverge from or even vitiate that policy, or the policy is reformulated to provide room for wider divergencies.

The truth is that the growing complexity of the international environment renders not only the State Department but every other single agency of government incapable of coping with the full range of international problems. Today, these embrace every aspect of national life: internal social and economic considerations included. Consequently no statement of foreign policy goals can hope to make sense unless it takes into account two factors normally excluded from policy deliberations within the Department—the national resources available to carry out a policy and the domestic political climate. Yet up to now, the Department's guidance to both the White House and other departments has invariably assumed unlimited national resources and complete unanimity of public opinion, in defiance of contemporary economic and political reality. Such weighty factors as creeping inflation, racial unrest, deteriorating public services, an adverse balance of payments, mounting demands from the cities for federal dollars, and the obvious incapacity of the country to finance both an ambitious domestic program and a global security system are deliberately excluded from Department position papers. Nor are the master plans and grand designs drawn up by the deskbound Policy Planning Council ever tested against the prevailing background of public and congressional opinion.

The same narrow approach stultifies the implementation of policy. To cite only one example: The Communist and extreme left-wing threat to vulnerable countries of the underdeveloped world is not simply subversion, terrorism, and guerrilla warfare. It also involves the establishment of an underground political network, a shadow government, a clandestine system of taxation and financial levies, a propaganda campaign aimed at disaffected segments of the population, a system of internal conscription, and partial (but not necessarily total) disruption of certain (but not all) parts of the economy. It can only be defeated, or at least frustrated, by a carefully synchronized counter-insurgency program structured to fit local conditions and embracing such variegated elements as economic assistance, police assistance, military assistance, public information guidance, and covert activities. Since these elements necessarily depend on the contributions of different departments and agencies, there must be a single hand to manipulate the threads or they will start to operate at cross-purposes. Today, in Washington at least, this hand is absent.

III

It is the incapacity of the foreign affairs establishment, headed by State, to give active direction, or at least co-ordination, to the overseas programs of the rest of the government that has periodically led the White House to intervene in the policy implementation process, even at the cost of depriving the President of his Olympian freedom from operational detail.

Several approaches have been tried at one time or another. The first has been the creation of a White House foreign affairs staff. Dating back to Woodrow Wilson, and even before, some Presidents have placed heavy reliance on a personal foreign affairs adviser. Colonel House is one example, Harry Hopkins, McGeorge Bundy, and now Henry Kissinger are three others. Bundy and his successors have been provided with a staff, informally organized along regional lines, which has operated freely at every level of government.

The main advantage of the private adviser approach is the ability to obtain objective advice from a trusted confidant, who is unimpeded by departmental loyalties. The principal defect is that the more active and ambitious the adviser and his staff as a stimulus and catalyst for the rest of the government, the more they enfeeble institutional authority and induce over-reliance on the White House. Persons in government develop such an acute sensitivity to political power that proximity to the throne creates lines of magnetic attraction that utterly disorient normal centers of responsibility. This was the main reason why President Johnson sharply curtailed the power and latitude of the National Security Council staff after McGeorge Bundy's departure.

A second and less well known device for injecting the White House into the foreign policy decision process is the Presidentially-sponsored interdepartmental committee, usually established at Cabinet or sub-Cabinet level to handle major questions of national security policy. In theory the National Security Council exists for this purpose, but statutory membership requirements make it a cumbersome instrument for any purpose short of a major crisis. (It may be remembered that the Cuban Missile Crisis of 1962 was handled by an *ad hoc* Executive Committee of the National Security Council to keep deliberations small and secure.) There are four prominent examples of White House-sponsored interdepartmental committees in recent history.

The Planning Board and Operations Coordinating Board were established by the Eisenhower Administration for the express purpose of co-ordinating policy with overseas programs. Their interdepartmental organization borrowed heavily from the joint staff committee structure developed in World War II. However, the OCB soon mushroomed into a multi-layered structure of committees, subcommittees, and working groups in which co-ordination became an end in itself and the status report was raised to a fine art. One of President Kennedy's first acts in office was to abolish the OCB, on the grounds that the organization had become a "paper mill." The Planning Board was allowed to fall into desuetude.

In its time the OCB did, however, succeed in imposing some degree of co-ordination on the foreign policy process, and its abolition left departmental and agency programs disjointed and without common purpose and direction. President Kennedy was therefore forced to resort to several *ad hoc* arrangements to take up the slack, of which the first was the Special Group. This was a sub-Cabinet committee, chaired by the President's Special Assistant for National Security, which was established after the Bay of Pigs to keep the covert programs of the CIA in line with foreign policy. No attempt was made to place the Group under the chairmanship of State, since it was recognized that State was legally and morally incapable of controlling the CIA.

The second high-level interdepartmental committee established by President Kennedy was the Special Group (Counter-Insurgency). It was created in January, 1962, to supervise policy and co-ordinate overseas assistance programs aimed at countering the Communist and extreme left-wing insurgency threat to the underdeveloped world. Originally chaired by General Maxwell D. Taylor when he was President Kennedy's Military Representative, the chairmanship was later given to State. The Special Group (Counter-Insurgency) had its most successful period under the chairmanship of W. Averell Harriman, when he was Under Secretary of State for Political Affairs from 1962 to 1965. The Group's most vocal and energetic member was Robert Kennedy, who sat more as the President's brother than in his capacity as Attorney General. It was so effective, however, that Secretary Rusk regarded it as a competing center of power. At his insistence, the President abolished it after a *pro forma* review by an outside task force, and its functions were transferred to the newly created Senior Interdepartmental Group (SIG).

The Senior Interdepartmental Group (SIG) represented the final effort of the Johnson administration to achieve coordination of overseas policies and programs under the leadership of State. SIG's charter was similar to that of the Special Group (Counter-Insurgency), but without being confined to a particular kind of foreign policy problem. It was chaired by then Under Secretary of State Katzenback and met in State rather than in the White House—an important distinction—but its muscle sprang from its Presidential sponsorship. Unfortunately, SIG was an outstanding failure, owing to excessive paperwork, feeble chairmanship, and flabby staffwork—all the vices of the old OCB. SIG was abolished by President Nixon in February, 1969, and its functions were taken over by a new interdepartmental committee of Under Secretaries chaired by Under Secretary Richardson.

The virtue of the White House-sponsored co-ordinating committee, when properly managed, lies in its ability to refer troublesome interdepartmental differences to top-level mediation before positions have hardened to the point of becoming infected with the malignant virus of agency prestige. The committee technique can also produce prompt action on disputes over program execution that might otherwise remain bogged down in a bureaucratic impasse. The mere existence of such a high-level group is therefore a powerful stimulus to action, the alternative being exposure of low-level rigidity and red-tape.

The defects of the White House-sponsored committee are some derogation of departmental responsibility and a tendency to lean on the committee for decisions that should have been made earlier by each department. Moreover, all such committees, regardless of their imposing charters and brass-encrusted membership, suffer from intermittency. Sub-Cabinet officers and heads of independent agencies rarely have time to meet more than once a week. Each meeting last for an hour or two. Once a decision is made, responsibility for implementation and follow-up necessarily devolves on the officials and institutions whose inadequacies made the Group necessary in the first place. And the war council atmosphere tends to lull everyone into the comfortable delusion that well-staffed papers, decisively handled in Washington, are synonymous with effective solutions in the field. The high-level interdepartmental committee is therefore most effective when restricted to handling only important matters in which the issues are carefully defined in advance.

IV

None of these devices, alone or in combination, really gets to the heart of the matter. They grossly underrate the expanded scope of foreign relations and the interrelationship between domestic and foreign policy. They utterly neglect the peculiar structure of the Executive Branch, with its system of essentially independent departments and agencies, each endowed with a carefully defined mandate and set of statutory responsibilities. Innovations of far greater depth and ingenuity are necessary to make the foreign affairs establishment more responsive to Presidential needs.

There must first be complete acceptance of the fact that foreign relations are now a medley of social, economic, financial, strategic, ideological, and technological interrelationships in which the foreign and domestic elements are inextricably mingled. Second, all agencies of the Executive Branch, and especially the State Department, must recognize that the underlying forces in international relations take their shape, direction, and momentum from the evolution and interplay of societies—not from the political pronouncements of governments and foreign ministries. The traditional emphasis on intergovernmental relations must be discarded and the political side of foreign affairs viewed more as a reflection or manifestation of underlying trends than as an autonomous factor in its own right. Third, it must be universally accepted that the field of foreign relations transcends the jurisdictional scope of any single department or agency, and can only be comprehended and dealt with on a supra-agency level.

Ideally, the most satisfactory way of creating a unified entity capable of comprehending and dealing with the full range of contemporary foreign policy problems would be to terminate the separate agency responsibilities in the foreign affairs field and combine them under a single Department of Foreign Affairs. But it would require half a generation to prepare the ground for legislation of so sweeping a character. Hence, the only practical course is to reorganize the foreign affairs establishment within the framework of existing law.

A first step to revitalize policy planning by placing it under the control of the President's Special Assistants for National Security Affairs was taken by the Nixon administration in February, 1969. The next step should be to establish, by Executive Order, a permanent interdepartmental Foreign Affairs Council to make recommendations on key issues of foreign policy and the national security, and to resolve major interdepartmental problems concerning overseas programs and activities. The Council would consist of the heads of the principal departments and agencies of the foreign affairs establishment—State, Defense, Treasury, the Central Intelligence Agency, AID, and USIA, with other agencies represented *ad hoc* as necessary—and would be chaired by the President's Special Assistant for Security Affairs, now elevated to the new Cabinet post of Secretary for National Security Affairs. It would meet not more than twice monthly and would depend on a small staff and secretariat to keep its agenda important and meaningful, and to arrange for the implementation of its decisions.

The Staff and Secretariat of the Council would be composed of a cadre of career military and civilian officials drawn from every agency of government, supplemented by a diversified and rotating element of skilled professionals from civilian life and the staffs of Congress. The rotating element would be deliberately appointed on a political basis, (i.e., its adherence to the policies of the administration in power) so as to provide an organic link between the permanent bureaucracy and the electorate.

The two principal functions of the Staff would be national policy planning and the co-ordination of overseas programs and activities. In its planning role, the Staff would be particularly charged with weighing all the factors, foreign and domestic, that enter into the sound formulation of policy and making recommendations of both courses of action and allocation of resources. When refined and endorsed by the Council, these recommendations would be forwarded to the President and become the basis for major policy decisions and program actions. Under this system, the President's responsibility for actually making policy would remain undiminished.

In mission and organization, the departments and agencies represented on the Council would remain substantially the same as before, but with a few important modifications. State would continue to be the sole conduit for official communications with foreign governments. It would also continue to handle all routine diplomatic and consular business, and would dominate the formal and ceremonial aspects of intergovernmental relations, including representation on international organizations at non-specialized levels. The Secretary of State would not, however, be cast in the rôle of a policy advisor and program co-ordinator in areas beyond his competence.

As a corollary, the regular Foreign Service would revert to being an authentic diplomatic corps, much smaller in size and more selectively chosen. On the other hand, the Foreign Service Reserve would be expanded and diversified by offering open lateral entry at every level to well-qualified economic, financial, scientific, and legal specialists. Whether or not AID and USIA should be merged into State could be decided later, but all three agencies would gradually reduce their inflated corpus of foreign affairs generalists and replace them with specialists. Administrators would be confined to administration, in the sense of housekeeping and technical management. However, an orderly but flexible promotion system would be devised for each track of category, offering parallel routes to the top, and in special cases allowing transfer from one track to another. Ambassadors and Ministers would be drawn from every personnel track, from other agencies, from the Council's staff, and from private life. Corresponding organizational changes would be made in Defense, Treasury, CIA, and other agencies concerned with foreign affairs.

The effect of this reorganization would be to raise policy planning, assignment of resource priorities, and program co-ordination to a supra-agency level, and these would be the main responsibilities of the new Secretary for National Security Affairs and Foreign Affairs Council. Responsibility for program execution would, however, stay decentralized in the existing departments and agencies, as required by law. Skillfully managed, the Council and Staff would close the present gap between policy formation and program execution. If successful, the new system would provide the Presidents of the nineteen seventies with a foreign policy machinery capable of integrating all the diverse elements of statecraft into a coherent, unified whole and responding with delicacy and vigor to the exigencies of the times.

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THE CULTURE OF BUREAUCRACY: THE COST OF COWARDICE—SILENCE IN THE FOREIGN SERVICE

(By William A. Bell, former Foreign Service officer)

In 1966, when the commitment of American ground forces in Vietnam took its greatest leap forward, criticism of U.S. policy became widespread among Foreign Service Officers, or at least among those stationed in Washington. A number of young officers, some of whom had been expressing their misgivings in private conversation, were called together at the Department for a briefing before setting out on campus recruiting trips. One of them asked the recruitment director what they should say to students who were interested in the Foreign Service but had qualms about the American role in Vietnam. The answer—in no uncertain terms—was that there is no place in the Foreign Service for persons who do not support this war. No one spoke.

At the beginning of the Dominican rebellion in 1965, U.S. Ambassador W. Tapley Bennett declined a request to moderate the rapidly growing dispute at a time when moderate leftists were still in control of the "constitutionalist" forces. Bennett's predecessor, John Bartlow Martin, states in his book *Overtaken by Events* that Bennett, having missed this chance at conciliation, probably had little choice but to bring in the Marines.

The book fails to relate, however, a scene in which Bennett summoned a large portion of his staff and told them that he was planning to call for help. After briefly describing the situation as he saw it, Bennett made it clear that U.S. military forces, if summoned, would be ordered to thwart the attempted revolution, not just "protect U.S. lives and property." He then asked his staff if there were any alternate views or proposals. No one spoke.

When John Bowling, a stimulating lecturer at State's Foreign Service Institute, suggested that flag desecrators were philosophically identical to the bomb-throwing anarchists of previous decades, and that draft resisters were unmanly and cowardly, not one of the Foreign Service Officers in his audience challenged the statement, despite Bowling's invitation to do so. After several moments of silence, Bowling himself finally felt constrained to express the other side of both positions.

If such examples lead to doubt as to whether Foreign Service Officers are capable of speaking out in a group situation, even when there is a clear invitation to do so, one can easily imagine the prevailing timidity in one-to-one conversations where there is a disparity in rank or bureaucratic authority. FSO's may proudly relate the vehemence with which they have rebuffed officers or other agencies—notably USIA and AID—but direct argument with one's superiors in State is not a generally accepted mode of conduct. Former Under Secretary of State George Ball enjoyed a reputation as a courageous devil's advocate on the subject of Vietnam, but anyone who opposed Ball's hard line vis-a-vis General de Gaulle had to be wary of the consequences. At least one senior officer with the temerity to play devil's advocate on this issue received word that the Under Secretary no longer desired to share the same room with him during policy discussions.

The State Department country director in Washington is the official perhaps most likely to take advantage of his colleagues' reluctance to force an issue. He tends to believe that his job—and his chances for career advancement—lies in maintaining a cordial daily relationship between the United States and Country X. He tends to turn aside any potential disturbance in this relationship, including those changes which could be in the long-run national interest. Unless he is an exceptional man, he is fearful that any such disturbance will adversely effect his reputation and career. Worse, he is probably right.

A desk-officer prerogative particularly prone to abuse is the power to cut off the flow of outgoing reports prepared by State's Bureau of Intelligence and Research, which is supposed to render judgments independent of existing policy considerations. This right of suppression exists for the alleged purpose of correcting "factual inaccuracies." But intelligence reports are often timed for release at an optimum moment. When desk officers withhold clearances of such reports temporarily, it reduces the unfavorable impact of views contrary to official policy.

The intelligence section of the State Department has few operational responsibilities; hence it is viewed by many FSO's as a kind of purgatory. For example, David Nes, who had the ill grace to tell the press and the Congress that he had warned the Department of the imminence of the 1966 Arab-Israeli war while serving as charge d'affaires in Cairo, was summarily assigned to the intelligence section until he chose to resign. A number of Foreign Service Officers in in-

telligence are thus more interested in returning to "policy-making" than in arguing a fresh point of view before those with whom they may soon again be working.

THE HEART OF THE PROBLEM

The occupational diseases of desk and intelligence officers are, of course, only symptomatic of the personality characteristics impeding the State Department. Back in 1963, Dean Rusk told a Senate Government Operations Subcommittee that "the heart of the bureaucratic problem is the inclination to avoid responsibility . . . organization seldom gets in the way of a good man . . . if a man demonstrates that he is willing to make judgments and live with the results." Governor Averell Harriman has stated repeatedly that "good organizational machinery can never substitute for good people"—a disturbing thought when juxtaposed with his assertion that "regardless of the talent brought in on top, the backbone of the State Department is the Foreign Service."

Professor Chris Argyris, Chairman of Yale's Deparment of Administrative Sciences and a respected authority on organizational behavior, was unkind enough to write a report on "Some Causes of Organizational Ineffectiveness Within the Department of State." After attending three long sessions with senior officers, Argyris judged the norms of personal interaction among most FSO's to be characterized by "withdrawal from interpersonal difficulties and conflict; minimum interpersonal openness; mistrust of others' aggressiveness; and withdrawal from aggressiveness and fighting." In calling for a further study of the causes for such norms, Argyris suggested the distinct possibility that "the problem is primarily one of individuals who fear taking initiative, and not the system suppressing their initiative."

HIGH-RISK OUTHOUSE

A study like the one Argyris suggested might well begin with the Foreign Service basic training course for young men entering our diplomatice corps. In 1963, it was conducted by a senior officer whose constant (and sincerely expressed) maxim was: "Find out who Big Brother is—and knuckle under."

The usual defensive explanation for Milquetoastian behavior on the part of individual Foreign Service Officers is the promotion system. FSO's are fond of describing it as a high-rise outhouse, constructed so that each person—except for those at the very bottom—is subject to deposits from those above but can deposit in kind upon those below. Although this is hyperbole, this general view of the system is widely shared within the Department. Whether it is accurate or not, *belief* in its validity creates a formidable operating reality; it hardly encourages dissent with one's "superior."

A classic example occurred in Rome in the late 1950's, when an astute political officer boldly tried to convince the Embassy that the U.S. government should support the "opening to the left" in Italian politics and quietly bestow a blessing upon the proposed creation of a left-of-center government in place of the traditional conservatives. This officer pressed his views on the Ambassador and on influential U.S. officials back in Washington—at which point outhouse residents at the intermediate levels let fly with reports of "insubordination." The offender was on the brink of removal from the Foreign Service when the incoming Kennedy Administration decided to support the "opening to the left." Arthur Schlesinger, Jr., saved the State Department from losing that officer, who is now highly regarded.

Despite the outhouse symbol, there has been encouraging evidence that the personnel system is a paper tiger, that it will reward the dissenting activist rather than punish him. One of the new criteria for promotion of junior men is the officer's ability to suggest or embark upon untested courses of action. Close attention is now given to screening out biased personnel reports, and efforts are being made to see that the most demanding assignments are given to the self-starters. In order to shore up this system, the personnel officer jobs in Washington are now being manned by individuals with deserved reputations for tough-mindedness. There are numerous examples of initiative being rewarded by promotion to the higher ranks, perhaps the most notable being the rapid rise of William H. Sullivan, who recently completed a long and distinguished tour as Ambassador to Laos and is now Deputy Assistant Secretary of State for East Asia and the Pacific.

NO EXIT

If retribution at the hands of the personnel system is something of a bogeyman, are there other reasons why Foreign Service Officers so regularly prefer discretion to valor? One might begin with a look at the personal circumstances of the older officers. They joined the Foreign Service when the bulk of new officers came from gentlemanly schools and "nice" families. Later, they saw John Foster Dulles sacrifice some of their colleagues to Senator Joseph McCarthy. Many of these men now have children of college age; they are unlikely to take risks which they (rightly or wrongly) believe could jeopardize their jobs. And they are aware of a harsh fact about the Foreign Service: it trains in skills not readily transferable to other forms of employment.

Whimsical critics of the Foreign Service have suggested that only individuals with professional degrees or independent incomes be accepted into the ranks, on the theory that such persons are less likely to worry about the risks associated with outspokenness. It has also pointed out numerous times that the toughest fighter of all—"the old crocodile," Averell Harriman—never had to lose any sleep over where his next paycheck might be coming from.

Other factors that dull the cutting edge of senior officers include the personnel rating report and the transient nature of Foreign Service assignments. The rating report, which is no longer withheld from the officer being rated, requires detailed comment on the officer's abilities and characteristics, as well as the degree to which his family is, or is not, an asset. One officer, now retired, recalls his first post abroad well. One day he puffed up three flights of the Consulate steps to tell a superior about an incident which had just occurred in the city. He was somewhat out of breath when he told his tale. The subsequent rating report said that the officer "does quite well, in spite of a slight speech defect." Although this is an extreme and ludicrous example, it does have its point: only the most thickskinned officers can accept a lifetime of these reports, however ridiculous, without tending towards self-consciousness.

Smith Simpson's *Anatomy of the State Department* ascribes Foreign Service faintheartedness to the constant cycle of assignment and re-assignment, which encourages officers to think more about their future possibilities than about their present challenges. Regulations requiring automatic dismissal of those Foreign Service Officers repeatedly passed over for promotion, wise as those rules may be in some ways, create an extra measure of pressure toward conformity.

While the timorous nature of those officers who survive to seniority is perhaps understandable, younger officers often display the same attributes, and perhaps to an even greater degree. Far from brimming with ideas, most young officers are concerned almost exclusively with career advancement into areas of substantial responsibility. Given the nature of most jobs at the bottom of the ladder, this may not be surprising.

DISTILLED WATER

One of the most promising efforts at renovating the State Department has been the Open Forum Panel, originally created as an avenue for out-of-channel policy ideas that could be passed on to the Secretary. Rusk gave this Panel his firm endorsement and sent an open letter to all posts, urging the submission of ideas. The silence was deafening.

Of the 100 or so ideas received, almost all came from the three Department bureaus whose directors had asked their subordinates to "let 1,000 flowers bloom" by noon on Friday. The remaining handful came from five or six individuals who had received no such "request" from above. The most imaginative suggestions were submitted by senior officers. Secretary Rusk met twice with the Panel and approved several of the policy suggestions. *The New York Times* and *The Washington Post* wrote articles praising the creation of the Panel, and CBS sent Dan Rather to do a TV news cut on the subject. But the effervescence of long-frustrated ideas within the Department remained roughly equivalent to that in a bottle of distilled water. It was curiously unrefreshing.

The Junior Foreign Service Officers Club is another hotbed of intellectual dissent. There is a fair amount of militancy in this group, but the demands are exclusively in the personnel field. The club never discusses the policy issues which younger officers might handle if given the positions to which they aspire. In pressing for higher entrance salaries for junior officers, however, JFSOC did wangle one important statistic out of administrative files: the average raw score achieved by Foreign Service applicants on the standard entrance exam has been dropping notably since 1963. This trend is particularly disturbing because it has occurred at a time when the raw test scores of applicants for just about every other program in this nation are going up rapidly.

In considering the disappointing caliber of younger officers, it is necessary to visualize what the State Department looks like to today's applicant. The pay is adequate, but it is significantly below that available in most other jobs, including the Civil Service. The first several years of employment will probably entail mostly consular work, which can be (and in many instances is) handled by intelligent highschool graduates. The State Department expects its employees to work closely with military officials and employees of the CIA, with whatever hang-up that may entail for many college students. But more important for recruiting, of course, few college students are at ease with the Department's rationale for fighting a cruel war in Southeast Asia. In addition, the style of the present Administration is notably less exciting than that of its predecessors; the most important foreign policy responsibilities seem to have moved to the White House for good; and domestic problems are rising to the top of the nation's priority list anyway.

Thus, it seems likely that the State Department has already screened itself out of consideration by many, if not most, of today's brightest college graduates.

The second category consists of beneficiaries of the State Department.

Of those entering the Foreign Service, most fall into one of three categories. The first—and probably the largest—category is that of patriotic expatriates. Many former Peace Corps volunteers see the Foreign Service as a way of continuing to lead interesting lives abroad. Many Americans with foreign wives find the Foreign Service a means of avoiding the cultural and marital strains of forcing total 'Americanization" upon their wives and families. There is also a large number of Foreign Service personnel who get great satisfaction out of eating at foreign restaurants, shopping at foreign stores, employing inexpensive household servants, drinking tax-free liquor, and patronizing the natives of their post of assignment—all while paying off a mortgage on a house in Washington, which they can rent out at a profit and live in themselves during assignments back home.

* * * * *

The third type of tenant into the Foreign Service is the one with a consuming interest in foreign affairs. George Kennan is possibly the most outstanding example of such a person, although there are other such dedicated and brilliant Soviet specialists, plus numerous experts in various geographic areas and functional fields. If the Foreign Service brings forth 10 such men a year, the shortcomings of the remaining officers can perhaps be disregarded.

TIRED NEW BLOOD

But the clammy atmosphere of the Foreign Service, combined with the highly responsible positions available outside (some in foreign affairs), acts to skim off many, if not most, of the most promising younger officers. The February, 1968, issue of the *Foreign Service Journal* contained an article entitled, "Is the Foreign Service Losing Its Best Young Officers?" The conclusion to be drawn from it is: "Probably so."

The three authors of this article (one of whom has since resigned himself) reviewed 57 questionnaires filled out by men who had entered the Foreign Service between 1960 and 1965 and had subsequently resigned. The authors found that the resignee differs in two ways from his colleagues still in the Service: "He is more likely to have a graduate degree, and . . . he is also more likely to be regarded as an above average officer by his superiors." There is, in the authors' view, "very strong evidence that the resignees do indeed represent the high-performance young men which the Service strives to attract and retain." The attrition rate for FSO's during their first five years of service has lately been about 20 per cent and is now rumored to be rising markedly.

Even more distressing, perhaps, are the reasons given for resigning. Low pay and dissatisfaction with supervisors were listed as of only marginal importance. Over half the respondents, however, gave as their primary reason for leaving either lack of challenge, or lack of long-range prospects for jobs of significant responsibility. Most of them listed "dissatisfaction with the personnel system" as an element, although not a major one, in their decision to resign. Of those who did mention personnel, the largest proportion (39 per cent) checked "pressure to conform" as a specific complaint.

This information inevitably raises some questions and doubts about those who remain in the Service. Are they more dedicated? Less employable elsewhere? More tolerant of mediocrity? Or mediocre themselves?

PRESCRIPTIONS

Unfortunately, cures for the Department of State have traditionally proved more debilitating than the original illness. However, this time around Secretary of State William P. Rogers has taken an important and constructive first step toward reform by calling for a Department open to innovation and debate. And Under Secretary Elliot L. Richardson has expressed uncommon interest in adjusting the machinery. These words must be followed up by specific measures.

The previously-mentioned Open Forum Panel has now shifted its attention to contacts outside the State Department, having found so little food for thought within. The Secretary should support the Panel in this role, if for no other reason than to display to the public and to prospective Foreign Service applicants a number of bright and aggressive young officers who believe that the Department can be a Better Place. The Panel should also continue to promote discussion groups and projects among the various Departmental bureaus. These sessions may not change policies overnight, but they are already breaking down inhibitions.

Dissenting opinions should be encouraged as a matter of official policy. Officers who have in the past written such opinions from posts abroad (including a report which predicted North Korea's invasion of South Korea) have found, upon arrival back in Washington, that their reports were suppressed or disparaged. Such forms of information management should perhaps be made a punishable offense.

In the long run, however, the Department of State will be a creative institution only if it directs its recruitment efforts toward men with proven leadership qualities. It will not be enough just to attract such officers; they must be given substantive jobs, not consular work, if they are to be retained.

Intellectual courage is hardly the sole criterion in seeking a Foreign Service prepared to promote our national interest. But given the various influences pervading foreign policy, such courage may be a prerequisite. During the McCarthy era, one Foreign Service Officer, in charge of a small consulate, received firm orders from Washington to remove certain works of literature from the shelves of the post library. Although outraged, the FSO weighed his personal interest against the national interest. He decided to comply with the order—against the advice of none other than an Air Force officer, his military aide. While superficially surprising, the implications are omincus.

CORRECTION OF COSPONSOR OF BILL

S. 11

Mr. BYRD of West Virginia. Mr. President, the name of the senior Senator from North Carolina (Mr. ERVIN) is indicated erroneously as a cosponsor of S. 11, to reinforce the federal system by strengthening the personnel resources of State and local governments, to improve intergovernmental cooperation in the administration of grant-in-aid programs, to provide grants for improvement of State and local personnel administration, to authorize Federal assistance in training State and local employees, to provide grants to State and local governments for training of their employees, to authorize interstate compacts for personnel and training activities, to facilitate the temporary assignment of personnel between the Federal Government, and State and local governments, and for other purposes.

On his behalf, I ask unanimous consent that, at its next printing, his name be removed from the bill.

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

WATER QUALITY IMPROVEMENT ACT OF 1969—AMENDMENTS

AMENDMENTS NOS. 226 AND 227

Mr. AIKEN submitted to amendments, intended to be proposed by him, to the bill (S. 7) to amend the Federal Water Pollution Control Act, as amended, and for other purposes, which was ordered to lie on the table and to be printed.

(The remarks of Mr. AIKEN when he submitted the amendments appear later in the RECORD under the appropriate heading.)

ENROLLED JOINT RESOLUTION SIGNED

The ACTING PRESIDENT pro tempore announced that on today, October 7, 1969, he signed the enrolled joint resolution (H.J. Res. 851) to request the President of the United States to issue a proclamation calling for a "Day of Bread" and "Harvest Festival."

THE ECONOMICS OF AGING

Mr. MUSKIE. Mr. President, the Senate Special Committee on Aging has been conducting an intensive study and hearings this year on the subject "Economics of Aging: Toward a Full Share in Abundance." Its purpose is to emphasize that a retirement income crisis exists in the Nation. This crisis has been caused partially by inadequate payments under our social security system and by limited protection under private pension plans. It has also been caused by severe and mounting costs for medical costs, inflation, and rising property taxes.

The Special Committee on Aging—under the leadership of the Senator from New Jersey (Mr. WILLIAMS)—has already conducted several hearings on major issues. As chairman of the Subcommittee on Health of the Elderly, I recently held hearings on the impact of inflationary health care costs upon the limited, fixed incomes of the elderly. One of the startling points made at that time is that medicare pays less than 50 percent of the medical costs of the elderly. The specter of financial disaster haunts too many other Americans who stand in need of health care or health products.

The committee has compiled testimony and studies which make an impressive case for far-reaching policy decisions and action on several fronts. The committee chairman, Senator WILLIAMS of New Jersey, recently wrote an article for the AFL–CIO Federationist which discussed the emerging issues facing America's elderly. I believe that his article is significant and timely. I ask unanimous consent that it be printed in the RECORD.

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

ECONOMICS OF AGING: THE WIDENING GAP

(By Sen. HARRISON A. WILLIAMS, JR.)

Retirement income? That's for old people to worry about. Things are bound to be better by the time I am ready to start collecting my Social Security and whatever else I can get in the way of pension income.

Don't we now have Medicare to take care of heavy medical costs in old age?

And haven't we raised Social Security fairly often within recent years, and isn't another hike in view?

And what about private pensions? Aren't they improving, too?

And isn't there a lot of talk about some kind of guaranteed income for the elderly as well as for others whose incomes are far below certain standards?

These might be the attitudes and questions of today's middle-aged and younger workers when they give some thought to—or shrug off thinking about—their own economic security in later years.

The answer to all the questions above is yes. But this is a case where yes is not enough.

We also need to face up to certain hard facts about inadequate income among today's 20 million Americans over 65 and for all the millions more who will reach retirement age in the next two decades or so.

Fortunately, those facts are emerging. But

they have not yet caused the alarm bell to ring throughout the nation. To help sound that alarm, the U.S. Senate Special Committee on Aging has begun hearings on "Economics of Aging: Toward a Full Share in Abundance."

That title springs from an excellent Task Force study which was issued before the first word of testimony was taken.

The idea of establishing a Task Force was to put together the "hard facts," and it was achieved. As no other document has done, the Task Force states the basic problem:

"Economic problems of old age are not only unsolved for today's elderly, but they will not be solved for the elderly of the future—today's workers—unless this Nation takes positive, comprehensive actions going far beyond those of recent years."

The Task Force also looks into the personal economics of individuals who—in the final decades of their lifetimes—discovered that fixed incomes and lifetime savings are either totally inadequate or barely enough for marginal life.

In short, a nation which established a Social Security system 34 years ago has not been equally inventive during affluent times in finding new ways to deal with a worsening retirement income crisis.

But to do that, we must first face the facts. The gap between the incomes of those Americans trying to make do on a retirement income and the incomes of younger people is decisive—and it's growing constantly. True, costs have risen for everyone since 1961, but for the elderly the figures are more startling:

The median income of families with an aged head of household in 1967 was only 46 percent of that for younger families, as compared to 51 percent in 1961.

A rise in earnings of 4 percent annually—a not unrealistic assumption in view of recent performance—means that consumption levels would approximately double in two decades, placing those on fixed income at a seriously deepening disadvantage in the marketplace.

Before we can hope to close the gap, we must recognize the magnitude of poverty among the elderly. Three out of 10 people 65 years or older—in contrast to one in nine younger people—were living in poverty in 1966. An additional one out of 10 of our aged population was on the poverty borderline.

Of older people living alone or with nonrelatives in 1967, half had incomes below $1,480; and one-fourth had $1,000 or less. Six out of every 10 among widows and other women living alone were well below poverty levels.

Yet many of these people did not become poor until they became old.

Worse, the situation will deteriorate in the years ahead. The Task Force pointedly warned that low income in old age is *not* a transitional problem that, given present trends, will solve itself. Among the reasons for believing that the problems will actually *worsen:*

Our "Older Americans" are getting older. More than 50 percent of those past 65 are now 73 or older. The population 85 and older may double by 1985. As average old age rises, so does the strain on already slim retirement income.

And, as advanced age further curtails already limited earnings opportunities, a major source of retirement income is reduced markedly. Employment is still the largest single source of income for the aged group, despite the fact that four out of five older persons are not in the labor force and that one in five tends to concentrate in part-time and low-paid jobs.

Assets are reduced or exhausted as years pass. Home ownership may become especially difficult.

Health costs are an ever larger problem, too, despite the blessings of Medicare—which met only 35 percent of all health care expenditures for the aged during its first year.

Inflation takes its toll. An annual rise of only 2 percent will reduce the purchasing power of fixed incomes by 18 percent after one decade and by 33 percent after two decades.

Today's workers are not equipping themselves to face the growing chasm between their present earnings and their retirement incomes. "Most people agree that they should save more heavily for retirement," one authoritative witness told the Task Force, "but most people fail to do so."

The Task Force expressed much the same thought when it reported: "The margin for saving—the excess of income over consumption expenditures—has been small for most families during most years of the worklife, especially for workers in the less skilled occupations.

"In addition, with an outlook for sustained economic growth," the Task Force said, "how realistic is it to expect today's workers voluntarily to forgo consumption in order to save for the years ahead when this requires that they significantly reduce their present standard of living to provide adequately for an uncertain and 'distant' old age?"

Some thought should be given to today's middle-aged head of household—struggling to pay off his mortgage, provide a good education for his youngsters and perhaps contribute to the support of a parent. All the time he is doing this he is also keeping up with the Joneses in our expensive or modest suburbs. Here is a man who probably gives little thought to his own security in later years.

Perhaps he thinks that "things will work out" even if he can't put aside savings of his own. But here again the Task Force gives him little comfort, and several projections:

Of families retiring in the next 15 years, it has been projected that almost 60 percent of those with preretirement earnings between $4,000 to $8,000 will receive pensions of less than half these earnings.

Projections to 1980 indicate that about half the couples and more than three-fourths of the unmarried retirees will receive $3,000 or less in pension income. And these projections use relatively liberal assumptions with respect to increases in private and public benefit levels.

The same projection found that more than two-thirds of retired couples could be expected to receive less than $3,000 in Social Security benefits in 1980.

Even under earlier projections, now known to be too optimistic, only one-third to two-fifths of all aged persons in 1980 are expected to have income from private group pensions.

In addition, private pensions cover less than half the work force and this coverage is concentrated among higher paid workers; those in the greatest need will be least likely to receive these pensions.

Early retirement is a developing trend that could seriously impede attempts to improve the income position of future aged populations. In recent years, more than half of the men retiring have done so before age 65.

Speaking for themselves in letters since the Task Force made its report, the nation's elderly show that their findings about the realities of life today and the prospects for tomorrow are closely akin to what the Task Force has discovered.

Here are a few excerpts from letters written by elderly Americans who tell what it means to live in old age on fixed incomes in a land of abundance. From Pitman, N.J., comes this commentary from a man who had to retire because of a health problem a few years ago:

"There is only my wife and I, and the Social Security pension for both of us amounts to only $1,920 a year, and from this amount we have to pay real estate taxes —water and gas and electricity—and for fuel oil. After these items have been taken care of we eat from the meager amount remaining. We cannot afford three full meals each day so we manage on one good meal. The prices of meat are outrageous and to have a roast or steak once a week is beyond our reach."

A man from Alhambra, Calif., says much the same:

"I am 76 years old. I retired 10 years ago with my home paid for, and no debts. After 10 years my property taxes have doubled. Every service and general living costs have skyrocketed and medical and doctor and hospital costs are as near to robbery as a cost can get: $600 for removing a cataract from one eye; almost $400 for the hospital (my wife had the operation). We fixed income people are in trouble."

And, from a 76 year-old woman who lives in Swarthmore, Pa.:

"I am one of those elderly people, living alone, who has become poor since becoming old. Unable to work any longer, I am trying to get along on my Social Security of $55 per month income, besides drawing a few dollars from a fast-dwindling nest egg in the bank and an occasional fee from private French teaching and some babysitting, to meet the ever increasing cost of living. I am, however, aware of the fact that some elderly people are worse off than I, and for those drawing less than $80 or $100 a month, the name of Social Security has become a paradox indeed."

The message is similar in the other letters I have received within recent weeks. Older Americans are worried and many of them are angry about economic problems over which they have very little control.

They have left the labor force, either voluntarily or involuntarily.

They have seen their limited resources dwindle.

For their sake and the sake of others who face the same future unless a national program for action is designed and fulfilled, we need now to build upon the foundation the Task Force has provided.

That program for action is next step forward for all of us who are concerned about the Task Force findings. For its part, the Committee on Aging will continue its hearings and offer its final recommendations early enough—it is hoped—to have some effect upon congressional action on Social Security legislation late this year or early in 1970.

Several major fields of inquiry have already emerged, and each should receive exhaustive consideration:

We should dig more deeply into the intense and deepening income maintenance problems of widows—an especially disadvantaged group.

Health needs and rising medical costs should also be examined in depth. Health care expenditures for the elderly are about three times the average for younger persons.

As already indicated, many elderly homeowners have special problems. Real property taxes are matters for local decision, of course. But there may be room for Federal-State-local cooperation once the facts are more fully explored.

Employment opportunities in later years should be broadened.

The trend toward earlier retirement should be examined. It is startling that within recent years more than 50 percent of male retirees have claimed reduced Social Security benefits before the traditional age of 65. Among those men are many who are most in need of an adequate Social Security income, but they often must settle for less earlier in life simply because they have no alternative.

Older workers face reduced employment opportunities with advancing age, and quite often they are "old"—in terms of reduced earning power—long before they are eligible for Social Security. Older members of minority groups are especially hard hit. What should they do while waiting for age 62 or 65?

And of course, additional questions along the same line come easily to mind.

Should general revenues be used to broaden Social Security protection? If so, how can they best be used?

What incentives can be provided to make private pension benefits more readily available to low-income workers?

Should a guaranteed annual income be provided to low-income retirees in order to relieve the Social Security system of providing better coverage for those who now have low benefits or none at all?

Would a constant purchasing power bond be helpful to those who *can* afford savings?

The Committee on Aging is obviously grappling with issues far more complex than the question of whether the next Social Security increase should be 7, 10 or 20 percent more. And it should be clear that even the most ingenious cost-of-living escalator plan for Social Security benefits won't do the job.

What we need is a willingness to realize that the elderly must be regarded as more than a welfare group deserving of only the minimum in terms of income and enjoyment of life.

And we must have new ideas for the next steps that must be taken by government, unions, employers and individuals planning for their own future.

The "Economics of Aging" is everybody's business, and everybody has a stake in the Task Force declarations and the Committee's explorations.

THE TASK FORCE

To prepare for its hearings on "Economics of Aging," the Senate Special Committee on Aging assembled a Task Force to prepare a preliminary working paper on major issues. That paper has served as the backbone for the continuing inquiry into the subject.

Miss Dorothy McCamman, former Assistant Director of Program Research for the Social Security Administration, served as consultant for the study.

The Task Force members are:

Juanita M. Kreps, Ph.D., Professor of Economics, Duke University.

Agnes M. Brewster, consultant on medical economics.

James H. Schulz, Ph.D., Assistant Professor of Economics, University of New Hampshire.

Harold L. Sheppard, Ph.D., staff social scientist, W. E. Upjohn Institute for Employment Research.

ESCALATING COSTS OF POLITICAL CAMPAIGNS

Mr. INOUYE. Mr. President, as chairman of the Democratic senatorial campaign committee, I have become increasingly aware of the rapidly escalating costs of political campaigns—particularly due to the influence and cost of television. As I have become increasingly aware I have also become ever more concerned with the effects of this high need for funds on our political processes. It is for this reason that I cosponsored S. 2876, the Campaign Broadcast Reform Act. Early action on this bill is clearly in the public interest.

In support of early action on the proposed legislation, I invite the attention of the Senate to an article written by David S. Broder, a well-known and highly respected political writer, and published in the Washington Post of September 30.

I ask unanimous consent that the article, entitled "Effort To Reduce TV Costs for Candidates Is Gaining," be printed in the RECORD.

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

EFFORT TO REDUCE TV COSTS FOR CANDIDATES IS GAINING

CAMBRIDGE, MASS.—There are signs at last that effective action may be taken before the next campaign to make the public airwaves a channel instead of a barrier to better public understanding of the issues and personalities in the election. Strong bipartisan support is developing for practical proposals to reduce the cost and increase the availability of radio and television time for candidates for Congress and the presidency. If President Nixon and the Democratic congressional leaders throw their weight behind the effort, there is no reason why the necessary legislation cannot become law in time for the 1970 election.

Early this month, 38 senators and 34 representatives introduced a bill, drafted by the bipartisan National Committee for an Effective Congress, to permit Senate and House candidates to buy substantial blocks of TV time at 20 to 30 per cent of the normal commercial rate.

In a report to be issued today, the Twentieth Century Fund Commission on Campaign Costs in the Electronic Era will endorse a similar approach, using a mixture of public and private funds for reduced-rate purchase of airtime for both congressional and presidential candidates.

Both recommendations are aimed at curbing the terrible inflation of campaign costs that has resulted from the increased dependence on television as the prime medium of political communications. Both would—the 20th Century Fund plan more directly than that of the NCEC—also tend to shift the emphasis in political television to longer programs, where issues can be discussed intelligently, and away from the one-minute "spots," where candidates are necessarily merchandised like bars of soap.

The need for action is evident. The Federal Communications Commission reported in August that campaign broadcast costs jumped 70 per cent from 1964 to 1968. Largely because of this, the cost-per-vote of campaigning has risen far more rapidly than the general price level in the past years.

Unless action is taken by Congress, the cost will continue to rise, limiting meaningful political debate and competition and making every candidate even more dependent than he is not on the large contributors needed for these incredibly expensive campaigns. Mr. Nixon spent $12.5 million last year on TV and radio, according to FCC figures, and it cost Hubert Humphrey $6 million just to lose.

Appearing recently on "Face the Nation," FCC Commissioner Nicholas Johnson said it was "absolutely preposterous" that privately owned broadcasting stations, which make large profits from the use of the public airways, are permitted "to hold up elected public officials" and candidates for public office "and make them pay to get time" so their constituents can hear their views.

His outrage is shared by many of those public officials, who found themselves spending much of their campaign time and energy last year raising money to enrich the owners of television stations.

After careful study, both the NCEC and the Twentieth Century Fund panels are recommending that Congress require the stations and networks to reduce their rates for specified amounts of airtime for the candidates.

The NCEC bill applying only to congressional candidates has been endorsed by the new Senate Republican leader, Hugh Scott; by the Democratic national chairman, Sen. Fred Harris; and by such leading Democratic figures as Sens. Edward M. Kennedy, George McGovern and Edmund S. Muskie.

The Twentieth Century Fund plan, covering both Presidential and congressional campaigns, is the unanimous recommendation of a five-man commission including Newton Minow, the Democratic chairman of the FCC from 1961 to 1963, and Dean Burch, Barry Goldwater's 1964 manager and the man just nominated by Mr. Nixon as head of the FCC.

With such broad and influential support, these practical solutions to one of the most serious problems of political communications and campaign financing could well become law next year. Their success would be assured if Mr. Nixon and the Demorcatic congressional leaders were to make an early commitment of support.

It is not often that an opportunity is available for leadership in a cause so clearly in the interest of the public and so clearly in the interest of every man who wants to believe that politics can still be an honorable profession.

THE PESTICIDE PERIL—LXII

Mr. NELSON. Mr. President, the fine publications sponsored by our country's conservation organizations have been on the forefront of informing concerned citizens regarding the threat to our wildlife and our total environment from persistent pesticides.

The August–September issue of National Wildlife Magazine includes an editorial which expertly outlines the pesticide issue. Like so many other accounts, the editorial reports on the growing evidence of fish and wildlife destruction from DDT and related pesticides and on the buildup of pesticide residues in man. In the face of this rapidly accumulating data, the editorial strongly states:

The widespread use of DDT should be halted immediately unless its safety can be proven.

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

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

OUR POINT OF VIEW, DDT THREATENS YOU!

(By Ed Chaney, Director, Information Services)

Thousands of tons of DDT have been ladled onto lands surrounding Lake Michigan over the past 20 years to combat real, and sometimes imaginary threats from a variety of creepy crawlies.

This perennial application contains poison that moves freely from place to place and retains its toxicity for a guesstimated half century or more. Yet it has become an accepted method of dealing with pests. And over the years—via wind, water and soil—DDT has washed into Lake Michigan from farms, orchards, mosquito swamps, elm-lined streets, flower beds and even from mothproofing by dry cleaners.

Occasionally, someone would wonder at the scarcity of robins after the community elms were doused with DDT to fight Dutch elm disease. Once in a while a few unexplainably dead fish would appear in a nearby creek. And sometimes an article claiming DDT was eating the livers out of eagles and ospreys would turn up on the back page of our paper.

"SILENT SPRING" SILENCED

But compared to the commotion over the surtax, the ABM and getting Johnny ready for graduation, these isolated incidents seemed of little concern to most people. Dr. George Mehren, former Assistant Secretary of Agriculture, summed up the tenor of the times in a statement to a congressional committee in 1968, ". . . the hysteria associated with 'Silent Spring' has effectively subsided."

But then it happened! The Food and Drug Administration put the grabs on more than

10 tons of Lake Michigan coho salmon en route to family dinner tables. The salmon contained up to 19 parts per million DDT—almost three times the maximum allowed in beef sold for human consumption. Suddenly, the fundamental relationship of DDT to man's position at the top of the natural food chain became an exciting topic of conversation for folks living in the Great Lakes area.

The coho seizures added fuel to the smoldering coals of Rachel Carson's best seller which had already been furiously fanned by a group of citizens and scientists banded together in the "Environmental Defense Fund." Attempting to ban DDT as a water pollutant in the state of Wisconsin, EDF paraded an impressive array of scientists through the national press damning DDT as a heinous, uncontrollable global pollutant.

Reaction to the contaminated coho impoundment was quick. Lacking an established tolerance level for DDT in fish, Secretary Robert Finch of Health, Education and Welfare, quickly set a temporary standard of five parts per million. He also established a commission to study the situation and present recommendations within six months.

HOT COHO

State and Federal fishery biologists predicted DDT levels in this year's crop of Lake Michigan coho would reach that five parts per million by mid-summer and several times that concentration by fall. Because growing fish concentrate DDT in their tissues, biologists hold out little hope that millions of pounds of valuable fish will be safe for consumption by the end of summer. The United States Bureau of Commercial Fisheries also warned that DDT levels in the lake are so high that reproduction of lake trout, salmon and other species may be in real danger.

Visions of DDT scuttling the $200 million Lake Michigan coho salmon fishing industry brought prompt reaction from the governors of the states surrounding Lake Michigan.

They met and declared there was no immediate DDT health hazard in Lake Michigan. Then they set up several committees to study the problem to see if a tolerance level of 20 parts per million DDT would be safe for humans. (Nobody knows what a really safe limit is. Whether it is 1, 5, 20 or 100 parts per million is an arbitrary judgment.)

Illinois Governor Richard B. Ogilvie announced his intention to continue drinking Lake Michigan water and eating coho salmon.

The Michigan Department of Agriculture "banned" DDT in April. This "ban" was analogous to slamming the barn door behind a horse thief and giving him several years to get out of town since it allows unlimited quantities of DDT to be sold and used in Michigan if the chemical was in transit from the manufacturer by June 27. Consequently, new, home-grown DDT will continue to pollute the air, water, soil, wildlife and people of Michigan for a long time.

It is a disturbing, spooky fact that no one really knows what effects, if any, DDT has on humans. Some eminent scientists maintain it may be difficult, even impossible, to find out until incalculable damage has occurred and it is too late to do anything about it.

CARRIES 12 PARTS PER PERSON

We do know the average American carries around approximately 12 parts per million DDT in his body. Man gets an estimated 90 percent of his DDT from food. We also know it is passed on to the human fetus via the mother's placenta and a nursing mother's milk generally contains more DDT than is allowed in milk you buy at the store.

Laboratory experiments with various animals have shown DDT attacks the central nervous system, upsets body chemistry, distorts cells, accelerates gene mutation, reduces drug effectiveness and affects calcium absorption by the bones.

Hungarian experiments with mice emphasized DDT's cancer-producing potential, and that country recently banned its use. These carcenogenic properties were confirmed by a recent controversial six-year study by the National Cancer Institute which found DDT in mice did cause tumors, most of which ". . . had malignant potential."

A pharmacologist with a leading drug firm says DDT has a deleterious effect on rats' sex hormones, which are essentially the same as man's. Further, the amount of DDT necessary to produce that effect ". . . is well withtin the range of DDT found in human fat."

All this growing, damning evidence does not *absolutely prove* DDT is having or might have the same effects on the human animal. But Dr. Wayland Hayes, past chief of the Public Health Service toxology section, has said, "In considering the safety of workers who formulate DDT, we must depend largely on animal experiments."

Unfortunately, the evidence damning DDT as a potential threat to mankind, all the laboratory experiments, state and Federal study groups, commissions and exploding public concern, may have little impact.

IT'S BIG BUSINESS

The manufacture of DDT is a $20 million a year business, and pesticide manufacturers also fear the fight over DDT will carry over onto its persistent chlorinated hydrocarbon relatives, heptachlor, lindane, aldrin, endrin, dieldrin, and chlordane which constitute a big part of the industry's $1 billion annual sales.

The pesticide lobby is powerful, experienced and at the slightly disparaging word aimed at DDT, industry spokesmen trot out an impressive array of truths extolling its virtues in fighting disease organisms and agricultural pests throughout the world. No one contests these truths.

But there are substitutes for DDT in the form of safe non-persistent insecticides. Insect sterilization offers much hope for counteracting certain pests, and research has been stepped up on insect predators.

But DDT's apologists continue their campaign that DDT is indispensable to the welfare of mankind and get away with it. They know from past experience that the public's memory is short and the people who make the laws and buy the products don't read history books. The decisions will be made behind the scenes.

Agriculture committees in state and Federal government are almost universally dominated by farm and pesticide-oriented legislators. These committees are commonly considered rubber stamps for all but the most offensive industry pleas and graveyards for regulatory bills.

DDT's proponents seem willing to write off the growing list of threatened wildlife including the bald eagle, osprey, peregrine falcon, eider duck, bermuda petrel, brown pelican and even the sportsman-revered mallard duck. During the EDF hearing in Madison, spokesmen for the National Agricultural Manufacturers Association said, ". . . the damage is not as severe as conservationists claim." One of their arguments is that "DDT inhibits the reproduction of birds . . . but these are primarily birds of prey, and very small numbers are involved." And, "A person whose thing is studying the peregrine falcon is concerned only about every little thing that might happen to his bird."

CAN'T PROVE HUMAN EFFECTS

When the question of DDT's possible effects on humans is raised, their answers boil down to "prove it." Despite the overwhelming, growing scientific evidence that portends frightening effects on man, DDT's fans are willing to gamble. And they have graciously volunteered the rest of the world.

The already dangerous and climbing levels of DDT in the food fish of Lake Michigan may be a grim hint of what is to come. Even if not another ounce of DDT were applied anywhere in the world beginning today, some experts guess it would be at least 25 years before the concentrations in the environment begin to level off. However, researchers have revealed a great deal of variability in the chemical's persistence depending upon local conditions.

Our exploding technology now keeps some men alive with artificial hearts and puts others on the moon. What unknown secrets will we discover about the 12 parts per million DDT we all carry in our bodies? At this level, the FDA would rule the average American unfit for human consumptions.

John Gottschalk, Director of the Bureau of Sports Fisheries and Wildlife, said, "What is happening in Lake Michigan is an indication of what to expect elsewhere. There will be a day, and it may not be until the year 2000, when *we* are the coho salmon."

The widespread use of DDT should be halted immediately unlesss its safety can be proven.

THE INDIANS OF ARIZONA

Mr. GOLDWATER. Mr. President, I invite the attention of the Senate to an interesting development that is taking place among the Indian people of Arizona.

First of all, few people realize how the Indians dominate the land mass of Arizona and how this State is truly the Indian center of the Nation. Of 50 million acres of land held in trust for the Indians, 20 million, or roughly 40 percent, are in Arizona. Of the 400,000 Indians served by the Bureau of Indian Affairs, 120,000 live in Arizona; and in addition to the 120,000, many urban Indians have cut their ties with the BIA and are living as ordinary citizen in our State.

These 120,000 Indians live on 19 different reservations in our State, and in times past much has been written and said about the plight of the Indians and many solutions to many problems have been proposed to help them. However, in the last few years an interesting development has taken place on these Indian reservations, and they are now becoming the center of attraction for major industrial developments.

At the present time, there are seven industrial parks in various stages of planning and operation located on Indian reservations in Arizona. All of the Arizona tribes except the Navajos, who are large enough to have their own very active industrial development program, have formed what is called the Indian Development District of Arizona which is actively and successfully pursuing the attraction of industry to these industrial parks. Industrial leaders across the Nation are finding that the Indians make excellent employees and that their absenteeism is at least average and in many times below that of industrial employees in other parts of the Nation. They are finding that the Indians are very adept at learning new skills, and they are also finding that there is a very large untapped labor supply on the Indian reservations in Arizona.

Almost all of the industries that have settled on the reservations in the last few years are extremely pleased, and these industries range from one small plant with

11 Indian employees to one electronics firm which employs over 1,000 Indians on the reservation.

I bring these facts to the attention of the Senate because it shows that the Indians of Arizona have begun to take the initiative in their development, and it shows the cooperation that can be brought about between Indians and non-Indians in economic development endeavors.

True, there are many real estate tax advantages to those plants built on the reservations; but when an Indian is employed, he is transformed into a more self-supporting citizen with an increased income giving him some of the better things of life. Also, as each one is employed, many of them come off the relief rolls and are made self-sustaining citizens of our State and our Nation.

And so, Mr. President, I would like to focus the attention of the Senate today on the outstanding progress being made by our Indians; and even though this is a small beginning, the roster of industries settling on our reservations is beginning to read like a "Who's Who of American Business Today." As a Senator representing the great State of Arizona, I would like to extend an invitation to all of American industry to inspect the facilities and the advantages of working with the Indians in Arizona.

CONCERN FOR FOREIGN AID PROGRAMS

Mr. McGEE. Mr. President, as one who has long supported, both in principle and fact, the Nation's foreign aid programs, I have become concerned with the attitude which leads to a lessening of our efforts in this field. It is a subject of no little complexity and embraces other nations as well, as a report which appeared in the Washington Post of Sunday tells us.

That report, excerpted from the report of the Commission on International Development headed by former Canadian Prime Minister Lester B. Pearson, deals intelligently with the flagging support for international aid and makes the point that the stagnating volume of aid and the hardening of terms occur at a time when developing countries have greatly increased their capacity to use outside assistance efficiently. These opportunities are met with obstacles that must be overcome by effective integration of aid, trade and investment policies, the report concludes.

The document, both in its entirety and in this condensation, deserves attention. I ask unanimous consent that the excerpted report published in the Washington Post be printed in the RECORD.

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

FOREIGN AID

(Excerpted, by permission of Praeger Publishers, Inc., from "Partners in Development: Report of the Commission on International Development" headed by Lester B. Pearson, former Prime Minister of Canada.)

The widening gap between the developed and developing countries has become a central issue of our time. The effort to reduce it has inspired the nations left behind by the technological revolution to mobilize their resources for economic growth.

It has also produced a transfer of resources on an unprecedented scale from richer to poor countries. International cooperation for development over the last twenty years has been of a nature and on a scale new to history.

The transfer of resources that gave substance to this international cooperative effort began after the war and increased rapidly in the late 1950s. By 1961, almost $8 billion, or nearly 1 per cent of the gross national product (GNP) of the high-income, noncommunist nations, was flowing into low-income nations. There were also additional transfers from the Soviet Union and other Communist countries.

Though after 1961, the total flow failed to grow as rapidly as the economies of the wealthy nations, the absolute level did steadily increase until by 1968 it had reached a total of $12.8 billion in public and private resources from the noncommunist countries alone.

The experience which we have gained in the last two decades bears out the premise—and the promise—of the effort that has been made. Economic growth in many of the developing countries has proceeded at faster rates than the industrialized countries ever enjoyed at a similar stage in their own history.

The fears that economically underdeveloped parts of the world were incapable of growth, or that their political problems would be so great as to preclude any economic advance, have proved to be unfounded. Many of the developing countries have shown themselves capable of a major development effort.

A SPIRIT OF DISENCHANTMENT

However, international support for development is now flagging. In some of the rich countries, its feasibility, even its very purpose, is in question. The climate surrounding foreign aid programs is heavy with disillusion and distrust. This is not true everywhere. Indeed, there are countries in which the opposite is true. Nevertheless, we have reached a point of crisis.

The question which now arises is whether the rich and developed nations will continue their efforts to assist the developing countries or whether they will allow the structure built up for development cooperation to deteriorate and fall apart. The signs are not propitious.

In the last years of this decade, the volume of foreign official aid has been stagnant. At no time during this period has it kept pace with the growth of national product in the wealthy nations. In fact, the commitments by the United States, which has been much the largest provider of aid funds, are declining. There, and in some other developed countries, we have encountered a spirit of disenchantment.

Some of this is due to the fact that attitudes in donor countries often have been affected by misconceptions and unrealistic expectations of "instant development" when we should have known that development was a long-term process. There has also been strong criticism of waste in the use of aid in the developing countries and complaints that aid activities lead inevitably to entanglement in political conflict and military hostilities in which recipient countries may become engaged.

COMMITMENTS AT HOME

A good deal of bilateral aid has indeed been dispensed in order to achieve short-term political favors, gain strategic advantages or promote exports from the donor. Much foreign aid was granted in the 1950s to enable some countries to maintain large armed forces rather than to promote economic growth. In none of these cases was the promotion of long-term development a dominant objective of the aid given.

It is hardly surprising, therefore, that hopes of satisfactory development progress were disappointed or that aid given as "defense support" has on occasion led to greater involvement in a deteriorating security situation affecting the recipient country. Nor is it surprising, either, that there should often have been criticism because of misconceptions of what this kind of aid was meant to achieve.

There has also been a lessening of support for genuine development aid, in part at least due to the increasing complexity and seriousness of domestic problems—the deepening commitments to abolish poverty and deal with such questions as civil rights, economic discrimination and urban and environmental problems.

It is not only among the developed countries that the climate has deteriorated. On the developing side, too, there are signs of frustration and impatience. In much of the developing world there is a sense of disillusion about the very nature of the aid relationship.

Our travels and studies have convinced us that we have come to a turning point. On all sides we sense a weariness and a search for new directions.

The period of development cooperation began with a number of presuppositions on both sides. Some—as we have seen—were unrealistic and unfortunate. Development was often seen in new nations as the economic continuation of the political struggle for independence; as an important means of creating a new national identity or of breaking old and restrictive ties. The elimination of alien rule was thought by many to open the way to early and easy prosperity.

The nature of the obstacles which stood in the way of quick results, or the decisions which had to be taken to achieve any results at all, were not always understood. The need for export growth was underestimated, agricultural development was usually neglected. Development was also too often only seen as a consequence of decision-making at the top. The vital need to bring about mass participation in development was at times sacrificed to the enrichment of special groups or individuals.

Donors and recipients alike tended to view the modernization and development of low-income countries as an attempt to repeat the Industrial Revolution in quick time. They focused inordinate attention on individual investment projects and relatively little on the causes and results of stagnation.

Recipients as well as donors also tended to expect too much too soon from aid supplementing the national development effort. A dramatic change in the lives of hundreds of millions of people was expected from a relatively modest flow of resources, much of which was offset by unfavorable trends in the terms of international trade.

WORKING FROM WITHIN

The understanding of these problems, however, has grown. Past approaches have been modified and coordinated and better results are being secured. The developing countries have more and more come to recognize that their economic policies must look outward and strive for competitive strength; that agricultural growth is indispensable in order to raise levels of living for the large majorities of their populations and to provide markets for their growing industries.

The most cumbersome controls have been relaxed, and much more attention is paid to the mobilization and a location of resources through incentives to individual effort. Above all, it is realized that development must come from within, and that no foreign help will suffice where there is no national will to make the fundamental changes which are needed.

It has become very clear that the impact made by the contribution of resources from outside depends on the efficiency with which

the recipient uses his own resources and on his overall economic and social policy. Both sides have learned that cooperation for development means more than a simple transfer of funds. It means a set of new relationships which must be founded on mutual understanding and self-respect.

Good development relations also require the acceptance of a continuing review of performance on both sides not dominated by either the donor's or the recipient's immediate political or economic interests or pressures. Aid to be effective, requires less uncertainty and more continuity than is often the case today. It cannot be disrupted or cut off without harmful results to the recipient's capacity to plan for the future.

Wealth does not entitle a rich and powerful country to dominate another country's national life as a consequence of the aid it may have given. On the other hand, it is impossible for any country to transfer public funds abroad without being able to satisfy its citizens that these funds are being effectively used to reach acceptable development goals and that the receiving countries are making strong efforts of their own to improve their situations. The "development relationship," which is at the heart of efficient aid policy, must be based on a clear division of responsibilities which meet the needs of both partners.

In recent years, the volume of aid has stagnated, the terms have hardened and the conditions have become more restrictive. This is happening at a time when the success of many developing countries has greatly increased their capacity to utilize additional resources effectively. To overcome the obstacles and take advantage of the opportunities for further growth will require that aid, trade and investment policies are integrated in a single strategy which rests firmly upon the performance of the developing countries themselves and the sustained commitment of the richer countries.

INDUSTRIAL UNION DEPARTMENT OF AFL–CIO SUPPORTS U.S. RATIFICATION OF HUMAN RIGHTS CONVENTION

Mr. PROXMIRE. Mr. President, a great deal of concern exists over the long-time failure of the Senate to act in the important area of human rights.

As I speak again today to urge the ratification of Human Rights Conventions on Forced Labor, Genocide, and Political Rights of Women, I refer to a statement by Jacob Clayman, administrative director of the AFL–CIO Industrial Union Department. It was made at the Dodd subcommittee hearings in 1967 and is worthy of recall. He said:

> There's a concern among workers that our nation assume its rightful role as a world moral leader. There is a deep commitment in the American labor movement to the thesis expressed by the late President John F. Kennedy who profoundly observed that the United States "cannot afford to be materially rich and spirtually poor."

Mr. Clayman also declared:

> Fifteen years, 16 years, is a long time to wait for the ratification of any agreement or convention. The long lapse of time, has, I am afraid, blurred our memories and obscured the issue and dulled our conscience. There have been times in our history when the Government has needed prodding or intervention from citizens and citizens' organizations.
>
> There is an almost Alice in Wonderland unreality to the Senate's magnificent speedy approval of the United Nations Charter and the Senate's snail-like pace on the United Nations Human Rights Conventions.

He mentioned the Senate's taking only 33 days to approve the U.N. Charter and remaining immobile on the matter of genocide for—by now—20 years.

Mr. Clayman's statement was an accurate gauge of events and ironic inaction.

We are still immobile, despite the fact that five American Presidents have pointed out the fundamental interrelation between this country's national interests and human rights.

I feel that our adherence to these Human Rights Conventions can make a very real contribution to the basic national interest of the United States.

FOND DU LAC COMMONWEALTH REPORTER CENTENNIAL YEAR

Mr. NELSON. Mr. President, I wish to congratulate the Fond du Lac, Wis., Commonwealth Reporter, a newspaper that is observing its centennial year.

When the first edition of the paper was printed on August 22, 1870, the Nation was recovering from the Civil War. Now, 100 years later, there is another war.

Through this important period of American history, the Fond du Lac Commonwealth Reporter has maintained a high quality of service to the community.

I ask unanimous consent that an editorial entitled "Our Centennial Year," published in the Commonwealth Reporter of August 22, 1969, be printed in the RECORD.

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

OUR CENTENNIAL YEAR

"With lifted cap, and pleasant smile, we greet you. . . ."

That was the introduction on Aug. 22, 1870, when the "Commonwealth Company" began publication of the Fond du Lac Daily, the first successful daily newspaper in the city's history.

Today—as the Commonwealth Reporter starts its centennial year—the original comment of nearly 100 years ago carries added meaning.

It takes us back to an era when Ulysses S. Grant—a later visitor to Fond du Lac—was President of a nation still shattered from the wounds of the Civil War. And it also gives us renewed awareness that while a long journey has been completed there are many miles still to be traveled.

The man who wrote that introductory line for the Commonwealth Company was J. A. Watrous, a highly respected, temperance-minded editor who at that time also harbored unfulfilled ambitions to win a seat in Congress.

His partner in the Fon du Lac Daily was Thomas B. Reid, described as a "jolly, bustling" man whose activities were said to be somewhat curtailed because of an ailing wife. In less than two months after the first edition, Reid sold out and his name was dropped from the masthead, even though he remained on the business staff.

Since only weeklies seemed able to survive in Wisconsin's pioneer communities, Watrous, in his first issue, mingled caution with hope in discussing the journalistic product he was about to send into Fond du Lac homes.

"We trust it will not be an unwelcome visitor," he said, speaking of the paper. "We commence small—creep before we walk."

Watrous offered Fond du Lac readers a stable of writers that included Miss Allie Arnold (who wrote poetry), Miss Georgia Benedict, Col. C. K. Pier, Dr. George M. Steele (president of Lawrence University) and Gen. John A. Kellogg of La Crosse.

Getting the paper delivered a century ago wasn't the well-organized procedure it is today. In fact, Watrous appealed to subscribers to nail cigar boxes on their gate posts as receptacles for the new publication.

He also boasted of "a fine corps of paper carriers," yet wisely suggested that persons interested in speedy delivery would do well to accept the paper at their place of business downtown.

The Fond du Lac Daily, right from the beginning, involved itself in all local affairs. Subjects in early editions ranged from "The History of the Cotton Street M. E. Church" to shenanigans going on in "those whiskey saloons on Brooke Street."

Watrous, as a veteran newspaperman, was ready for anything. His name was listed as Editor-in-Chief and the paper declared that "to him all communications for its columns should be made, and against him all actions for libel commenced."

The Commonwealth firm had its share of troubles. The press broke down. Deliveries were messed up. And during mid-October of 1870—when Watrous was wearing two hats as an editor and a candidate for Congress—the newspaper moved from its "underground cellar" office into a new four story building on Forest Avenue.

When that hectic transfer was completed, Watrous remarked that it was his ambition to "make the Commonwealth the very best newspaper in the state. . ."

It was clear that, through the sheer drive and hard work of the men behind it, the Commonwealth was here to stay.

Its competitor, the Weekly Reporter, did not move into the daily field until Chicago-born Louie A. Lange and J. L. Thwing combined talents in 1883. Thwing, who had worked as a newspaperman in Milwaukee, preceded Lange on the Reporter editorial staff. Lange, who had learned the printing trade as a youngster in Fond du Lac, decided to come back to the community after working in LaPorte, Ind. and Milwaukee.

As "editors and proprietors" they published the first issue of the Daily Reporter on March 31, 1883. Lange, who also served in the State Legislature, acquired full ownership of the paper in 1885. In 1894 he also purchased the Fond du Lac Journal—founded as the community's first newspaper in 1846—and merged it with the Reporter.

The success of the Reporter was demonstrated in 1896 when the Lange Block building was completed at the southeast corner of West Second and Macy Streets. Newsmen and printers began evacuating old quarters at 88–90 Macy Street in December of that year, and one indication of the turmoil was the frank editorial admission that "everything is upside down."

The new Lange Block structure was praised lavishly by a Milwaukee publication as perhaps the best newspaper plant in Wisconsin. It was three stories high (one story has since been removed), with office space rented on the second floor and the third story rented to various religious organizations for special events.

For years the Daily Commonwealth and Daily Reporter were rival papers. Their staffs sought "scoops" and their sales representatives competed for advertising dollars. Both papers remained healthy, with the Commonwealth flourishing in the P. B. Haber building and the Reporter gaining added momentum after reorganizing as the Reporter Printing Co. in 1903.

Over the years, of course, there were rumors that one paper was going to buy the other out.

A recently found letter, written by Lange in 1915, two years before his death, indicated that he was willing to sell "at a fair price" to the Haber firm. However, the transaction went the other way.

In October of 1926, with A. H. Lange—a

nephew of the Daily Reporter founder—serving as president, the Reporter Printing Co. bought out the Daily Commonwealth.

Readers were introduced to a new, larger daily called the Fond du Lac Commonwealth Reporter.

So as a newspaper our history parallels the progress of Fond du Lac County. Much has happened over the years, and carrier pigeons no longer are used to "rush" baseball scores to the newsrooms as they were back in the days that preceded establishment of efficient wire services.

The Commonwealth Reporter has seen plant renovations, the addition of new departments, purchase of much modern equipment and editorial and advertising changes.

To celebrate our centennial year we're planning a series of unusual events and public service programs in which we believe everyone will be interested.

Since our beginning as a daily in 1870 much history has been recorded and much more is still to be written.

The Commonwealth Reporter is proud to have played a role in Fond du Lac's growth, and its time-worn pages—now preserved on microfilm—reflect the lives and achievements of those who have lived here.

In our opinion, Fond du Lac is a community with much to offer and, on this occasion, we feel the warmth and glow of a long, tested friendship.

We realize, of course, that you may not always agree with what we say or the way we say it. But our interest, first and always, is to make Fond du Lac an even better place to live.

It is in this spirit that we sincerely wish to invite each of you to share in making the coming year a pleasant and memorable celebration of our 100th birthday.

THE ERADICATION OF THE SCREWWORM

Mr. GOLDWATER. Mr. President, today I invite the attention of the Senate to an outstanding example of international cooperation as well as State, national, and private enterprise cooperation.

This concerns some of the events that have been taking place since 1962 in the cattle industry. Since that time, the National Livestock Producers' Confederation of Mexico and the Southwest Animal Health Research Foundation of this country have cooperated with the U.S. Federal Government in almost completely eradicating from our country and Mexico one of the most vicious pests that has plagued the livestock industry since its beginning in this country.

I refer to the outstanding work done by all of these groups in the complete eradication of the screwworm from the United States. The National Livestock Producers' Confederation of Mexico and the Southwest Animal Health Research Foundation and the U.S. Department of Agriculture, as well as the State governments of the States of the South and Southwest, have all cooperated in an outstanding way to bring about this achievement. The effect of this has been the savings of millions of dollars to cattle growers and livestock producers in all of these areas.

Mr. President, this is also an outstanding example, believe it or not, of the peaceful use of atomic energy, and it also has had a remarkable effect on the conservation of wildlife in this country.

The screwworm has been a scourge and has caused great losses in the Southwestern United States and Mexico causing large economic losses not only by injuries and death to animals but, in addition, time and labor involved and the expense of insecticides and medicines.

The elimination of this pest has been brought about through the aerial release of sterile screwworm flies over infested areas. It should be noted with some satisfaction that the accomplishment of this eradication is the fulfillment of one of the points of discussion by the President of Mexico and the President of the United States at the Punta del Este Conference held in 1965.

It is my hope, Mr. President, that many more of our mutual problems with our neighbors to the South may be solved in this fashion and that the excellent cooperation between two groups as has been demonstrated by the livestock men of both countries may be continued. I also wish to stress that the cooperation between the Federal Government, State governments and the private sector has combined to make this possible. Perhaps from this, too, we can learn some lessons to help to solve other problems in our society.

FINANCIAL INSTITUTIONS PROVISIONS OF HOUSE-PASSED TAX REFORM BILL

Mr. McINTYRE. Mr. President, I wish to speak today about another set of provisions in the House-passed tax reform bill—the provisions of that bill dealing with financial institutions.

The House-passed bill makes four changes in this particular area. Two of these changes—those dealing with the bad debt reserves of commercial banks and the treatment of bonds and certain other securities held by financial institutions—are fully justified. They are in fact required by equitable considerations. Third—extending the tax-exempt status of foreign deposits in U.S. banks—is arguably required by our balance-of-payments situation. The fourth change, however, is quite unfortunate, and it is to this change that I address my remarks today.

I am deeply concerned by the changes made by the House-passed bill in the methods used by mutual savings banks, savings and loan associations, and cooperative banks to compute their bad debt reserves.

While most business organizations must compute their bad debts reserves on the basis of their actual loss experience an exception has traditionally been made for the types of institutions to which I have just referred. These mutual institutions have been allowed to base their reserves on either of two alternative formulations, both of which usually produce larger reserves, and hence tax savings, than would a calculation on the basis of loss experience.

The House-passed bill would eliminate one of these two alternatives and greatly impair the usefulness of the other. These changes are necessary, according to the House Ways and Means Committee, because there is no justification for allowing mutual institutions a lower effective tax rate than that available to most other corporations.

Mr. President, I strongly disagree. I am, of course, a strong believer in the equitable treatment of all taxpayers in a similar position. But mutual institutions are unique organizations, which clearly deserve to be treated differently from normal corporations.

Mutual institutions are the prime source of funds for residential housing, one of our most urgent national needs at this time. If the House-passed bill became law, however, it would greatly restrict the loans which mutual institutions could make for this purpose. Increased taxes would mean less funds for loans, a lower return, and less protection for depositors, and would further retard an industry already hard hit by high interest rates. It strikes me as the height of folly to undermine in this way the determined efforts other members of our Housing Subcommittee and I have made in recent months to enable us to meet our urgent housing needs.

For this reason I feel that the equitable considerations urged by the Ways and Means Committee are not applicable. On the contrary, I believe it is imperative that we retain unchanged both of the alternative methods presently available to mutual institutions in the computation of their bad debt reserves. Congress recognized a short time ago that both of these methods were needed because of the different situations in which these organizations might find themselves. There is no reason whatsoever to reverse this conscious congressional decision now.

There is one minor change which might be made in this area of our tax laws, however, to insure that the benefits of the provisions in question are indeed made available only to those institutions for which they are designed.

At present, savings and loan associations and cooperative banks are entitled to use the altenrative computation methods only if they meet a comprehensive set of investment standards, established by Congress in 1962 to insure that these tax benefits would be available only to institutions primarily engaged in home mortgage financing. In general, these standards require that 82 percent of the institutions' assets must be invested in residential real estate, liquid reserves, and certain other "qualifying assets." Mutual savings banks, however, are not subject to any such investment standards and may use the special reserve methods regardless of the amount of their investments in home fortgage financing. The Ways and Means Committee has proposed to solve this problem by imposing investment standards similar to those now applicable to other mutual institutions on mutual savings banks as well.

My remarks thus far have been directed to the provisions of the House-passed tax reform bill. I shall conclude by saying a few words about the changes proposed by the administration in this area.

The administration proposal would require all financial institutions—whether commercial banks or mutual institutions—to compute their bad debt reserves on the basis of loss experience. It would attempt to do this without cutting off the flow of funds to residential housing by giving financial institutions a special tax deduction equal to 5 percent of gross

interest income from loans for approved projects.

I am convinced that this proposal would not work and that it would have even more adverse effects on our housing programs than would the House-passed bill. Letters I have received from mutual institutions in my home State of New Hampshire are unanimous in their conclusion that the administration proposal would seriously weaken their competitive position and force them to divert their assets increasingly into nonmortgage uses.

Mr. President, I heartily endorse the action of the House in extending to mutual savings banks the investment standards now in our laws. We must have no major changes, however, in the degree of tax benefit currently available to true mutual institutions legitimately engaged in the housing field.

PUBLIC HEARINGS—TAX REFORM ACT OF 1969—SUMMARY OF TESTIMONY

Mr. LONG. Mr. President, yesterday, the Committee on Finance began its final 3 days of public hearings on the House tax reform bill. Testimony centered around the proposed tax treatment of private foundations. The principal statement was presented by a distinguished 19-man panel which touched on virtually every aspect of philanthropy and on the impact of the bill on charitable giving and foundation activities. Additionally, testimony was received with respect to the effects the House bill would pose for educational television.

So that Senators might follow the progress of these tax reform hearings, I ask unanimous consent that a summary of the testimony be printed in the RECORD.

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

FOUNDATIONS

I. The Role of Foundations in American Life

IRWIN MILLER, CHAIRMAN OF THE BOARD, CUMMINS ENGINE CO., COLUMBUS, IND.

Foundations

Emphasizes that although foundations constitute only approximately 8 percent of the total philanthropy, they play a vital role in the pioneering of thought and action. States that foundations are uniquely qualified to experiment with new and untried ventures; thus, they can take dissenting positions from prevailing attitudes. In addition, they are flexible and can act quickly when the need arises. Points out that foundations have pioneered and assisted pioneers, scientists, scholars, and innovators, and have strengthened those organizations concerned with these vital activities. Notes that they have often anticipatd social and international problems and mobilized knowledge for dealing with them.

States that it has been clear for several years that some abuses exist, but adds that the preponderant number of private foundations perform their functions without tax abuse. Indicates, though, that even the few abuses are too many and must be rooted out. Feels that the proposed measures to curb fiscal abuses are good, and are supported by most foundations; however, several of the abuses could be curbed by better enforcemnt of existing law. States that a tax on private foundations is patently inconsistent with the reason society sanctions foundations. Emphasizes that to reduce these publicly dedicated funds by any percentage is to diminish the value to society by just that amount.

Feels that proposed limitations on programs are unwise in that they attempt to eliminate "bad judgment" and in doing so allow for only the most bland kinds of judgments, and only the most bland kinds of activities by foundations. Concludes that the tax and program limitations act as a signal to discourage private philanthropy and thereby the whole private foundation sector of American life.

Recommends that foundations, like all other public institutions, should be accountable to society. Points out that the basic ingredients of a balanced system of accountability are already at hand—the Government could fully enforce existing law. Recommends that a foundation registration fee should be enacted which would be earmarked for enforcing existing law as well as proposed law to curb fiscal abuses. Suggests that the agents of accountability, other than the Government, are (1) public disclosure and the press, (2) broadbased boards of trustees, (3) "market evaluation" by foundations recipients and (4) congressional inquiry.

Urges the Congress to adopt those parts of that bill that are directed toward preventing abuses, such as self-dealing or inadequate returns to charity and that the Congress eliminate those measures, such as the tax and the program limitations, which would vitiate the capacity of foundations to continue their productive service.

HERMAN WELLS, CHANCELLOR, INDIANA UNIVERSITY, BLOOMINGTON, IND.

Private foundations

Emphasizes that foundations are vital forces in higher education via scholarships for needy students, funds for facilities and equipment and grants for research. Points out that often foundations come to the rescue when no other support is available. Feels that foundations have had beneficial repercussions far beyond the campus and region and will extend long past the present time.

States that taxation of foundations will reduce funds available to higher education; the size of the reduction is no measure of the potential removed by such action. Emphasizes that at a time of crisis in financing higher education, even the direction of such a move is disheartening. Concludes that the tax yield is miniscule in comparison with its detrimental effect on higher education. Feels that if taxation of foundations is initiated, there is a strong likelihood that the percentage will be increased in succeeding years. Points out that most foundations have an excellent record; therefore, punishment for the abuses of a few should not be visited on the many. Believes that the prohibition against private foundations engaging in activities intended to influence legislation has crucial implications. States that it is dangerous to prohibit unpopular ideas or the concept which is ahead of the times. Maintains that foundations are an expression of free enterprise by providing support for the unusual man and the unusual idea. Concludes that the American foundation is one of the instrumentalities by which our independence and freedom are maintained.

II. Effect of the Legislation (Proposed Tax) on Beneficiaries

FATHER THEODORE M. HESBURGH, PRESIDENT, UNIVERSITY OF NOTRE DAME, NOTRE DAME, IND.; FRANK C. ERWIN, JR., CHAIRMAN, BOARD OF REGENTS, UNIVERSITY OF TEXAS SYSTEM, AUSTIN, TEX.; DR. JOHN COOPER, EXECUTIVE SECRETARY, ASSOCIATION OF AMERICAN MEDICAL COLLEGES, EVANSTON, ILL.; FELIX ROBB, DIRECTOR, SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS, ATLANTA, GA.

Private foundations—Effect of the legislation (proposed tax) on beneficiaries

States that the proposed 7½ percent tax would diminish current funds for support of education and scientific research by at least $65 million a year. Emphasizes that even more serious is the desire of some critics to terminate the existence or tax exemption of all foundations after a period of years. Believes that foundations have been of immense value to the American society. Points out that through a system of matching grants, the Ford Foundation's Special Program in Education has stimulated many colleges and universities to develop resources considerably in excess of the original grants; likewise, Rockefeller, Sloan, and Carnegie Foundations have made major contributions to education. Maintains that without such assistance, there is serious question whether the independent sector of our dual, private/governmental system of higher education can survive.

Contends that a tax on foundation income would bring a major reduction of that assistance. Feels that Congress should legislate against specific abuses rather than to diminish the funds with which foundations make their vital contributions to the private educational system. Points out that private foundations contribute substantially to the training of our doctors, research technicians, nurses, and other medical personnel. Believes that even more important, they provide vital assistance in medical education such as establishing new medical schools and by assisting in the development of new techniques of medical education, new curricula, and new methods of relating medical facilities to the provision of health care of our citizens. States that financial assistance in these areas is difficult, if not impossible, to obtain.

Points out that foundations have afforded key support to State and municipal colleges and universities. Urges that the south, with an enormous burden of children to educate and fewer dollars to do the job than any other region, is especially vulnerable to any change in public policy that would limit the flow of private funds for education and make equalization of educational opportunity more difficult. Concludes efforts to transform talented but underprivileged youth from public liabilities to productive, educated citizens provide further dramatic evidence of the dividends accruable from strategic foundation investment in human development.

III. Effect of the Tax as Seen by Foundations

GEORGE HARRAR, PRESIDENT, ROCKEFELLER FOUNDATION, NEW YORK, N.Y.; ALAN PIFER, PRESIDENT, CARNEGIE CORPORATION OF NEW YORK; DAVID FREEMAN, PRESIDENT, COUNCIL ON FOUNDATIONS, NEW YORK, N.Y.

Tax on foundations

Opposes the 7½ percent tax on foundation income. Believes enactment would be contrary to national interest.

Role of tax exemption for charitable purposes

Points out that no distinction has ever been made between types of charitable organizations under the sec. 501(c)(3) income tax exemption. Maintains that an income tax on foundations would destroy this principle and constitute a breach of long-standing national practice; would serve as a precedent for future taxation of other classes of charitable organizations; would encourage other levels of government to impose income taxes; and would lead to a weakening of the private nonprofit sector by endangering the freedom of private institutions through possible arbitrary increases in tax or restrictions on activities.

Justification for private foundations

Considers voluntary philanthropic system to be the essence of free enterprise in its flexibility to enter new fields of social concern. Emphasizes that, while Government has entered into social welfare extensively, work of private foundations continues to be necessary in meeting vast social needs.

How the tax would affect foundations

Rockefeller Foundation (p. 129 of committee print).—Indicates that the foundation has appropriated all its income and over $230 million of its principal to philanthropic projects, many of which have preceded Government activity in the field of social welfare. Claims that the proposed tax would cost the foundation's beneficiaries more than $3 million per year, and also hamper its overseas programs.

Carnegie Corporation.—Notes that the corporation has distributed $400 million since 1911, and that the proposed tax would reduce future grants by $1.2 million per year.

Smaller foundations (p. 136 of committee print).—States that foundations across the country concentrate giving on local educational and charitable institutions. Questions whether Congress intends to discourage development of these local organizations by reducing the available funds from foundations.

Other arguments against tax

Maintains that burden of tax will fall on educational, health, and welfare agencies; the tax applies indiscriminately against all foundations, and would be ineffective in correcting abuses; the tax will produce insignificant governmental revenue, yet will be a serious blow to charitable institutions as tax will be more than a user fee; the tax is inconsistent with continued policy of tax exemption; and the tax is a punitive measure, not reform, against only one form of charitable organization.

Proposed alternative to foundation tax

Recommends an annual fee assessable on foundations in proportion to assets, with the amount of fee determined annually to assure adequate supervision of foundations.

IV. Effect of Program Limitations

MERRIMON CUNINGGIM, PRESIDENT, DANFORTH FOUNDATION, ST. LOUIS, MO.

Grants to individuals

Maintains that the partial prohibition against grants to individuals might still handicap unduly some worthy programs. Recommends modifications in the wording of the bill which would allow the continuance of worthwhile programs, carefully defined, publicly announced and impartially administered.

Any attempt to influence legislation

Argues that this provision (sec. 4945(c), pp. 44–45 of the bill) is potentially the most serious issue raised for foundations by any part of the bill and it would inhibit or prevent presently approved activities by foundations that would adversely affect their freedom to contribute to general welfare. Maintains that the bill seems to have intended only to make sure that foundations do not engage in partisan political activity. Recommends changes in the language of the bill concerning this prohibition to avoid the proscription of worthy foundation activity.

HOMER WADSWORTH, PRESIDENT, KANSAS CITY ASSOCIATION OF TRUSTS & FOUNDATIONS, KANSAS CITY, MO.

General

States that this group of spokesmen do not oppose provisions of the bill that outlaw self-dealing, requirements that would assure that private foundations spend their income for charitable purposes, and provisions that would require full disclosure of all foundation activities.

Proposed tax on private foundations

Opposes as fundamentally punitive and totally inconsistent with the effort of our Government over many years to encourage private giving and private efforts to accomplish worthy public purposes. Supports a fee payment to provide the Treasury with sufficient funds to maintain an adequate staff for review annually of all foundation activities to assure compliance with the law.

Contact with Government officials

Points out that the bill would restrict severely foundation contact with government officials and can only have the effect of numbing foundation efforts and driving foundation money away from the areas in national life that are of current concern. States that private foundations and other exempt organizations have *less* sanction in present law and regulations for presenting their views to public bodies than business organizations. Suggests that the bill be amended to protect the rights and privileges of private foundations.

Expenditure responsibility

Indicates that this provision of the bill means that "the private foundation is fully responsible—to see that the grant is spent solely for the purpose for which made, to obtain full and complete reports from the grantee on how the funds are spent, and to verify the accuracy of such reports, and to make full and detailed reports with respect to such expenditures" to a designated government official. Suggests that the amount of follow-up and inspection which the bill requires is excessive, and perhaps even impossible to provide. Urges a rule of reason (responsibility of applying reasonable diligence to foundation relations with grantees) rather than as an insurer, with absolute liability for the grantee's conduct.

W. RUSSELL ARRINGTON, PRESIDENT PRO TEMPORE, ILLINOIS STATE SENATE, TESTIFYING FOR THE CITIZENS CONFERENCE ON STATE LEGISLATURE, CHICAGO, ILL.

Possible consequences to the citizens conference on State legislatures

Points out that the citizens conference's activities provide advisory and technical services to some 16 State citizen commissions that study and recommend procedures for legislative modernization, conduct research and publish comparative information about legislative improvement, conduct media conferences to provide for an exchange between State legislators and editors, publishers, station owners and managers, and inform the public how the electorate has supported or rejected amendments concerning legislative articles of State constitutions. Asserts that the abandonment of the "substantial activities" test will effectively proscribe the above-described activities and will prohibit the private sector from working to improve government at any level.

Recommends that the bill be revised to allow organizations classified as private foundations to mobilize public support to study, recommend, and change, if need be, governmental units. Suggests safeguards—that the activity be nonpartisan in nature, national in scope, that it not engage in support of or opposition to candidates, that the activity be general in nature rather than advocating particular legislation, that partisan election campaigns be avoided and that all financial transactions be disclosed between a tax-exempt organization and government officials.

V. Effect of Distribution Requirements (Including Problems Raised by Definition of Qualifying Distributions)

JULIUS STRATTON, CHAIRMAN OF THE BOARD, THE FORD FOUNDATION, NEW YORK, N.Y.

Private foundations

States that "private foundation" is a term newly introduced to the Internal Revenue Code by the proposed legislation, lumping together for the first time as "private foundations" all 501(c)(3) organizations except certain specified categories. Contends that because of this new definition, many important and worthwhile nonprofit institutions which are not primarily grantmaking organizations, which depend heavily on foundation support, and which have never before been thought of as foundations may now be considered so and subject to the new restrictions in the bill.

Warns that there are three far-reaching consequences of such redefinition:

(1) Such organizations would be subject to the proposed taxes, thereby reducing the funds available for their educational, research, and scientific activities.

(2) They would be subject to the many other regulations and program limitations in the bill, limitations which earlier witnesses have discussed.

(3) They would have far greater difficulty in obtaining support from philanthropic foundations.

Qualifying distributions

Maintains that although the broad requirement of paying out current income would not cause serious problems for most foundations, difficulties arise because of the uncertainties surrounding who would be eligible to receive foundation grants and how these grants should be disbursed and managed.

Recommends that:

(1) A more precise definition of "private foundations" should be formulated—a definition which would include only what have commonly and logically been regarded as philanthropic foundations.

(2) A simply test should be established—based on a concept in the current Internal Revenue Code relating to operating foundations—under which grants that flow promptly to charity would be qualifying distributions.

(3) The penalty provisions in the bill should be reconsidered. Warns that without clarifying changes of the sort suggested, the traditional role foundations have played in our national development may be seriously impaired.

WHITNEY NORTH SEYMOUR, CHAIRMAN, COUNCIL ON LIBRARY RESOURCES AND THE INTERNATIONAL LEGAL CENTER, NEW YORK, N.Y.

Operation foundation

Describes the organization and work of the Council on Library Resources, an independent, nonprofit organization established in 1956 for the sole purpose of aiding in the solution of library problems. States that the council engages in no self-dealing activities, all of its income is spent in furthering the purpose for which it was formed, it has no endowment, it controls no businesses, it owns no stock.

Fears, however, that the language of H.R. 13270 defining operating foundations, eligible to receive qualifying distributions from other foundations, might mean that the council might possibly be forced to terminate its greatly-needed activities. States that although the council meets unreservedly the provision that all of its income be expended directly for the active conduct of the activities for which it was organized, it cannot devote more than half of its assets to this purpose since it has no "assets" as indicated by the examples in the House report, and its support comes entirely from one source, the Ford Foundation. Feels that although philosophically the council is an operating foundation, it might not be considered so under the definition which seems to be established by the legislation.

Expresses concern on similar grounds in regard to the International Legal Center. Points out that its accomplishments would not have been possible without the initial underwriting provided by the Ford Foundation, that a nonprofit service-type organization cannot become viable from inception or even launched without such financial backing. Feels that the center, like the council, might be placed in jeopardy by ambiguities in the provisions of the bill now before the committee. In this connection, asks the committee to clarify that portion of the definition of an operating foundation which

refers to assets, and to the word "directly" as applied to the use of assets. Expresses the belief that it cannot be the Congress' intention to disrupt the efforts in the public interest of organizations like the council and the center. Urges the committee to consider carefully and rewrite the provisions he has cited in such a way as to eliminate the evils which called them into being, and at the same time clarify them so that the effectiveness of honorable and essential institutions may be destroyed.

VI. Restrictive Efforts on the Development of Philanthropy and Operation of Foundations (Including Effects of "Expenditure Responsibility" and Heavy Penalty on Trustees)

DANA S. CREEL, PRESIDENT, ROCKEFELLER BROTHERS FUND, NEW YORK CITY

Treatment of private foundations under the tax reform bill

Claims the penalties and remedies proposed in the reform bill are excessive and tend to diminish the funds of foundations available for legitimate philanthropy. Believes these penalties subject management, both staff and trustees, under very substantial personal liabilities, and would greatly reduce the ability of foundations to attract the best caliber of management. Also, that these penalties create onerous and in some cases impossible requirements on foundation administration.

Indicates a preference for State regulation of private foundations, but suggests that at this point this would not be satisfactory because of the past failure of a number of States to undertake effective programs of enforcement. Believes States should be encouraged to undertake such responsibility. Proposes for the present a system of sanctions by the Revenue Service, modified as follows:

(1) Penalties should not be imposed on foundations but rather on individual wrongdoers, for foundations are inanimate and can function only by the acts of individuals;

(2) Penalties should be flexible, reasonable in nature, with a maximum limit, and appropriately related to the acts or failures to act which are penalized;

(3) Proscribed acts or failures to act should be so defined so that transgression can be readily ascertained;

(4) A notice procedure of proposed penalties should be established, and an opportunity granted for correction of improprieties within a reasonable time before a penalty is imposed;

(5) A reasonable statute of limitations should be established with respect to penalties.

JAMES R. KILLIAN, JR., CHAIRMAN, BOARD OF TRUSTEES OF MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MASS.

Treatment of private foundations under the tax reform bill

Educational institutions, such as MIT, derive a substantial portion of their contributions from "private foundations." Believes that at a time when there is deep concern about the funding of all higher education and about the financial future of our private institutions, ways should be found to increase and not diminish private funds for education.

States the provisions of the reform bill appear to be so severe that they will probably constitute the "death knell" of foundations as we know them, and the incentive to form new foundations will be lost. Approves the objectives of the bill aimed at eliminating abuses of private foundations, but believes the penalties imposed are too harsh and are indiscriminately imposed against both the offenders and the innocent.

In addition, notes that penalty taxes are applied to existing foundations as well as those established hereafter, and suggests it is unfair to impose penalties on existing foundations established in reliance on present law which has encouraged their formation and operation.

JOHN J. M'CLOY, ATTORNEY, NEW YORK CITY

Treatment of private foundations under the tax reform bill

States the provisions of the reform bill dealing with private foundations could have a detrimental effect on American cultural, scientific, social, and educational life. Although it appears there has been some abuse of use of foundation funds, believes this has led to an abrupt and too far-reaching reversal of Congress' policy of encouraging charitable foundations through tax incentives (which have been a major influence in the progress of American private philanthropy).

States that no comprehensive or objective study of the impact of foundation grants on our life has yet been made—those who contend that foundations have not been beneficial to this country should have the burden of proof.

Contends there is an inherent inconsistency in imposing any tax on a foundation if it serves a charitable or publicly beneficial should be stimulated—if they are evil, they should be extinguished. Urges Congress not to impose a discriminatory tax on the income or assets of private foundations until it is firmly proven that this is justified.

States that a comprehensive, objective, and sustained review of the affairs of the foundations should be made based on regular audits by the Government—preferably by the Revenue Service. More should be known about the manner in which foundations' funds are distributed and spent, about the results achieved and the effect the withdrawal or diminution of these funds would have on educational, scientific, and charitable beneficiaries. Sustained audits and supervision of the foundations by the Government should be financed by an annual fee charged the foundations; however, it should not be a tax to provide general revenue.

The reform bill does contain good features with respect to private foundations; for example, those calling for fuller reporting, elimination of self-dealing, undo accumulation of funds, better enforcement procedure by the Treasury, and better cooperation with the State authorities to encourage the States to do their own policing.

OTHER WITNESS

JOHN W. MACY, JR., PRESIDENT, CORPORATION FOR PUBLIC BROADCASTING

Expenditures by private foundations with respect to public broadcasting

Notes that tax reform bill deals with "taxable expenditures" by a private foundation, generally defines such expenditures as those paid to influence legislation or the outcome of any public election, and imposes penalties on private foundations making such expenditures. Suggests this presents a question of whether a public broadcasting organization may be given a foundation grant without penalty to the foundation if the station then uses the grant to pay for presenting public affairs programs (e.g., such as news programs, documentaries, panel discussions, political debates, and interviews). Contends that it does not appear the House intended to prevent public broadcasting stations from presenting public affairs programs with the assistance of financial support from private foundations.

Recommends the bill be amended to generally exclude public broadcasting from the taxable expenditures provision by not imposing any penalty with respect to amounts paid for the production or distribution of public affairs programs which are broadcast over noncommercial educational broadcast stations.

THE CASE AGAINST THE CRITICS

Mr. DOLE. Mr. President, in the past several weeks we have heard increasing criticism of President Nixon's Vietnam policies. The President has been repeatedly attacked for failing to make "meaningful changes" in U.S. policy toward this tragic conflict. The minority leader, the distinguished Senator from Pennsylvania (Mr. SCOTT) has requested a moratorium, but the criticism continues unabated.

We are all aware that the Vietnam war has had a demoralizing effect on the American people and a devastating impact on our economy. What I cannot understand is how the President's critics can reasonably expect him to end in 10 months what the previous administration could not end in 8 years.

Maybe the answer to that question is that these critics are not asking the President to act reasonably because they see personal political gain in embarrassing and discrediting the President.

Mr. David S. Broder, writing with a refreshing detachment that is often not present in Washington, has posed this same question in a column in the Washington Post today. I urge Senators to read the article for the thought-provoking ideas it expresses.

I ask unanimous consent that Mr. Broder's article be printed in the RECORD.

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

A RISKY NEW AMERICAN SPORT: "THE BREAKING OF THE PRESIDENT"

(By David S. Broder)

CAMBRIDGE, MASS.—If there are any smart literary agents around these days, one of them will copyright the title "The Breaking of the President" for the next big series of nonfiction best-sellers. It is becoming more obvious with every passing day that the men and the movement that broke Lyndon B. Johnson's authority in 1968 are out to break Richard M. Nixon in 1969.

The likelihood is great that they will succeed again, for breaking a President is, like most feats, easier to accomplish the second time around. Once learned, the techniques can readily be applied as often as desired—even when the circumstances seem less than propitious. No matter that this President is pulling troops out of Vietnam, while the last one was sending them in; no matter that in 1969 the casualties and violence are declining, while in 1968 they were on the rise. Men have learned to break a President, and, like any discovery that imparts power to its possessors, the mere availability of this knowledge guarantees that it will be used.

The essentials of the technique are now so well understood that they can be applied with little waste motion.

First, the breakers arrogate to themselves a position of moral superiority. For that reason, a war that is unpopular, expensive and very probably unwise is labeled as immoral, indecent and intolerable. Critics of the President who are indelicate enough to betray partisan motives are denounced. (That for you, Fred Harris.) Members of the President's own party who, for reasons perhaps unrelated to their own flagging political careers, catapult themselves into the front ranks of the opposition are greeted as heroes. (Hooray for Charley Goodell.)

The students who would fight in the war are readily mobilized against it. Their teachers, as is their custom, hasten to adopt the students' views. (News item: The Harvard

department of biochemistry and molecular biology last week called for immediate withdrawal from Vietnam.)

Next, a New England election (the New Hampshire primary is best but the Massachusetts Sixth Congressional District election will do as well) surprisingly shows that peace is popular at the polls. The President's party sees defeat staring it in the face unless it repudiates him, and the Harris poll promptly comes along to confirm his waning grip on public trust. The Chief Executive, clearly panicky, resorts to false bravado and says he will never be moved by these protests and demonstrations, thus confirming the belief that he is too stubborn to repent and must be broken.

And then, dear friends, Sen. Fulbright and the Foreign Relations Committee move in to finish off the job.

All this is no fiction; it worked before and it is working again. Vietnam is proving to be what Henry Kissinger once said he suspected it might be—one of those tragic, cursed messes that destroys any President who touches it.

That being the case, any President interested in saving his own skin would be well-advised to resign his responsibility for Vietnam and publicly transfer the assignment of ending the war to Congress or the Vietnam Moratorium Committee or anyone else who would like to volunteer for the job.

But we cannot. And that is the point the protesters seem to overlook. Assume that they and the President are both right when they assert the time has come to end this war. Assume that the protesters know better than the President how to do so—despite the conspicuous absence of specific alternatives to the President's policies in their current manifestos.

There is still a vital distinction, granting all this, to be made between the constitutionally protected expression of dissent, aimed at changing national policy, and mass movements aimed at breaking the President by destroying his capacity to lead the nation or to represent it at the bargaining table.

The point is quite simple. Given the impatience in this country to be out of that miserable war, there is no great trick in using the Vietnam issue to break another President. But when you have broken the President, you have broken the one man who can negotiate the peace.

Hanoi will not sit down for secret talks with the Foreign Relations Committee. Nor can the Vietnam Moratorium's sponsors order home a single GI or talk turkey to Gen. Thieu about reshaping his government. Only the President can do that.

There is also the matter of time. It is one thing to break a President at the end of his term, as was done last year. It is quite another thing to break him at the beginning, as is being attempted now.

The orators who remind us that Mr. Nixon has been in office for nine months should remind themselves that he will remain there for 39 more months—unless, of course, they are willing to put their convictions to the test by moving to impeach him.

Is that not, really, the proper course? Rather than destroying his capacity to lead while leaving him in office, rather than leaving the nation with a broken President at its head for three years, would not their cause and the country be better served by resort to the constitutional method for removing a President?

And what a wonderful chapter it would make for Volume 2 of "The Breaking of the President" series.

TRADE: A VISION FOR THE SEVENTIES

Mr. JAVITS. Mr. President, there are many good reasons for the United States to follow a policy of world trade expansion, and few American businessmen have expressed these reasons more forcefully than Arthur K. Watson, chairman of IBM World Trade Corp. When the Foreign Trade Club of Philadelphia recently presented an award to Mr. Watson for his work in forming the Emergency Committee for American Trade, he offered a very well reasoned analysis for broader trade policies that I believe deserves greater attention. Mr. Watson had recently returned from the trips to Latin America with Governor Rockefeller and had just completed a term as president of the International Chamber of Commerce. Both responsibilities had shown him the importance of rising levels of world trade and added to his already fine credentials in international trade.

His speech is in my opinion, a clear exposition of where enlightened American business stands on the two most important economic issues facing the world today—trade and development.

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

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

TRADE: A VISION FOR THE 70'S

(By Arthur K. Watson)

There is an old tradition which requires that speakers submit a title for their speech long before they know what they are going to talk about. Consistent with this, Dr. Braile asked me, last July, for a title and I told him it was: "Trade: A Vision for the 70's."

I thought that had a nice ring.

After all, if you ask a man to leave his family for the evening, and pay $14 for dinner, the least you can promise is a vision.

I did have another title: "Trade Policy at the Crossroads." I dropped that because I was afraid one of you would remember that I gave the same speech two years ago.

Still it is an honest title. Whatever my credentials as a visionary, I ought to be an expert on trade crossroads. As President of the International Chamber of Commerce I spent two years at one. I don't think things have moved much since I left office last June.

The crossroads, if you will forgive a tired metaphor, is between protectionism and freer trade. It is, more broadly, between two visions of the world.

One is an old vision, a vision of the nation state, sovereign, self-sufficient, self-seeking and grandly unconcerned about much of anything beyond its borders.

The other is the vision of an economically interdependent world where man, goods and capital move freely from one country to another.

Neither camp, free trader nor protectionist, ever carries its arguments to their logical extreme. Protectionism, pushed to its extreme, is impossible. There are now 140 nations more or less in the world and new ones are coined constantly. They all have to buy from the world, so they all have to sell to it. As a further embarrassment, times of high protectionism have usually coincided with economic stagnation and often with political disaster. We ought to remember that the Smoot-Hawley Tariff—with rates so high it stopped trade cold—was passed in 1930.

The free trade camp, and I consider myself a member in good standing, is also uneasy about its ultimate vision. However fine it might be, it is hard to imagine a world where man, capital and goods really move with unfettered freedom. To function, this would need a world of closely integrated social, economic and governmental institutions.

With a Common Market that cannot agree on a common monetary policy, with a Latin American Free Trade Area that cannot agree on much of anything, the free trade idea borders, I would have to admit, on the visionary.

Still, if I must choose, I'll take the visionary.

As the old joke goes, show me a man with both feet on the ground and I'll show you a man who can't put his pants on.

Furthermore, the decision is not between the extremes, it is one of direction. Of trend. And that is the significance of the crossroads and the danger of this protracted pause.

It began, to put a date on it, in May, 1967. That was the month when we learned of the successful end to the Kennedy Round negotiations and along with a lot of others I was convinced that freer trade had won a definitive victory.

It had not.

We got tariff cuts only to see ingenious non-tariff barriers erected in their place. The mind boggles at the range and resourcefulness of the barriers. We've seen new import quotas—voluntary, so called, and involuntary—we have seen import licensing, subsidies, discriminatory customs valuation schemes, prior deposit schemes, border taxes and so on. There is little man could devise that has not been done to thwart the spirit of the Kennedy Round and avoid the letter of the GATT.

Our own country, I regret to say, has not been least among the sinners.

One said little story illustrates this. During the winter the United States gets most of its tomatoes from Florida or northern Mexico. Well, last winter, at the height of the growing season, the Florida growers persuaded the Department of Agriculture to impose restrictions on the size of tomatoes—they had to be of certain size, or larger, to be shipped in our market. The effect of this was to exclude much of the Mexican crop—it rotted on the ground.

The Mexicans were furious, I can't blame them, the American housewife payed more for her tomatoes and got a tasteless thing that was picked green instead of the vine ripened.

Who won? The Florida tomato growers—at the expense of everybody else.

Even the dollar, in the hands of an American businessman is no longer a free currency. Voluntary restraints on capital exports are now mandatory restraints and we borrow from tomorrow to shore up the dollar today.

What has happened, from the dollar to tomatoes, to steel, to textiles and shoes?

The euphora that followed the Kennedy Round quickly turned to apprehension. Businessmen, all over the world, worried about the bogeyman of foreign competition. With tariffs going down they suddenly expected to see their home markets flooded by imports. The fact that is did not happen was not enough to allay the fear. Businesmen did what they have done for years. They went to their government demanding protection, and in too many instances, they got it.

At the same time, though not directly related, there was a marked deterioration in the international monetary picture. Six monetary crises have swept through the world in 24 months and governments, like businessmen, decided that trade restrictions were the easiest way, if not the best, to protect their balance of payments.

Furthermore, those nations with balance of payments surpluses have not been overly helpful. There seems little question but that the German mark is undervalued, and so probably is the Japanese yen. Both of these great nations are amassing huge surpluses and neither is willing yet to fully meet its responsibilities as world trading partners.

There is another factor, far less tangible, but perhaps more important. The leader was not leading anymore. It was our country that sparked the Kennedy Round. It was the United States that pushed and prodded a reluctant world toward liberalization. President Kennedy had a trade mandate from Congress that Johnson never got. From July, 1967 on, Johnson became the first President since 1934 without any tariff cutting authority from his Congress and President Nixon, today, has none. This is a technical point, but symbolic. While protectionists did not control Congress under Johnson, and don't today, they may be strong enough to wield a veto power. This, in fact, could account for our current pause at the crossroads. Neither side has mustered the force to prevail in its view, each has the ability to block the other on anything important. The United States, the leader, is no longer leading and nobody else can.

We could, those of us on the free trade side, play for a draw. That is exactly what we did in 1968 after a handful of us organized the Emergency Committee for American Trade and persuaded over 50 of the biggest companies in America to join the effort. Protectionism had such a grip on the Congress by then that we were relieved when the year passed without any protectionist legislation passing.

With 1969 three-quarters gone, I expect results will be about the same this year.

The Administration may offer a trade bill, I hope that it does, but the mechanics of its passage make it unlikely that anything will be written into law this year.

Next year may be better. But the danger, the danger that prevented action in the Johnson Administration is still present. The trade bill could become a Christmas tree decorated with quota riders to protect everything from Chinese gooseberries to lamb.

If this sounds farfetched, keep in mind that more than 90 Senators and more than 350 Congressmen sponsored or co-sponsored import quotas last year covering everything from Chinese gooseberries to frozen lamb.

Washington is not peculiar in this respect. The same tune is being played in other capitals of the world. Through the Emergency Committee for American Trade, I have been in regular touch with free trade forces in many other countries. Like us, they are busily plugging holes in their dikes. The struggle to protect trade is now worldwide.

What is the issue? What are the stakes?

At first glance it is all trifling. Why not give the harassed gooseberry growers some protection from foreign competition? And, while we are feeling generous, let's not overlook shoes and textiles and apparel and consumer electronics and autos and bicycles and motorcycles and steel and a long, long list of other gestures we might make.

Why not? The answer is retaliation. Our trading partners will return the compliment in full measure and we will be on our way to a trade war—the one kind of war where everyone inevitably loses.

At stake is not gooseberries or lamb. It is the world economy. It is what Peter Drucker calls "the one positive achievement of the period since World War II." This world economy is an achievement that we can measure in economic terms, but the social and political significances far overshadow the economic.

Let me remind you of the numbers: the dollar value of world trade has grown from $101 billion to $230 billion during the sixties. That is a growth rate of nearly 8% compounded. During the same time, the sales of multinational corporations, from their foreign production, has grown from around $70 billion to something like $185 billion, a compound growth rate of 10%. These are rough estimates, there is no world census.

The trade translates, in American terms, to nearly three and one-half million jobs created by exports. It translates, in the Delaware Valley alone, to one hundred thousand jobs or more.

Predictions are hazardous, but I will offer one just to redeem my promise about the 1970's. The dollar volume of free world trade will increase to well over $400 billion in the next decade. Philadelphia, obviously, will get its share of this vast increase. But the catch is a trade war—that projection could go down as well as up.

The period ahead, months, perhaps several years, will be exasperating for all of us.

Our international monetary arrangements as yet are imperfect and international monetary problems set a tone for protectionism. Internationally, we have no central bank or Federal Reserve. Still, I believe we are moving in that direction. With SDR's, special drawing rights, and what I think is a serious possibility, the so-called crawling peg for currencies, we may build into a system both the expansion mechanism it has needed, and the adjustment mechanism it lacks.

We have no commonly accepted law for international business and, through the GATT, only the rudiments of trading arrangements.

Like the bumble bee, which theoretically cannot fly, I believe it could be proved that the free world economy theoretically cannot exist. Yet it does exist, and it flourishes.

But the next stage, the one we face in the 70's, is going to be harder than the booming sixties. If growth is to continue, we must face the inevitability of readjustments here in the United States. Some of our labor intensive industries may be hurt by foreign competition. It will be competition from manufactured goods made in cheap labor countries with all the emotional overtones that implies.

But isn't that one of the purposes of trade? Are we spending $23 billion a year on higher education in the United States to raise another generation of mill hands and common laborers? That is absurd. Our future lies in our multinational corporations and in the exports of high technology and the products of our farms—which, incidentally, is one of our highest technologies by world standards. There are businesses, over the longer run, we should not emphasize. There are low paying jobs Americans will not want to take in the 1970's—and shouldn't take. I don't airily dismiss the problems, the industries and the workers affected deserve help from our government. They were promised such help in the Trade Expansion Act of 1962 but never got it. That law ought to be strengthened.

But just because we face adjustments, we should not lose sight of the goal. The real effect of these adjustments is to trade low paying jobs for high paying jobs, and to trade low profit industries for high profit industries. That is our future and I believe we are shortsighted indeed if we fail to understand it.

Abroad, the stakes are even higher. I was one of the advisors on Governor Rockefeller's, more accurately President Nixon's Mission to Latin America, and after twenty countries, and twelve hostile demonstrations, a man returns with some rather vivid impressions of Latin America.

To put what I want to tell you in perspective I should explain that these demonstrations seemed a lot more dramatic when you read about them up here than when you went through them there.

My dear wife worried more about the trip than I did.

That said, and it remains that a sizable minority, perhaps even a majority of Latin Americans distrust the United States and many dislike it. The Mission was a catalyst for these emotions.

Viewed from the Latin American perspective, I think all of us here might feel about the same way.

After thirty or forty years of Good Neighbor policies, Point Four programs, Partnerships for Progress and Alliances for Progress, Latin America is still dirt poor and deeply frustrated. It blames much of its trouble on us.

It blames too much on us. But we are not the Good Samaritans that we may think we see in our own mirrors.

Today's U.S. aid to Latin America, sixty-five percent of it, is not a gift but a loan and often a loan made with costly restrictions. Last year, the Alliance for Progress loaned Latin America $862 million, but it collected $366 million on earlier loans.

The U.S. private sector actually took more out of Latin America than it put in—$812 million more.

I could talk about what we have done for Latin America. Government-to-government aid may not be the most efficient road to development, but its achievements are not inconsiderable. The U.S. private sector may have disinvested last year in Latin America, but it still has nearly $11 billion invested there. This direct investment creates around 800,000 jobs and is the nucleus around which much of modern Latin American industry has grown.

The arguments, ours and theirs, are by no means simple but one message came through loud and clear in my visits with the private sector and with government officials.

What Latin Americans want now is *not aid*, but trade.

They are reaching the end of the line on import substitution, they are reaching the end of the line on servicing foreign debt. They simply must find a way to break out of the old bind of tropical exports and raw materials. It is debatable whether or not the terms of trade have gone against Latin America. It is not debatable that Latin America's share of world exports has dropped almost fifty percent over the last fifteen years.

Latin America has to find a way to export the products of its factories and the United States is their logical market.

Some of the stories you hear down there are heartbreaking. A Central American businessman was encouraged to build a factory to produce cotton gloves for the U.S. market. He bought machinery in the United States, he bought cotton in the United States. After he had shipped a few gloves, we suddenly created an import quota on cotton gloves. The amount we allowed him to sell to us was a few days of his production. There his machines sit, a glove factory in the tropics where nobody wears gloves.

As long as we are visiting the theatre of the absurd let's look at sugar. Many of these little Caribbean countries we visited have nothing much to export but sugar. Still, we keep them on strict quotas while we subsidize beet sugar production in the United States.

I came back from Latin America persuaded that we had to emphasize the private sector and we have to emphasize trade, not aid, as the healthier solution for Latin America. The Governor, as you know, has presented his report to the President and I hope something to this effect is in it.

When you believe strongly in a cause there is a danger, I freely admit, that you may perceive as the apex what is merely a facet. I have tried to discount this temptation—I have tried to look at freer trade and at multinational business in perspective and recognize that they are only part of an international system.

I can't convince myself.

They, it seems to me, are the very heart of the system and if you tamper with them, you tamper with the heart. It is nearly a quarter of a century now since World War II ended and I must agree with Peter Drucker that the most viable and significant

thing we have done is build the firm beginnings of an international economy. That is an accomplishment that can endure when the NATOS and SEATOS are footnotes in history.

Our choices, our options, are not infinite. Fundamentally, as I see it, we will revert to protectionism or sit paralyzed at the crossroads while the situation deteriorates. We have been sitting there while the dollar became partially a blocked currency, we have been sitting there while everybody built petty trade barriers and quibbled. We sit there, now, and listen to the opening guns of a world trade war.

That is an option, and that is the one our protectionist friends would choose.

The other is to *seize the initiative again*, and we can do it.

Our own economic house is going to be put in order. I'm convinced of that. We are going to stop this erosion of the dollar and with it this incredible increase in imports.

We already have the competitive muscle to hold our own in the world. There is no industrial system anywhere that matches our efficiency and sophistication. There are no workers, anywhere, with the training, the education and the productivity of the American worker. There will be some industries where we can't compete. But that, in nearly every case, will be an industry we should not be in.

The answer is not to build a fence around sick industries. The answer is to aggressively open markets for industries where we have the advantage. Like many of you, I'm a world traveler, and I never cease to be surprised to find that no matter where I go I am almost always on an American made plane. In air frames we compete. Should we foolishly give away these billions in sales and hundreds of thousands of jobs to protect some inefficient domestic industry? That is what you are talking about when you talk protectionism.

We can go on the trade offensive again and win. We can win for ourselves and the world.

We have, I am convinced, more than enough bargaining power to persuade our trading partners to drop some of their unfair barriers. And we will drop ours.

We are going to solve our monetary problems and we don't have to wait to prove it. The world already believes it. It is time some of our trading partners took a hard look at their own currencies. Whatever the psychological gratification of surpluses, the ledger finally must balance and they know it. It's time to bargain again—but bargain up the road to liberalization, not back to 1930.

And what can *we* do, and do personally? Nearly everyone in this room believes in free trade, and nearly everyone has a personal stake in it.

Let me suggest, let me *urge* a three-point program:

(1) Don't leave a protectionist argument unchallenged. Whether you hear it at a party or read it in the press, go back at it—hard and fast. Expose the thinking behind it, and the motives behind it.

(2) Really support these free trade organizations. Thousands of speeches have to be made, millions of pamphlets have to be published. The American people must understand what freer trade means to them as consumers and workers.

(3) Most of all, talk and write to the Congressmen and Senators that you know. They are the ones who are going to make the decisions. Up until now they have been bombarded by protectionist demands but have heard precious little from our camp. Let them know what we believe.

Gentlemen, and ladies, this erosion cannot be allowed to go on. The world *will* take a road, one of them or the other. It has to be toward freer trade. We have got to go to work to be sure that it is.

PUBLIC HEARINGS—TAX REFORM ACT OF 1969—SUMMARY OF TESTIMONY

Mr. LONG. Mr. President, today the Committee on Finance began its second day of public hearings with respect to that part of the House tax reform bill which relates to the tax treatment of private foundations. The first witnesses consisted of a four-man panel which described to the committee the impact these proposed foundation provisions would have on advanced study groups. A number of other distinguished individuals outlined the effects these provisions would pose on their respective foundations, committees, societies, and schools.

So that Senators might follow the progress of these tax reform hearings, I ask unanimous consent that a summary of the testimony be printed in the RECORD.

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

PANEL ON IMPACT OF FOUNDATION PROVISIONS ON ADVANCED STUDY GROUPS

JOINT STATEMENT OF CARL KAYSEN, DIRECTOR, THE INSTITUTE FOR ALVANCED STUDY; O. MEREDITH WILSON, DIRECTOR, CENTER FOR ADVANCED STUDY IN THE BEHAVORIAL SCIENCES, INC.; KERMIT GORDON, PRESIDENT, THE BROOKINGS INSTITUTION; AND CARYL P. HASKINS, PRESIDENT, CARNEGIE INSTITUTION OF WASHINGTON

Private foundations

Explain the position of centers of advanced study and research, and other academic institutions not organizationally connected with universities and colleges, with respect to the House proposals. Contend the treatment of educational institutions under the House bill does not correspond to the facts of the higher education system.

State that advance study institutions are involved in a variety of ways in scientific and scholarly research advance training, and the dissemination of the results of research to academic and general public—none of them is engaged in partisan political activity.

Object to the proposed 7½ percent tax on net investment income, and state it would be a financial burden. Note, also, that grant-making private foundations themselves would be subject to the tax and will consequently have less money available for grants.

Point out that if and to the extent that private foundations make grants to advanced-study institutions, the proposed "expenditure responsibility" rules would require a granting foundation to exercise substantial control over the recipient's use of the funds. Suggest this obviously would impair the traditional independence and academic freedom enjoyed by advanced-study institutions.

Urge that the status of advance-study institutions be clarified by the adoption of a specific category that would accommodate them clearly outside the category of "private foundations". Believe the best way to do this would be by revising the definition of "educational organization". As an alternative, suggest another exclusion could be added to the definition of "private foundation", and that it could be framed so that an advance-study organization would have to meet several definite tests.

Urge that if they cannot be placed clearly outside the definition of private foundations, that the definition of "operating foundation" be clarified so that there will be no doubt they can qualify.

In addition, urge an amendment on behalf of those who may not be able to qualify for "operating foundation" status, which would expand the definition of "qualifying distributions".

Suggest that the proposed "expenditure responsibility" requirement which is to be exercised by a grant-maker over a grant recipient be rephrased so that the test can be met by "best efforts" or "reasonable diligence".

OTHER FOUNDATION PROBLEMS

HON. BROOKS HAYS, CHAIRMAN, SOUTHERN COMMITTEE ON POLITICAL ETHICS

Private foundations

States that he has a very favorable impression of foundations based upon his personal experience with foundation programs over two decades—feels they have been, and are, of particular importance to the uplifting of the Southern States. Notes that the Southern Committee on Political Ethics has no self-interest in this matter, since it is not tax-exempt and receives no foundation support.

Points out that when the House Select Committee to Investigate Foundations was established in 1952, the activities of a few foundations had caused apprehension and concern. However, in its investigation, the Committee found that generally foundations were not diverting their resources from their basic purposes and were not working against the interest or traditions of the United States.

States that the Committee also found that the larger and older foundations were rendering great service to the country, and that the larger foundations favored public accounting and disclosure—while some small ones opposed it. States that the Committee recommended full disclosure of all grants.

HOWARD J. PRIVETT, COUNSEL, JAMES IRVINE FOUNDATION

Private foundations

Outlines the nature of the James Irvine Foundation as follows:

(1) The Foundation is the trustee of a charitable trust which owns 54.55 percent of the stock of The Irvine Company of Orange County, California, by virtue of a gift from Mr. James Irvine.

(2) The stock had a value of $5.6 million when it became absolute and has produced income of more than $10 million which has been distributed on a current basis to the universities, colleges, hospitals, youth organizations and similar charities in the community served by the Foundation.

Urges the members of the committee to proceed with measures designed to curb specific abuses and to reject a broad sweeping compulsory divestiture rule which would defeat the intentions of donors of existing foundations and operate as a powerful deterrent to the making of substantial gifts of corporate stock to charity in the future.

Alternatively recommends that if the committee should conclude that the divestiture proposal should be adopted, then

(1) an exception should be made for foundations in existence on May 26, 1969, with respect to all business interests acquired before that date;

(2) an exception should also be made with respect to business interests which foundations are directed to retain by the terms of governing instruments which were irrevocable on May 26, 1969; and

(3) provision should be made for an unrestricted ten-year period for the disposition of stockholdings in excess of the prohibited amount, with authority in the Secretary of the Treasury to extend the period in cases of hardship.

Recommends that the requirement that foundations distribute out of capital each year the amount by which their annual net income is less than 5 percent of the market

value of their assets should be modified to except therefrom:

(1) Existing trusts established by instruments which do not permit distributions out of capital;

(2) The value of investments which the trustees have no power to change;

(3) For a transition period of ten years, the value of investments now held by foundations which do not produce income equal to the minimum investment return rate; and

(4) For a reasonable period the value of unproductive assets acquired by means other than purchase.

Recommends that the minimum investment return rate should be based upon the estate or income tax savings on the bequest or gift to charity and the income tax savings on realized capital gains. States that it should not be applied to unrealized appreciation in the value of assets on which no tax saving has been realized.

Supplement statement

Believes that the time of the Committee on Finance of the United States Senate should not be used to review the legal squabbles of a dissident minority shareholder with the management of a private corporation; nor do they believe that the merits or demerits of such controversies are in any way relevant or material to the determination of a national tax policy applicable to private foundations.

States that Mrs. Smith's charges against the Foundation are without substance in fact or in law and that her submittals to your Committee and to the Committee on Ways and Means are calculated not to serve the public interest but to benefit her private interests at the expense of the charitable beneficiaries of Mr. Irvine's trust.

JOAN IRVINE SMITH, JAMES IRVINE FOUNDATION

Private foundations

Describes the nature of the James Irvine Foundation and its assets holdings.

Contends that The James Irvine Foundation under the management of N. Loyall McLaren, President, has engaged in self-dealing practices.

Recommends to the Committee on Finance, that the provisions relating to (1) divestment by private foundations of stock held in corporations whose business is unrelated to the charitable activities of foundations; (2) the income tax of 7½ percent based on value of the investment assets of foundations; and (3) the 5 percent annual income distribution applicable to all foundations, be approved by your committee with the following revisions, to wit: that the divestment period commence with the year 1970 on a basis of at least 20 percent instead of the 10 percent provided in H.R. 13270 at the end of 1971 and that there be an annual 20 percent divestment provision during each of the remaining 4 years so that at the end of the 5-year period, as now provided in H.R. 13270, the James Irvine Foundation will have been required to divest itself of all stock that it holds in The Irvine Company. Also adds that the 7½ percent income tax be made applicable to the year 1969 in order that this new tax will be paid on April 15, 1970, and that the 5 percent income distribution provision be made applicable to the year 1969 in stead of 1970.

BYRON P. HOLLET, MEMBER, BOARD OF DIRECTORS, LILLY ENDOWMENT, INC.

Foundation problems

Recommends that the distribution requirement be based on an average of asset values over a period of years (ten years, for example) rather than on current market values, and that the required annual distribution should not exceed the return that could be reasonably expected from a well-managed portfolio containing common stocks.

Suggests revision of the stock ownership limitations so that the voting stock of any one corporation held by a foundation would be limited to 20 percent, as the bill provides, but when combined with the holdings of disqualified persons the limitation would be 35 percent. "Disqualified persons," for this purpose, would include only substantial donors who are living, their spouses and lineal descendants, and managers of the foundation.

Recommends that the exception in the bill for an organization created by an inter vivos trust that was irrevocable on December 31, 1939, and meets certain other requirements, be enlarged to include incorporated foundations existing on that date that hold interests in corporations whose common stock is traded on public exchanges or in the over-the-counter market.

Recommends changing the 7½ percent tax on investment income to a supervisory fee.

ROSS L. MALONE, PRESIDENT, AMERICAN BAR FOUNDATION

Private foundations

Outlines the nature of the American Bar Foundation as a non-profit research and educational organization sponsored by the Amerian Bar Association and devoted to study of the operation of law in society and to improvement of the administration of justice.

Feels that the House bill can be interpreted as subjecting the American Bar Foundation to the restrictions, liabilities and tax consequences of a private foundation. Believes this result is at variance with the policy expressed in the Act and an unintended consequence of technical complexities in drafting.

Contends that these adverse consequences can be avoided by minor amendments, drafts of which are presented in the Technical Explanations of their statement.

LINCOLN GORDON, PRESIDENT, JOHNS HOPKINS UNIVERSITY, ON BEHALF OF THE ASSOCIATION OF AMERICAN UNIVERSITIES

Charitable contributions

States that private giving is essential to the health of higher education not only because it needs the money, but also because such help—as contrasted with governmental support—provides universities with resources that help them to determine their own character and their own priorities.

States that the House bill will tend to curtail the volume of gifts and grants from private sources; urges that provisions which seriously threaten or restrict private giving be modified or removed.

Considers the Limit on Tax Preferences as sound; however, believes the value of appreciation of property should not be counted as a preference item when it is given as a charitable gift. Points out that charitable gifts, in contrast with every other tax preference item, do not generate income for the taxpayer.

Also considers the Allocation of Deductions proposal as sound in principle, but believes charitable gifts should not be considered a personal itemized deduction subject to allocation. Points out that all other items subject to allocation are involuntary expenses of the taxpayer, and that charitable gifts do not logically fall in this category because they are discretionary.

Private foundations

Opposes the 7½ percent tax on the investment income of private foundations—believes it should be replaced by the concept of a supervisory fee based on actual costs of supervision.

Expresses concern with the House provision which would define as a taxable foundation expenditure any attempt to influence legislation through an attempt to affect the opinion of the general public. States that the meaning of the prohibiting is so vague and ambiguous, and the penalties on individual foundation managers so harsh, that foundations would be inhibited from making grants in many fields where the participation of academic people in public affairs is urged and expected.

JOHN G. SIMON, PROFESSOR OF LAW, YALE UNIVERSITY

"Private Foundations

States that certain provisions of H.R. 13270 are likely to have the unanticipated effect of aggravating rather than solving the questions of "foundation power" which are of concern to many Members of Congress.

States that the birth rate of the larger foundations largely depends on contributions to foundations of property which is (a) appreciated and/or (b) represents some part of a donor's corporate control stock. Feels that contributions of both types of property to foundations would be heavily discouraged by H.R. 13270.

Points out that over time, many of the 300 existing foundations in the over-$10 million class will be dissolved, leaving only a few of these foundations operating in any one field of activity or in any one geographical region. Emphasizes that this shrinkage will narrow the options available to organizations seeking substantial foundation funds for new ideas and new approaches, unless a reasonable foundation birth-rate is maintained in the over-$10 million category. Adds that new entry is desirable here in "private charitable enterprise," as it is in private commercial enterprise, in order to diffuse power. States that decentralization into nongovernmental hands becomes dangerous if there are too few hands.

Feels that discrimination against private foundations regarding appreciated property will heavily discourage gifts of appreciated property to foundations, in addition to having some overall negative impact on charitable giving.

States that the stock ownership provision will make it very difficult or unattractive for a man whose nest egg consists of corporate control stock to endow a foundation with that nest egg; consequently, this provision will discourage the creation of new foundations and may also have a negative effect on overall charitable giving.

Maintains that of the three specific evils attributed to foundation control of business enterprises in the House Ways and Means Committee Report, one does not appear to present a significant problem, and the other two can be cured by application of other provisions of H.R. 13270 and existing law, supplemented if necessary by certain fairly simple amendments. Proposes that if the stock ownership prohibition and the appreciated property provision are to be justified, it must be on the ground that there is some positive advantage in diverting charitable giving away from foundations to nonfoundation charities.

Because the case for diverting charitable giving away from foundations has not been made, and in view of the strong public policy reasons for maintaining a reasonable birth-rate among the larger foundations, recommends that the committee (a) refrain from approving an appreciated property rule which discriminates against foundations, and (b) refrain from adopting the stock ownership prohibition, or at least minimize the deterrent impact of such a prohibition by substantially extending the deadline for divestiture beyond the 5-year period set forth in H.R. 13270.

RAYMOND B. ONDOV, MEMBER, HORMEL FOUNDATION

Private foundations

Describes the Hormel Foundation as a philanthropic organization incorporated under the Laws of the State of Minnesota in December 1941, for religious, charitable, scientific, literary or educational purposes. Points out that the Foundation owns ap-

proximately 10 percent of the voting stock of the Hormel Company, but in addition it is the trustee of various Hormel family trusts which own approximately 47 percent of the voting stock of which some trusts require that approximately 10 percent of the stock is to be distributed to certain members of the Hormel family; upon the death of the family members, the Foundation will own absolutely 47.817 percent of the stock.

States that:

(1) The Foundation has not engaged in self-dealing.

(2) The Foundation distributes its income on a current basis.

(3) The founders of the Foundation and of the Hormel Company never served on the Foundation board.

(4) The Foundation has never engaged in speculative trading activities.

(5) In the first few years of existence the Foundation borrowed small sums on a short-term basis to meet its commitments; however, it has been approximately twenty years since the last borrowing was paid. The Foundation has not and does not lend money to anyone.

(6) The Foundation has no unproductive assets except a small tract upon which the Hormel Institute is located and another two acres of negligible value.

(7) The Foundation has never attempted to influence legislation or a public election.

(8) The Foundation never engages in financial transactions unrelated to its charitable purposes.

(9) The Foundation submits all required reports to federal and state authorities and its financial statements are audited.

(10) In order to protect the community in which the company was conceived, nurtured and developed by the Hormels, the founders vested controlling stock interest in the Foundation.

Feels that the present act will completely destroy the Foundation's by-laws requirement that a management be maintained which is interested in the purposes of the Foundation and the welfare of the community. States that the founders of the company greatly feared a take over by industry giants and the resultant calamity to Foundation and the community. Feels that the present act provides the avenue of destruction and opens the doors to leave a community destitute.

Contends that the Hormel Company possesses all of the desired factors making it vulnerable to a take over resulting in the company's general offices being removed and the plant facilities substantially reduced or completely eliminated. Feels that the result would be the tragic uprooting of families.

Suggests that this calamity can be avoided without disturbing the purpose and effectiveness of the Act by removing the stockholding limitation in its entirety. States than an alternative would be to provide a "Grandfather Clause" or exception which would permit the Foundation to retain its holdings.

Requests a modification in paragraph 5(B), page 84, which would permit a family member to serve on the controlled company's board of directors.

Emphasizes that the Tax Reform Act is designed to establish greater equity in the tax laws but feels that the divestiture provisions create a new gross inequity in The Hormel Foundation case. States that equitable principles have never condoned punitive measures against the innocent.

CHARLES STEWART MOTT, CHARLES STEWART MOTT FOUNDATION

Nature of foundation

Mentions a few of the accomplishments of his foundation during the past years. Indicates that the foundation helps people through opportunities in education, health, and recreation primarily in the community of Flint, Michigan. States that foundation services carry out avowed governmental objectives in education, health, and social services—which re-enforces the concept of tax exemption for funds so used.

States that if some foundations do a poor job, they should be regulated, rather than place penalties upon foundations clearly operated for the public advantage. Indicates that the foundation functions as Government's equivalent of industry's research and development department.

Tax on investment income

Opposes the 7½ percent tax on foundation income. States that if spending foundation income for acceptable purposes is good, then a tax on that income is not logical.

Prohibitions on self-dealing

States that the proposed prohibition of all dealings between foundations and donors could create unreasonable problems. Indicates that it is not difficult to imagine circumstances under which a foundation might need to borrow money or lease property. Indicates that the Mott Foundation has not relied upon such practices, but believes that circumstances could exist where a foundation might have justifiable need of legitimate dealings with one or more of the donors contributing to it.

Distributions of income

States that the proposed distribution of annual income or 5 percent of the fair market value of investment assets within 12 months could be unduly restrictive and detrimental. Indicates that it would improve investment in growth businesses which require reinvestment of current earnings for greater future value and earnings.

Stock ownership limitation

Believes the proposed stock ownership limitation would be most unfair, unworkable, and destructive of proposed changes. Indicates that this would prevent reasonable latitude of investment management to produce maximum current and future income to carry forward foundation programs. Points out that required divestiture could result in serious loss of income and consequent cutback of services.

Limitations on use of assets

Supports the proposed limitation on use of assets, and the requirements for disclosure and publicity on operations. Suggests that possibly a voluntary association of foundations could establish what would be, in effect, an accreditation standard of objectives, methods, and practices.

EUGENE T. HACKLER, VICE PRESIDENT, AMERICAN ASSOCIATION OF HOMES FOR THE AGING, AND TREASURER, EVANGELICAL LUTHERAN GOOD SAMARITAN SOCIETY:

Tax-exempt organizations

Supports provisions to deal with *Clay Brown* debt financing, taxation of unrelated business income, taxation of interest, rents and royalties from controlled corporations, and taxation of income from advertising and trade journals.

States that "long-term institutions and homes for the aging" should be specifically exempted as a sec. 170(b)(1)(B) type exempt organization, the same as hospitals.

Gifts of appreciated property

Requests that gifts of appreciated property to "long-term care institutions and homes for the aging" be exempt from any taxation of the appreciation.

Tax on foundation income

Suggests that the proposed 7½-percent tax on investment income, or even the 2-percent tax, not be applied to long-term care institutions and homes for the aging. States that if there must be a tax for administration purposes, it should not be applied against reserves for continuation of service (life care contract obligations) and reserves for improved services, expansion, replacement and working capital.

Political activities

Considers the political activities prohibition section of the bill to need clarification, so that long-term care institutions and homes for the aging are not restricted in their right to communicate to legislators or advocate a cause for the elderly.

Distribution of foundation assets

States that evaluation of noncharitable assets will present administration problems in appraisals of real estate. Suggests that taxpayers not be burdened with the cost of preparing annual appraisals.

Disclosure requirements

Requests clarification of the provision so that every institution having auxiliaries, ladies aids or similar small organizations should not have to go to the expense of reporting.

MITCHELL ROGOVIN, LOUIS AND HENRIETTA BLAUSTEIN FOUNDATION INC.

Stock ownership limitation

Argues that the attribution rules are too broad in that they would cause private foundations with no voting stock to dispose of all their nonvoting securities because of stock owned by family members. States that rules of attribution should not apply in determining whether a private foundation has excess business holdings, and that nonvoting stock should not be equated with control and no attribution should be allowed where no voting stock is held by the foundation.

Indicates that where involuntary divestiture of excess business holdings is required, the bill should preclude adverse tax consequences on the disposition of closely held stock, since no market is generally available for closely held securities—other than issuing corporation. Recommends that redemption by issuing company of excess business holdings not trigger (a) dividend consequences to the donor or (b) assertation of the penalty tax for unreasonable accumulations by the redeeming corporation.

Charitable contributions of appreciated property

Contends that the proposal to limit the tax advantage of gifts of appreciated property to some organizations creates illogical and discriminatory distinction between groups of charity. Maintains that provision would shift contributions from private foundations to other organizations.

Tax on investment income

Opposes the tax on investment income of private foundations. Notes that other tax-exempt organizations would not be required to "make a small contribution * * * toward the cost of government." Contends that the precedent of taxing investment income will cause State and local authorities to tax foundation investment income. Suggests that *all* exempt organizations be required to pay a small "user charge," measured by their capital, to pay for the audit program.

Distribution of income

Maintains that the 5-percent minimum distribution requirement is unrealistic. States that foundations should only be required to distribute earnings currently. Proposes, as an alternative, that the yield minimum be lowered to 3 percent.

Clay-Brown

States that the provision is sound and long overdue. Indicates, however, that the language of sections 514(b) and (c)(1)(C) of the bill could be interpreted to include a foundation borrowing money in order to make a contribution in furtherance of a charitable purpose where it pledges recently

acquired donated property as collateral for the loan. Recommends that the language be clarified in the Committee Report.

ELVIS J. STAHR, PRESIDENT, NATIONAL AUDUBON SOCIETY

Private foundations

Expresses the opinion that the House bill would be a serious setback to the conservation movement. States that although it would have no direct effect on any of their organizations (because they are not "private foundations"), it would indirectly curtail the activities of nonprofit conservation organizations that depend upon philanthropy.

Expresses concurrence with the Administration's suggested removal of charitable gifts from the area of Limit on Tax Preferences and Allocation of Deductions.

Believes private foundations should pay the administrative costs for the Government's supervision of private foundations, however, recommends that it be a true license fee and that the Administration's proposal of a 2 percent rate be adopted.

Believes that a minimum distribution requirement is sound, and agrees that when donors receive immediate and sometimes substantial tax benefits from contributions, charitable organizations should receive greater benefits.

Expresses concern with the divestiture provisions of the House bill, and believes the limitation of 20 percent to be both unnecessary and harmful—hopes the divestiture provision will be removed completely or at least substantially liberalized.

PROTECTION OF COASTAL WETLANDS

Mr. CASE. Mr. President, an article published recently in the New York Times illustrates two important points I have been trying to make for some time.

The article tells the story of 180 young girl students at the Thomas School in Rowayton, Conn., who became concerned about the protection of coastal wetlands along Long Island Sound which were being subjected to indiscriminate dumping and filling.

The girls, in grades 6 through 12, conducted an intensive campaign to save the wetlands. Their campaign was culminated successfully on October 1 when a new Connecticut law became effective.

The article, I believe, demonstrates that our youth, operating through traditional channels, can have an impact on our society if they are willing to devote the effort needed to accomplish a worthwhile objective.

At the same time, the article emphasizes the need for greater governmental attention to the protection of our environment. In order to bring about the added focus on protection of the environment at the Federal level, I have introduced a bill calling for establishment of a cabinet level Department of Conservation and the Environment. Once the bill is enacted, I hope that State and local officials will use it as a model to structure their governments so that our environment can be considered in the decisions of government at all levels.

Mr. President, I ask unanimous consent that the article be printed in the RECORD.

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

CONNECTICUT SCHOOLGIRLS LOSE MARSH OF THEIR OWN, BUT GAIN ENACTMENT OF AN ECOLOGICAL PROTECTION LAW

(By Bayard Webster)

ROWAYTON, CONN., October 4.—For 180 young girl students in this quiet, tree-shaded town bordering Long Island Sound, the month of October is a glorious one. It is the month when Connecticut Senate Bill No. 419 became effective.

The new law, in force on Oct. 1, calls for the survey and preservation of Connecticut's coastal wetlands which, up to now, had been unprotected by law from the ravages of indiscriminate dumping and filling.

The passage of the bill by the Legislature was primarily the result of a campaign by the 180 students of The Thomas School here, a private girls' school for grades six through 12.

For several years the girls had used a tidal marsh near their school as an outdoor classroom for the study of biology and wildlife. When they arrived this spring they found it was being used as a dumping ground by contractors.

GIRLS DECIDE TO ACT

They also found that Connecticut had no law prohibiting the filling-in of ecologically valuable bog areas, which provide spawning ground for fish and are rich sources of shellfish. That was when the girls determined to get such a law passed.

"It all started when we went out for our first class in the marsh last spring," said Susan Middleer, a 17-year-old senior, as she pointed to a filled-in section of Farm Creek Marsh, about a half-mile from the school.

"This is what we found. There's very little life here left to study," she added, looking at the small houses, built on dumped fill, that hemmed in the once-spacious marsh.

"The first thing we did," said Mary Cabral, a petite 16-year-old senior, "was organize a mourn-in. We made black crepe-paper sashes, had an early breakfast at the school and led a silent march to the swamp." A dozen legislators were invited, but only two showed up.

The students were discouraged, but with the help of two science instructors, Mrs. Joy Lee and David L. Cherney, the class organized the whole school into a conservation group, known as PYE (pronounced "pie") for Protect Your Environment.

GIRLS DESIGN EMBLEM

Susan and Mary, aided by their art instructor, designed the club's emblem, a circle of yellow (sunlight) with triangles of blue (water) and green (the earth) inside.

At first they fashioned homemade bumper stickers and lapel buttons showing the PYE emblem. Later, contributions and money from the sale of the emblems enabled them to afford machine made insignia. Their campaign to convert the Legislature got underway in earnest.

How do you "convert" a Legislature?

Bombard all 213 of them with a total of 800 hand-written letters. Invite them to breakfast for talks. Sell or give away more than 20,000 bumper stickers—to anyone, not just the legislators. Distribute and sell 25,000 lapel buttons.

Get up at 4:30 in the morning, go down to the train station and tell sleepy-eyed commuters about the threat to the scenic wetlands in their area. Hold conservation seminars in the community, talk to civic groups. Girl Scout meetings, garden clubs, League of Women Voters chapters—anyone who'll listen.

After you think you've got everyone aroused, get your area legislators to introduce a bill. Nurse it out of committee. Cross your fingers as the State Senate passes it, hold your breath when the House does too. Then breathe a sigh of relief when the Governor signs it.

Representative Edward S. Rimer, Jr., of Wilton, who helped the girls with the legislation, said:

"Those kids were just great. Their sincerity and youthful exuberance were what won everybody over. There's no question that the bill wouldn't have passed without their efforts."

The bill was passed by voice vote in the Senate on May 30. The girls worried about the vote in the House, but the bill passed unanimously there on June 2. On July 1 Governor John N. Dempsey signed the bill into law.

Before the effective date of the bill there were no restrictions on the dredging or filling-in of tidal marshlands in the state. Connecticut is one of the last states to pass such legislation.

"Many people think a salt water marsh isn't good for anything—they don't understand its value," said Mr. Cherney, the biology instructor, as he led his class toward a swampy area at Wilson's Cove, about one-half mile farther from the sound than Farm Creek Marsh.

He explained the importance of a tidal marsh: "It's a great source of food—it has mussels, clams, oysters—and it's the place where fish spawn and the young fish grow up before going out into Long Island Sound."

He also pointed out that the salt swamp, washed by the tides of the sound, is a major source of food for ducks, geese and migratory birds.

Mr. Cherney looked at the bog he had found to take the place of the other one. He pointed to a spot where an oil spill last spring had killed most of the swamp grass and animal life. The area was beginning to come back to life, but signs of an oily scum were everywhere. "This marsh isn't great," he said, "but it's all we have."

As the girls returned to their science laboratory at school, Mrs. Edward T. Faber, a science instructor who has also worked with the students this fall on the PYE program, sat on a stool and talked of her enthusiasm for her students' accomplishments.

"I think the whole movement is just fine," she said as the school janitor walked in, wearing the familiar yellow, blue and green button on his shirt. "It not only gives them a chance to learn biology and ecology but it enables them to become political activists—to see what the political process is all about.

"They lost a marsh," she added, "but they gained a broader vista of life."

ADDRESS BY SECRETARY OF DEFENSE LAIRD BEFORE AFL–CIO CONVENTION

Mr. SCOTT. Mr. President, today Hon. Melvin Laird, Secretary of Defense, addressed the eighth convention of the AFL–CIO in Atlantic City, N.J. Mr. Laird was the first Secretary of Defense ever to address a national convention of the AFL–CIO. Mr. Laird's remarks on Vietnam and the significance of the current Vietnamization program are worthy of review by all Members of Congress.

Therefore, Mr. President, I ask unanimous consent that these remarks be included in the RECORD.

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

ADDRESS BY THE HONORABLE MELVIN R. LAIRD, SECRETARY OF DEFENSE, BEFORE THE EIGHTH CONVENTION OF THE AFL–CIO, OCTOBER 7, 1969

It is an honor to be the first Secretary of Defense ever to address a national convention of the AFL–CIO.

As George Meany and others in this audience know, this is not my first contact with organized labor. For 17 years I have had close contacts with your national leaders, first as a member of Congress and now as Secretary of Defense.

The outstanding contributions made by labor in keeping our Nation secure and free have become even more apparent to me in my present office. I know firsthand how much the skill and productivity of American labor mean to our defense forces.

As an illustration of labor's support of defense, let me recall the action three years ago of the Building and Construction Trades Department. At that time the Navy was seeking to recruit apprentices and journeymen to bolster the Seabee units in Vietnam that were undertaking a backbreaking construction job. In response to the Navy's appeal, some 5,000 building tradesmen came out of your ranks into the Seabee's.

I could relate many other instances of this kind that have meant so much to the young Americans in the military forces in Vietnam—such things as the help of maritime unions in unsnarling the tie-up in Saigon harbor.

The positions taken by organized labor in the areas of foreign and military affairs have been uniformly wise, farsighted, realistic, and free from illusion. The support of your Executive Council for the President's decision to begin on the SAFEGUARD Antiballistic Missile System was of major importance in bringing about favorable Congressional action on this proposal. I know I voice President Nixon's sentiments when I thank you for this support.

The AFL–CIO has also supported the efforts of our Government to assure the right of self-determination to the people of Vietnam, and this forms a background for my remarks today. This policy now being carried out by the Nixon Administration offers the best hope of ending heavy American involvement within a reasonable time and of making it possible for the people of South Vietnam to chart their own political course in peace and freedom.

Make no mistake about it. To carry out his policy, the President needs the support of a united people. The young Americans in Vietnam need that support. Hanoi's strategy is clear: the leaders in Hanoi expect to achieve victory by waiting for us to abandon the conflict as a result of anti-war protest in this country. From their experience with the French and from their reading of events in the United States last year, they are encouraged to believe that they can get all they want if they merely wait long enough. The President will not bow to acts and utterances by those Americans who seek to pressure him into capitulation on Hanoi's terms. Those acts and utterances serve only to encourage the enemy to keep on fighting in South Vietnam and to keep on stalling in Paris.

The Paris talks had made little headway by the time the Nixon Administration assumed office in January. They remain stalemated today. At Paris, the North Vietnamese can endlessly block our efforts to end the war through negotiation by rejecting all proposals. For this reason, the President decided at an early point in his Administration that we could not leave all our eggs in the negotiation basket. The President continues to give his full support to our Paris efforts because, clearly, negotiations could provide the speediest resolution to the war. But this course requires a sincere effort by both sides, not by the United States and South Vietnam alone.

In January, the U.S. Government had no alternative plan to influence the course of events should the continuing efforts at Paris fail. Today, there is an alternative course of action that at the same time complements our efforts at Paris. That program is Vietnamization.

Vietnamization is something new. Those who view it as a mere continuation of the program for modernizing South Vietnam's armed forces are quite mistaken. It is much more than that. The Vietnamization program represents a major change not only in emphasis but also in objectives. Troop modernization until early this year had the negative goal of partially de-Americanizing the war. Vietnamization has the positive goal of "Vietnamizing" the war, of increasing Vietnamese responsibility for *all* aspects of the war and handling of their own affairs. There is an enormous difference between these two policies.

The previous modernization program was designed to prepare the South Vietnamese to handle only the threat of Viet Cong insurgency that would remain *after* all North Vietnamese regular forces had returned home. It made sense, therefore, only in the context of success at Paris. It was a companion piece to the Paris talks, not a complement and alternative. Vietnamization, on the other hand, is directed toward preparing the South Vietnamese to handle both Viet Cong insurgency and regular North Vietnamese armed forces regardless of the outcome in Paris.

In other words, we felt we could not stand pat with the past. Vietnamization has put some aces in the Free World's poker hand.

As I noted, Vietnamization embodies much more than merely enabling the South Vietnamese armed forces to assume greater military responsibility. It means, in South Vietnam, building a stronger economy, stronger internal security forces, a stronger government, and stronger military forces.

The American public must understand and support this if it is to be made to work in Vietnam. By making Vietnamization work, we create a powerful incentive for the enemy to negotiate meaningfully in Paris.

The enemy needs to know that time is not on his side, that the passage of time is leading to a stronger, not a weaker South Vietnam.

As the President has said time and again, we hold firmly to a single objective for Vietnam: permitting the people of South Vietnam freely to determine their own destiny. We want peace as speedily as possible, but we cannot acquiesce to a peace that denies self-determination to the South Vietnamese.

The President has also said: "I do not want an American boy to be in Vietnam for one day longer than is necessary for our national interest."

Vietnamization offers us the best prospect for bringing our men home quickly while achieving our objective in Vietnam.

The last thing I want to do is convey false hopes or promises to the American people. I do want to give as full a picture as I can of the situation we face in Vietnam and what we are trying to do about it. I cannot promise a miraculous end to the war. I cannot promise that our losses in combat will remain, as they were last week, at the lowest level in almost three years. But I can say to you that we are on the path that has the best chance of minimizing U.S. casualties while resolving the war in the shortest possible time without abandoning our basic objective.

In the Vietnamization program, high priority actions are underway. Let's look briefly at the four facets of Vietnamization for just a moment: stronger economy, stronger police for internal security, stronger government, and stronger military forces.

In the economic field, a significant factor is the opening up of waterways and roads for farmers to bring their produce to market and the growing confidence of farmers in using them. In addition, South Vietnamese have replaced Americans in the operation of the civilian port facilities at Saigon and at supply and warehousing facilities in various parts of the country. In the past three years, South Vietnam has trebled its funding of imports while the amount spent for this purpose by the Agency for International Development has dropped by a third. South Vietnam is moving toward restoration of self-sufficiency in rice production. Of course, progress in an economy distorted by war is bound to be uneven. Vietnam suffers from the chronic wartime malady of steep inflation but the government of Vietnam is attempting to face up to this problem with American help.

In the field of local security, the police force has been expanded and its training strengthened. Partly for this reason, the Viet Cong infrastructure is being weakened and rooted out in many areas. The infrastructure includes the hard-line Communist civilians who control and direct the acts of terrorism, assassination, and kidnappings at the local level—as well as the military activities of the local guerrillas and main force units. One measure of success in local security is the extent of the denial to the enemy of the base of popular support he needs for supplies, concealment, intelligence, and recruits and, more important, the reduction in terrorist activities which intimidate the population.

In the political field, progress is measured by the extent of the peoples' trust in their government. It is at the grass—or "rice"—roots level where we find encouraging signs. Locally elected governments are spreading throughout the country. Self-government has been brought this year to more than 700 villages and hamlets in recently pacified areas, bringing the total with self-government to about 8 out of every 10. There has been a notable increase in the number of citizens willing to seek local office and hence to face the threat of Viet Cong terrorism which has taken such a toll of local officials in past years. However, much remains to be done. The government of South Vietnam is continuing its efforts to strengthen popular support for their elected government officials at all levels, to improve administrative practices, and to provide better services to people in such fields as education and public health.

The success of the whole Vietnamization program would be jeopardized without progress in the political field. The political system and policies of South Vietnam are not our responsibility, but we are anxious to see them succeed.

The military area is where progress in Vietnamization has been most visible. We have begun to replace American with Vietnamese troops. Already this year, in two installments, we are cutting the size of our forces by 60,000 in Vietnam, and, in a related development, by 6,000 in Thailand. Contingent on one or more of the three criteria expressed by the President—progress at Paris, progress in Vietnamization, and reduction in the level of enemy activity—additional numbers of Americans can and will be brought home.

The troop redeployment so far announced have not been made possible by any progress in Paris or by any convincing evidence that Hanoi wants to reduce the level of combat. They have been made possible principally by the improved capability of South Vietnamese military forces. The armed forces of South Vietnam have increased substantially. Since January of this year, fourteen more battalions have been put in the field. They are better trained and better equipped. They are increasingly taking up the burden of combat. For more than a year, their ground forces have not been defeated in any engagement of units of battalion size or larger.

These, then, are some of the encouraging signs. But there remains much to be done, particularly in strengthening the economic

and political spheres. I don't want to suggest for a moment that everything is going our way, for there are still serious problems before us.

But we are not the only with problems. One might gather from some statements of both our critics and our supporters that the North Vietnamese and Viet Cong are eight feet tall, that they enjoy unreserved popular support, and that victory for them is inevitable. With Vietnamization well underway, I think it is time to pause and view the more balanced perspective of the problems faced by both sides.

Although the controlled press in North Vietnam does not parade criticism of their war effort, we see their problems in other ways. First of all, there are the staggering casualties they have endured numbering well over half a million men lost in combat since 1961. The impact of their casualties on the war effort is compounded by the growing difficulties encountered in recruiting replacements for the Viet Cong in South Vietnam. Add to this recent floods, epidemics, agricultural production difficulties, and a sagging economy. Finally, North Vietnam has lost its tough leader of many years, Ho Chi Minh, who served as a unifying symbol of so-called liberation wars in Southeast Asia. We cannot know what effect such difficulties will have in the future course of the war, but we must keep them in mind in our assessments.

I have explained to you today what this Administration is seeking to do in Vietnam, and why we believe our dual approach of Vietnamization and negotiation is the best path to follow.

There are those who claim that the United States should establish a formal and fixed timetable for U.S. troop reductions in Vietnam. On May 14th, President Nixon offered to withdraw our forces from South Vietnam by a fixed timetable if North Vietnam would do the same. The place to establish a fixed timetable is in Paris or in some other mutual context, rather than by unilateral action in the United States. The President's offer has received no response from Hanoi, and from some statements I have read, seems to have been ignored by many in this country.

We believe there are other reasons why the unilateral setting of a fixed timetable would be unwise at this time.

First, the readiness of South Vietnamese forces to supplant American forces may not coincide with a predetermined timetable. We have achieved a momentum behind Vietnamization. It is of the greatest importance that this momentum be maintained. An arbitrary timetable could disrupt this momentum.

Second, any hope of progress in the Paris talks would evaporate. Knowing that American troops would be removed by a certain day, the Communist negotiators would be even more inclined to yield nothing and more encouraged to wait us out.

Third—and this is particularly important—we cannot at any stage of this process subject the American troops left in Vietnam to the danger of being overwhelmed by an enemy force. Any timetable set now could work out so as to leave a small band of Americans as a sacrifice to illusion, impatience, or frustration.

A timetable set now might prove to be too slow or too fast. We are not setting one because it would not be fair to our men in Vietnam or to our allies, and it certainly would retard progress toward ending the war.

I cannot tell you how or when the war in Vietnam will end. It has been my policy in office not to make optimistic forecasts; there have been too many of those in the Department of the Department of Defense. We are now embarked on a new course that we believe has the best prospect for ending American combat involvement. We shall persist in assisting the South Vietnamese to attain self-determination. We will not abandon South Vietnam. As President Nixon has said.

"Abandoning the South Vietnamese people would jeopardize more than lives in South Vietnam. It would bring peace now but it would enormously increase the danger of a bigger war later.

"If we simply abandoned our efforts in Vietnam, the cause of peace might not survive the damage that would be done to other nations' confidence in our reliability."

I am sure of one thing. The day that we all hope and pray for when there are no more American troops in combat will be speeded if the American people make it clear that they are united behind their President's policy.

As we press toward a resolution of the situation in Vietnam, we must not lose sight of the larger world stage. We must be vigilant in the face of a continuing threat from abroad to our security and a growing challenge here at home to the military foundation so vitally needed for a policy of peace.

The President has said we are entering an era of negotiations. We are trying to make negotiation work in Paris. We would like to see it work in arms limitation talks. We hope to make it work in all areas of contention as we approach the decade of the 70's.

You men of labor know a great deal about negotiation. Two things in particular you have learned and applied in your long history. The first is to persist and persevere, regardless of how difficult the course, because the goal is worthy. The second is to negotiate from strength.

On Vietnam, we are persevering in negotiating for peace and we are strengthening our hand through Vietnamization.

On the larger front, we have a strong military base that we must maintain so that we can always negotiate from strength while assuring our ability to defend our interests should negotiation fail.

We need your continuing help in keeping America aware of the need both for strength and perseverance in building a policy of peace. We know we will get it.

Thank you very much.

A MAJOR STATEMENT ON NATIONAL SECURITY BY SENATOR BROOKE

Mr. PEARSON. Mr. President, yesterday I had the privilege of introducing the distinguished junior Senator from Massachusetts (Mr. BROOKE) to the students and faculty and guests of Kansas State University. Senator BROOKE was on the campus at Manhattan to deliver a major speech as a part of the university's distinguished Alf M. Landon Lecture Series.

Senator BROOKE's speech, entitled "National Security: Dollars, Demands, and Dilemmas," was one of the most lucid and most learned statements I have had the privilege to hear regarding the great and complicated issues of national security and how we as a society are and should be reacting to these issues.

Mr. President, this is an extremely valuable and useful statement which I want to bring to the attention of the Senate and the public; therefore, I ask unanimous consent that Senator BROOKE's speech be printed in the RECORD.

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

NATIONAL SECURITY: DOLLARS, DEMANDS, AND DILEMMAS

(The Landon Lecture, Kansas State University, Oct. 6, 1969)

It is a great honor to be with you today and to have the opportunity to present the Landon Lecture. Alf Landon brought great distinction to this State and to the Nation. And the lectures which have borne his name have brought eminent men to this campus. I am very gratified that you have invited me to take part in this important series of programs.

Some of you no doubt recall the famous Civil War general, Joseph Hooker, whom Abraham Lincoln appointed to replace the slow-moving General McClellan. General Hooker made a special effort to demonstrate that he was a true man of action, and in his first few days in command sent to the President a dispatch headed, "Headquarters in the Saddle." Mr. Lincoln was not exactly impressed. "The trouble with Hooker," he remarked, "is that he's got his headquarters where his hindquarters ought to be."

A lot of Americans are wondering in 1969 whether those responsible for the Nation's defenses have their "headquarters" in the right place, namely on the job of meeting our national security needs economically and effectively. We are witnessing an unprecedented display of citizen's ire against the military establishment. Not only the uniformed military, but the civilian leaders and private contractors engaged in defense activities are bearing the brunt of unusual public criticism.

Part of this criticism stems, of course, from the frustration and bitterness engendered by the Vietnam war. However one assesses that conflict, it has triggered a major loss of confidence in the capacity of our Government in general and of our military in particular. But the new and growing skepticism toward the military is compounded of other political and economic factors, as well.

There has long been a need for responsible criticism in the field of national security policy, but there are obvious reasons why it has been difficult to develop. Defense policy is intimidating. Replete with complicated technologies, awesome weapons, arcane strategies, and stratospheric budgets, it quite understandably has scared off many of those who might normally have contributed independent judgments. Furthermore, much relevant information has been classified and withheld from public debate, sometimes necessarily, often, one suspects, merely for convenience. And the horrors of the nuclear age numb the mind; many aspects of contemporary defense policy have seemed unthinkable to some of our citizens. Thus, the inclination to leave this vital field of policy to the experts has been a powerful one.

This context has altered rapidly, however, in recent months. In and out of Congress, a swelling body of aroused individuals has begun to plunge into issues of national security with a vigor and determination rarely seen. A new breed of journalism has begun to flourish, exposing serious problems in defense procurement and management. The small group of dedicated congressional investigators who have plowed these fields for many years—these have been joined by a large number of allies, including several on the Senate Armed Services Committee. Individual members of the House and Senate have struck out on their own to uncover dubious contract practices, to highlight the dangers of certain weapons systems, to press the case for non-military approaches to security such as the pending strategic arms negotiations with the Soviet Union.

The need for strategic arms talks should be evident. It was in 1945 that we exploded the first atomic device, and shocked the world and ourselves with the awesome power of this new technology. In 1949 the Soviet Union detonated a similar weapon. For the past quarter century, the two most powerful nations in the world have held each other at bay. Changes have occurred within both blocs; allies have challenged the leadership of the United States and the Soviet Union alike; but the nuclear stalemate goes on.

The American people have become increasingly aware over the years that the great

power of nuclear weapons is sufficient only to insure mutual deterrence; it does not and cannot provide meaningful military superiority against a nation also armed with thermonuclear weapons and ballistic missiles. This view apparently has been accepted by the leaders of the Soviet Union also. At the present time neither side can hope to attain "superiority." Both the United States and the Soviet Union have over 100 long-range missiles. These weapons, armed with nuclear warheads, can be either land or sea-based. In the case of the Soviet Union, nearly all are land-based. Nearly half of the U.S. missiles are located at sea on our Polaris submarine fleet.

In addition, the Soviet Union has constructed a rudimentary anti-ballistic missile system around the major cities of Moscow and Leningrad. Some theorists have argued that an ABM system, by protecting the major population centers, could give the Soviet Union a "first strike capability." That is, in time of major international tension, the Soviets could conceivably launch what is known as a "pre-emptive" attack upon the United States, knowing that their initial attack would wipe out a portion of our offensive capability and that their ABM system could protect their administrative and population centers against the remainder of our missiles. It was this consideration which prompted many of our citizens to support the construction of a similar anti-missile system for the United States. However, the Soviet ABM system is not as technologically advanced as the one we are planning to construct, and the Soviets seem to have stopped deploying the original system because it will not work adequately against U.S. missiles.

Thus, for the time being, both sides are left with a rough comparability in strategic weapons, and confusing as it may be, offensive weapons—numerous and powerful enough to devastate an opponent even if he were to strike first—are our best insurance against the outbreak of war.

Now, however, we are faced with a new technology which threatens to disrupt this carefully maintained balance of power. I refer specifically to MIRV, the innocent-sounding acronym for multiple independently targetable re-entry vehicles, MIRV's are multiple warheads, placed on a single missile. Instead of a single nuclear bomb in the tip of a missile, we and the Soviets are now developing the capability of placing three or more bombs in the nose of each rocket; and through complicated electronic engineering, each of these bombs can be guided to a separate target.

With this new generation of weapons about to sprout from the arsenals of the Soviet Union and the United States, I have been joined by almost half the Senate and a sizable number of House Members in calling for joint moratorium on flight tests of the so-called MIRV systems. These weapons, multiple independently targetable re-entry vehicles, are by far the most dangerous technology to be devised in years. MIRV would multiply the offensive forces of the two sides several-fold.

The significance of MIRV has tended to be lost in the intense controversy over the proposed ABM deployment. Many of us have opposed ABM deployment at this time, but even if the decision is made to proceed, it will be years before the system is operational. During that period we will have many opportunities to re-assess the need for such a defense. In other words, ABM deployment remains a *controllable* decision, in the sense that unilaterally or cooperatively with the Soviets we still have an opportunity to limit or terminate the program, if that promises greater mutual security.

By contrast the insidious quality of MIRV technology lies in the fact that we are very near the stage at which these systems will no longer be controllable by technically practical and politically feasible means. Once an intercontinental missile is resting in its silo, we may no longer be sure whether it has one or several warheads, or whether it is capable of striking one or several targets.

It has become increasingly clear to close students that, short of a highly improbable system of on-site inspection of deployed missiles, the most promising approach to controlling MIRV is to prohibit the test programs which are necessary to perfect multiple warhead devices. By banning MIRV test flights, which can be observed with some confidence by both sides, it may be possible to forestall actual deployment of these weapons by preventing the achievement of the reliability and accuracy that would be required. At the least, a MIRV test moratorium should slow the development of this menacing weapon, allowing additional time to seek workable arms control agreements in this realm.

And time has become the most precious commodity where MIRV's are concerned. The United States is nearly half-way through the test series that may lead to initial deployment of the Minuteman III and Poseidon MIRV systems late next year. While the Soviet Union appears to be working on a less flexible system, it also has conducted a number of tests of a large weapon capable of striking more than one target. If these tests continue unabated, each nation will have to assume that the other has actually deployed MIRV.

Why is this likely to be so critical a turning point in the history of the arms race? The reasons are many, but the fundamental points can be stated briefly. MIRV threatens to erode one of the basic barriers to nuclear war, namely, the utter certainty that neither the Soviets nor the Americans could carry out a nuclear attack without suffering devastating retaliation. But when a single missile becomes capable of destroying several other missiles, a nuclear war may become more likely. This is not to say that MIRV deployment condemns us to inevitable holocaust. But in moments of acute crisis, when each side knows that the other has the capacity to wipe out much of its retaliatory force, the tendency to strike first will probably grow.

When the risks are so grave, the disaster of war so total, we cannot afford to tempt fate. It may be possible to survive in a world populated by MIRV's, but it would be far preferable to live in a world free of them.

The uncertainties such a system would add to the present balance of terror would make a significant arms control agreement exceedingly difficult to achieve, and would lead us into a less stable strategic relationship with the Soviet Union. The likely result would be yet another offensive-defensive arms race, with ever-increasing burdens and ever-decreasing security on both sides. It is my profound hope that the President will accept the proposal to seek a joint MIRV test moratorium. Without it, I have grave doubts that the planned negotiations can be successful in turning us away from the perilous path on which we have been proceeding.

There has been far too little sense of urgency in the Nation and in the Government regarding those negotiations, the so-called strategic arms limitation or SALT talks. The Soviet Union initially accepted the American suggestion for such talks over a year ago, but the invasion of Czechoslovakia, the U.S. election campaign and other factors combined to delay them. President Nixon indicated four months ago that the United States was prepared to proceed with these vital negotiations. But the clock has been ticking and the Soviets seem to have grown even more wary of these talks.

At present it is clear that the issues for the SALT talks have been vastly complicated by the rapid advance of technology on both sides during recent months, but the opportunity still exists for earnest and productive diplomacy to curb the arms race. MIRV tests continue, ABM deployments proceed, weapons decisions are made—but the cause of enlightened negotiation is stymied.

This is no time for considerations of national pride or calculations of narrow advantage to intrude. The stakes in these negotiations are nothing less than the future security of mankind.

The SALT talks, when and if they begin, will no doubt be prolonged and complex. Yet the fundamental questions they must address can be reduced to a single point: Are the two powers prepared to build their future strategic relationships on the doctrine of mutual deterrence? That is in fact the question which President Nixon put to the Soviet Union in his notable speech of March 14. The President, for the first time, confirmed that the United States has adopted a policy of strategic sufficiency, and has concluded that neither side can successfully or safely pursue the elusive goal of military superiority. He made clear his understanding that the United States and the Soviet Union should forego certain weapons not only because they are costly but because they jeopardize strategic stability. For example, the President rejected a heavy city-oriented ABM system and a massive expansion of our offensive forces precisely because they would threaten the Soviet Union's capacity to retaliate. Such deployments would force them to take countermeasures of a very dangerous character.

President Nixon has expressed a vivid appreciation of the central paradox of our time, namely, that mutual security depends on mutual vulnerability.

If the Soviets respond affirmatively in the SALT talks by agreeing that mutual deterrance must be the touchstone of future security arrangements, many specific consequences will follow. Agreement on a number of issues should become more feasible. For example, in agreeing that mutual deterrence should be a common goal, the two sides should also be able to agree that unlimited deployment of ABM systems would be incompatible with mutual deterrance. A freeze on the number of offensive delivery systems should also become more possible, since continued expansion of such forces undermines mutual deterrence, especially if MIRV technology is not inhibited. And even some limitation of anti-submarine warfare may become workable, since a breakthrough in ASW might erode the distinctive deterrent value of missile-launching submarines.

These are not easy or comfortable questions. An ideal world would not have to contend with them, for it would have no nuclear weapons, no intercontinental ballistic missiles, and, for that matter, no wars. But in the world as it is, those concerned about the well-being of life on this plant must come to grips with these problems in a realistic and constructive way. The SALT talks offer a precious opportunity to do so. That opportunity must not be squandered.

As we confront these momentous issues, these paralyzing questions of life and death, it is easy to drown in self-pity and anxiety. Indeed some have ascribed much of the unrest among today's younger generations to the overwhelming sense of impending doom which nuclear weapons have imposed on mankind. Professor George Wald of Harvard recently described today's youth as the generation without a future. He declared that this awful perception was at the root of campus tension.

Perhaps there is some truth in his view. The insight is plausible enough, and the spread of student disturbances to many countries cries out for explanation. But the distinctive feature of the recent waves of student activism is not that it occurs in the nuclear age. In truth the most notable point from our perspective is that the traditional outbursts which have so often occurred in

European, Latin American and Asian Universities have now been matched in the United States. For some reason American students have adopted some behavior patterns which have disrupted other countries' schools for centuries.

It is difficult to attribute this phenomenon to the fact that we have entered an age in which students everywhere are oppressed by *ANGST*. A terrible sense of dread about the fate of the world. Thoughtful students always and everywhere have been concerned about these great issues.

Most campus disputes have involved immediate issues, though local, some of those issues are common to many schools. The quality and relevance of education, the difficulties of personal learning in gigantic institutions, the demand for greater student freedom and greater student involvement, all these important questions would surely be with us whether or not we had ever heard of nuclear weapons.

In short, while the anxieties of the thermonuclear age are real and painful, while they no doubt compound the other stresses of modern life, it is unreasonable to blame all our troubles on the fact that we are fated to inhabit a world plagued with such absolute weapons. Apocalyptic visions tend more to numb the believer than to stimulate him to constructive action.

To cope with the challenge of controlling nuclear weapons, we cannot afford to wallow in a mood of hopelessness and helplessness. We need clear heads to identify and isolate the special problems of nuclear arms control, and this mammoth task is not made easier by chaining ourselves in interesting but irrelevant speculations.

Nuclear weapons worry young people; nuclear weapons also worry older people. We need to control nuclear weapons, not because they trouble our students, but because they threaten the well-being of all men.

I make this point to anticipate another: the limitation of nuclear weapons and the prevention of nuclear war are feasible. Rather than succumb to frustration and despair, we ought to take stock of what we have done and what we can do in this field. The record is by no means entirely bleak. For several years the United States had a virtual monopoly on nuclear weapons and could have exploited them to rule the world. Yet there was never any real likelihood that it would do so. Having the power to dominate, America made clear its goal of a just world order by declining to use that power.

In later years, the Soviet Union has overtaken the United States lead in nuclear weapons, and peace has come to rest on a balance of terror. The recognized fragility of that balance has been a powerful incentive to seek better and more dependable foundations for peace. The lesson has impressed itself on every informed mind:—National security is inseparable from international security—in the words of Maxim Litvinov: "Peace is indivisible."

The fruits of this lesson have ripened slowly, but they have begun to ripen. By the decade of the sixties it became possible for the Soviet Union and the United States, after arduous negotiations, to reach significant arms control agreements. The nuclear test ban treaty, concluded in 1963, not only inhibited nuclear fall-out from the atmosphere; it also curtailed further development of even more refined and destructive nuclear devices.

Another agreement sought to stop the threatened extension of such weapons into the untouched environment of outer space. Antarctica has been declared off limits to military installations.

Recognizing that the quest for a durable peace would be jeopardized by the continued spread of nuclear weapons, most members of the United Nations supported efforts to devise a non-proliferation treaty, which has now been concluded. A "hot line" has been installed to maintain emergency communications between Moscow and Washington, and to reduce the dangers of accidental conflict. At this stage prospects are hopeful for additional limitations on military uses of the ocean floor and on the horrendous chemical-biological weapons of which we have all read.

Perhaps more important than these formal arrangements to reinforce world stability have been the tacit and unilateral steps taken by the great powers. Both sides have come to employ space-based observation systems which provide vital information about the number and kinds of weapons available to the two countries. In a sense technology has given us the "open skies" which President Eisenhower proposed over a decade ago. The contribution of such peacekeeping systems is immeasurable.

Furthermore both nations have learned that a stable balance of power cannot rely on vulnerable weapons which are only usable in a first strike. Hence, the Soviet Union has followed the American lead in deploying weapons suitable for a second strike but less vulnerable to an initial attack. And both Moscow and Washington have gone to great lengths—in Cuba, in Vietnam, in Berlin, in the Middle East—to avoid even minor clashes between Soviet and American military units. In some respects the fear of escalation has been enormously healthy, it has induced the kind of Soviet-American restraint that must prevail if crises are not to become calamities. It is this kind of mutual restraint which has allowed us time to explore non-military approaches to the problems of national security.

These promising measures are, of course, only half-steps toward the world we seek. But they are solid accomplishments which demonstrate that we can begin to erect a peaceful order through cooperative undertakings. Given time and hard work, we and the Soviets can transform our realization of common peril into appreciation of our common interests. And those common interests are the basis for fashioning meaningful limitations on the types and levels of weapons we maintain.

It would be naive to conclude that these halting beginnings are a guarantee of major future successes at the conference table. But it would be equally naive and far more dangerous to the values we hold most dear if we fell prey to the misconception that attempts to achieve arms control are condemned to failure. Anxious concern is fully warranted; a pervasive sense of futility is not.

The rewards for progress on the arms limitation front are measured not only in increased security for all nations. They also appear in the vast opportunities to reallocate resources now devoted to military expenditures. At present some $200 billion a year is spent on national security programs throughout the world. If we can liberate even a small fraction of that sum, by reducing the necessity for such expenditures, think what it could mean for the prosperity of this globe. Programs to speed development of the impoverished lands, to relieve the blight infecting urban communities in every country, to feed and clothe and heal those in need—even a diversion of but 10% of the world's military budgets would be a boon to mankind.

Again, my message is that it can be done. Already, on our own and without requiring parallel action by the Soviet Union, we are finding ways to shift resources away from some military programs and into other priority efforts. A year ago those of us advocating adjustments in U.S. defense spending discussed the possibility of a $5 billion reduction in the budget; no one really expected that to occur. But in the period since January of this year, executive and legislative action has in fact trimmed defense spending by very nearly that amount. The budget for 1970 will be in the $77 billion range, as opposed to the more than $81 billion recommended by the previous administration. It could be even less, depending on how the $2 billion cut proposed by the Senate Armed Service Committee is finally resolved. Thus progress toward controlling the defense budget has been dramatic and substantial.

The dilemmas of national security are complex and must be aired widely, if the collective wisdom of the American people is to be informed enough to be effective. Problems like these defy dogmatic and idealogical judgments. In wrestling with them I often recall the encounter a century ago between the Archbishop of Canterbury and Cardinal Hensley. Leaving a meeting at which he had been with the Cardinal, the Archbishop offered him a ride. "After all," he said, "We're both engaged in God's work."

To which the Cardinal replied, "Yes, you in your way, and I in His."

None of us can claim the mantle of Divinity when it comes to the great decisions of national security and public welfare. But God has equipped us with intelligence and compassion which, coupled with determined effort on our part, can lead to more humane and progressive policies. And those policies will be a living testament to the peace and justice America seeks for herself and for all nations.

HAS A RECESSION BEGUN?

Mr. YARBOROUGH. Mr. President, for the last several months, the Nixon administration's fiscal and monetary policies, and in particular, its policy of high interest rates, have been detrimental to the country. As I have repeatedly stated, the high interest rates fostered by the Federal Reserve, combined with the Nixon administration's cutback in Federal construction and in vital domestic programs, will eventually cause a recession without curbing inflation.

The revelations in this morning's newspapers seem to indicate that this is exactly what is beginning to happen. It was reported in this morning's edition of the Washington Post that unemployment rose from 3.5 to 4 percent of the labor force in September after seasonal adjustments. The magnitude of this monthly increase, the largest in 1 month since the 1960–61 recession, has shocked many of the Nation's economists. While the Nixon administration tends to view the unexpected increase in unemployment as evidence that the Government's anti-inflation program is beginning to take hold, in my opinion, the increase signifies the beginning of a damaging recession. As Mr. Harold Goldstein, assistant commissioner of labor statistics, pointed out, there is serious cause for concern due to the steady increase in the quarterly unemployment rate from 3.3 percent in the January–March period to 3.5 percent in the April–June period and to 3.7 percent in the past 3 months.

As the article in the Post notes, unemployment normally falls sharply in September as youngsters, who have a high jobless rate, leave the summer labor force to return to school. But this year there was an actual September rise of 90,000 in the unemployed ranks causing the unemployed to reach 3 million. After seasonal adjustment, the increase in unemployment came to 365,000.

And who are these newly unemployed? They are the blue-collar workers, the factory worker, and the skilled and unskilled laboring man. The unemployment rate for blue-collar workers jumped from 3.8 to 4.4 percent, while that for the white-collar employee held steady at 2.2 percent.

Mr. President, Prof. Milton Friedman, noted Chicago University economist and campaign adviser last year to President Nixon, testified before Senator WILLIAM PROXMIRE's Subcommittee on Economy in Government on October 6, 1969, that unless the administration and Federal Reserve quickly relax their tight money policy, the Nation faces "an unnecessarily severe recession next year" with unemployment ranging higher than 7 percent. His views are contained in an article by Hobart Rowen in today's edition of the Washington Post. I ask unanimous consent that this article be printed in full in the RECORD at the conclusion of my remarks.

Former Vice President Hubert Humphrey, in a speech to the AFL–CIO yesterday discussed the bankruptcy of the Nixon administration's economic policy. In an article by Robert C. Maynard, appearing in today's edition of the Washington Post, Mr. Humphrey's remarks are reviewed. I ask unanimous consent that this article be printed at the conclusion of my remarks in the RECORD.

Mr. President, the economic posture of our Nation is a matter of serious concern. As I have recurringly stated, the real cause of inflation in this Nation is the needless and fruitless Vietnam war. Increasing interest rates have only added to the inflationary spiral generated by war spending.

Mr. President, in all American history, this is the only administration I know of that boasts about more unemployment. The administration becomes elated every time the unemployment rate goes up a percentage point, raising the cry that this means we are stopping inflation. But we all know, Mr. President, that the unemployment rate is not the proper criteria for measuring inflation and recessions since the war in Vietnam has taught us the cruel lesson that we can have a recession and inflation at the same time.

So, the administration instead of holding its head high with boastful pride with each increase in the unemployment rate, ought to try to do something about the "forgotten American" as Mr. Humphrey called him. The real forgotten American is the adult citizen who pays higher interest rates and suffers in a recession, while at the same time paying higher prices and suffering in an inflation. And the administration's high-interest rate policy, with its resulting unemployment indicates that the administration has forgotten about the forgotten American.

There being no objection, the articles were ordered to be printed in the RECORD, as follows:

FED SPARKING A RECESSION, SENATORS TOLD

(By Hobart Rowen)

Unless the Federal Reserve quickly relaxes its tight money policy, the nation faces "an unnecessarily severe recession next year," with unemployment ranging higher than 7 per cent.

That was the somber judgment offered yesterday by Prof. Milton Friedman, the noted Chicago University economist and campaign adviser last year to President Nixon.

A long-time critic of the Fed, Friedman testified before Sen. William Proxmire's subcommittee on Economy in Government, and later elaborated on his fears of a recession to reporters.

The committee also heard testimony from Brookings Institute economist Charles L. Schultze and from Ralph Nader on the need for efficiency and new incentives to improve government operations.

Nader complained that regulatory agencies do not make compliance surveys regularly—indeed, in some cases not at all.

"Endemic non-enforcement voter time builds up a corruption of the political legal process that is difficult to overestimate," he said.

Schultze, former Budget director, cited a number of subsidies for business, industry and farm groups that he said work inefficiently, at great cost to taxpayers.

One major drawback in managing public enterprise, Schultze said, results from the Budget Bureau's failure to charge the right departments with all the costs they incur. An example that fascinated the committee is that the Defense Department is not charged with the cost of atomic warheads for its nuclear weapons.

Proxmire (D.–Wis.) said he would ask Budget Director Robert P. Mayo to comment on this and other aspects of Schultze's testimony.

Unemployment rates in the vicinity of 7 per cent would be the highest since the 1958 recession, Friedman said. And he warned that the Federal Reserve "has but little time" in which to reverse its policy.

"But I see no signs that they are prepared to do so," the controversial economist told the impromptu press conference.

Friedman's assessment of the Fed's posture appeared to be borne out by public and private statements by Federal Reserve Board governors indicating that a solid majority thinks it is too early to loosen the money strings.

Over the weekend, for example, Governors Andrew F. Brimmer and William Sherrill said in separate speeches that the present level of restraint, measured by zero growth in the money supply, would have to be continued for a time.

Fed Chairman William McC. Martin told the House Banking Committee yesterday that current signs of a slow-down in the economy were only slight. In fact, he said, "it's hard to see interest rates going down."

But Friedman, internationally noted as the principal exponent of the theory that monetary policy is the single most important determinant of the shape of the economy, said that signs were already present that the over-heated economy is slowing down, in response to tight money.

"There is a serious danger that the Fed is over-doing the matter," he told the Proxmire committee. He cited figures showing that the money stock—currency and checking accounts—which had been increasing by an annual rate of slightly more than 4 per cent for the first half of the year, has not been increasing at all for the past few months.

"That's a very sharp change," Friedman argued, "and it means they probably have gone too far."

His prescription for the right policy, would be a return to a 4 or 4.5 per cent rate of growth in the money supply, which he said would be compatible with the sustainable level of real growth in the economy.

The Fed was unresponsive to Friedman's argument. Nor were they changing their minds because of publication yesterday of labor force figures showing a sharp jump in the September unemployment rate to 4 per cent. Brimmer told the Washington Post that there was still "nothing to suggest" that there has been an improvement in "price behavior."

HHH HITS NIXON ON ECONOMICS

(By Robert C. Maynard)

ATLANTIC CITY, N.J., October 6.—Former Vice President Hubert Humphrey, looking and sounding more like a political candidate than a college teacher, lambasted the economic policies of the Nixon administration today as "cruel and mean."

Noting that interest rates have risen this year to their highest point in a century, Humphrey said of the man who defeated him almost a year ago, "I didn't think his administration would go back that far for its standards."

In his most sweeping post-election condemnation of Mr. Nixon to date, Humphrey accused the President of failing to provide moral leadership and found every phase of his domestic program wanting or worse.

His only reference to Mr. Nixon's foreign-policy performance was a plea for support against deployment of anti-ballistic missiles lest one day an epitaph read, "Here lies America, armed to the teeth but rotten to the core."

WRY GREETING

Humphrey chose as the occasion for his attack on Mr. Nixon the convention of one of his staunchest supporters in last year's election, the AFL-CIO.

"My dear friends of the AFL-CIO," he said after entering the hall here to a standing ovation, "I come to you as a private citizen—through no fault of yours. I know how much you did for me and I hope you know how I wanted to do for you. If everyone had done as well as you did, I would have had this meeting in the East Room of the White House, and you would have been my guests."

A scattering of neatly printed placards ("HHH" and "HHH for Unity) waved in the bright television lights in the basement ballroom of the Traymore Hotel.

The former vice president got right down to business by explaining why he has withheld comment until now on the administration of President Nixon and Vice President Agnew.

"Since they had so little time to get to know each other, they deserved a honeymoon, but they have been together now for more than nine months: I think something should issue from this union."

Clearly still smarting from the 1968 Republican campaign slogan, "The Forgotten American," Humphrey snapped that it was stolen from Franklin D. Roosevelt and then said that Mr. Nixon's version of the "forgotten American" was "all of those who oppose social reform—their friends in the corporate board rooms—their Republican friends in the South, especially that leader of southern Republicanism, Sen. Strom Thurmond."

The consequence, Humphrey trumpeted, was "unprecedented inflation, the highest interest rates since 1859, a let-up in civil rights enforcement—you name it, the Nixon-Agnew administration has remembered its friends and forgotten the rest of us."

But it was in the field of economic policy that Humphrey gave the President the lowest marks of all.

He accused him of a "virtual abdication of . . . responsibility" by not putting more pressure on both business and labor to hold prices and wages in check as Presidents Kennedy and Johnson had done.

"If your son or son-in-law tried to buy a house, he knows what it means to be forgotten by the Nixon administration. Assuming you are lucky enough to find someone willing to lend the money, the 15 per cent increases since January in the cost of maintain-

ing a home mortgage means that the three-bedroom home you could afford last year has now become a two-bedroom home."

PRICE SPIRAL CITED

Turning to the consumer price situation, Humphrey said that "any housewife shopping knows what it means to be a forgotten American—meat, fish and poultry have gone up as much the last seven months as in the previous 10 years."

Almost as though it had been staged, an AFL-CIO aide handed Humphrey an Associated Press story reporting that unemployment rose to 4 per cent during September, the highest level in two years.

After reading the news, Humphrey told his audience, "You shouldn't be surprised. It has always been thus. It has always been thus. Beware of the signs of the times."

SENATOR BROOKE OPPOSES REPEAL OF AMMUNITION CONTROLS

Mr. BROOKE. Mr. President, there is at present on the Senate calendar a bill, H.R. 12829, providing for an extension of the interest equalization tax and other related matters. I have reviewed the proposed legislation and the report of the Committee on Finance and find them, as usual, comprehensive and well-reasoned.

There is, however, one provision of the proposed legislation which is totally unrelated to the economic issues at hand and which causes me great concern, both on substantive and on procedural grounds. I refer to section 5 of the bill which would amend the section of the United States Code pertaining to ammunition recordkeeping requirements.

Just a little over a year ago, the Senate agreed, by a vote of 41 to 36, to include controls on the sale of all ammunition as a major provision of the Firearms Control Act.

I do not wish at this time to reiterate all of the arguments in support of such a requirement. I would only stress, as I have before, that the showing of identification before a purchase of ammunition can be made does not impose an unreasonable burden upon any legitimate sportsman or law-abiding citizen. It does, however, serve as an impediment to the purchase of ammunition by known criminals for illegitimate purposes. It also provides that ammunition which has been purchased and used for illegal purposes stands a better chance of being traced, for even if a person used a false name or false identification to make the purchase, his face or something about him may be remembered by the salesman, thus facilitating his apprehension.

Mr. President, it seems to me to be simply a matter of commonsense that some restrictions should be placed on the purchase of lethal materials. Cars and motorcycles, private planes, and in some cases even bicycles must be registered by their owners, and operators of these vehicles must be certified to use them. This is only reasonable, for such vehicles use the public highways and airways, and their safe operation is an insurance for all concerned. By the same token, most States require some identification before alcohol or cigarettes can be sold, in order to prevent the sale to minors of products which have been proven harmful. Identification must be shown before checks can be cashed or purchases charged in a store, in order to protect the welfare of the customers and the banks or businesses concerned. No one regards these measures as an infringement of fundamental rights. Rather, they are seen as a means of protecting the entire community, and most Americans respect and abide by that principle.

But until last year the most deadly of all instruments, and the one most often used in crimes of passion or premeditation, was available to all Americans regardless of age or background, with no restrictions at all. The passage of the Firearms Control Act was a small but significant step toward protecting the rights of all Americans—not just the hunters and sportsmen, nor the criminals and vandals—but all Americans.

Even so, the National Rifle Association and other likeminded individuals and organizations have opposed the reasonable restraints of this act, presumably on the grounds that any restrictions on their right to keep and bear arms is a step toward the denial of that right and toward eventual Federal dictatorship. They now seek to repeal one of the major provisions of that act, and they would do so not by public hearings and the proposal of a measure specifically for that purpose, but by attaching a rider to an innocuous tax bill in the hopes that their proposal will be carried quietly through the Senate on the silent wings of interest equalization.

Mr. President, there are less than a million members of the NRA. There are two hundred million Americans, nearly 80 percent of whom, or 160 million, are strongly in favor of legislation to curb the widespread and unrestricted availability of guns and ammunition in America. The figures should speak for themselves. Shall it be said that this Congress was dictated to by an interest group speaking in opposition to the known will and best interests of the vast majority of our citizens? Or shall we in fact hear the voice of the people, the so-called "forgotten Americans," whose concerns and wishes should be our own? To repeal the present, modest controls on ammunition sales would be to ignore the larger needs of our society.

I urge the Senate to reject this unnecessary and unwise provision, and to give the existing statute a fair opportunity to demonstrate its value.

NIXON PUTS A HALF MILLION MEN OUT OF WORK

Mr. WILLIAMS of New Jersey. Mr. President, yesterday the administration reported that unemployment had reached a 2-year high of 4 percent. This represented an increase of one-half of 1 percent in a 1-month period, the largest single increase since the last years of the Eisenhower administration.

Since the announcement was made, economists have debated the effect of the unemployment rate on the inflationary economy. The debate has been joined by several administration officials. An assistant secretary of the treasury predicts the unemployment rate will increase 5 percent by next year. One of President Nixon's campaign advisers has even predicted unemployment of 7 percent or higher next year. They talk in terms of percentages, economic progressions, gross national product.

But what does this really mean? It means that last month, in 1 month alone, 90,000 Americans lost their jobs, 365,000 more Americans, after seasonal adjustment, were unemployed. It means that since Richard Nixon was sworn in as President his economic policies have put more than one-half million men out of work. It means that one-half million Americans, so far, have paid the price of Richard Nixon's false economic stability.

And what does the White House have to say about the harsh economic adversities facing these one-half million Americans it has forced out of work. It merely says: "We are not happy with the increase in unemployment."

The banking industry has increased its interest rate over 30 percent since last year pushing inflation to terrifying levels and the administration does nothing. The auto industry, steel industry and oil industry increased their prices, compounding the inflationary spiral, and the administration does nothing. But when American workers seek to increase their salaries in order to catch up with industry's price increases, the administration acts swiftly enough against America's working men and women to cut back on three-fourths of the Federal construction jobs. It stimulates increased unemployment and then characterizes the rising unemployment rate, in the words of a high Treasury official, as "some success in the battle of inflation."

Yes, American workers, once again a Republican administration is treating you as the "cannon fodder" in the battle against inflation. When you're out of work, they know that they are winning their battle. The fact that prices are still increasing, that interest rates are higher than they have ever been in the history of the country does not seem to trouble this administration.

These are all clear signs that we are heading into a phenomenon which can only occur, and has only occurred, in Republican administrations. In the midst of general inflation, we are approaching a severe recession for those least able to withstand it, and the administration will not take one step, not even one small step, to curb the excessive profits of big business, to curb the voracious appetites of financial institutions. The administration sings in unanimous chorus, "while the rich get richer the poor will just have to struggle along as best they can."

The half million Americans who have been put out of work by Mr. Nixon do not have to worry anymore about price increases; they do not even have the income to buy at last year's prices, let alone tomorrow's prices. And by this time next year the Treasury Department confidently predicts an unemployment level of 5 percent which means that another three-fourths of a million Americans will be unemployed. If the administration

has its way, by next year a total of almost 5 million Americans will be unemployed. And all Mr. Nixon can say is:

We are not happy with the increase in unemployment.

The American workingman must rise up and demand action where action is needed and deserved. Prices must be stabilized. Corporate profits must be restrained, and the mortgage lenders must not be permitted their finance charges which more than double the price of housing and increase the price of everything, even the food we eat.

We have a right to expect the President to come to grips with the reality of inflation. We have a right to expect the President to squarely face the needs of America's 78 million working women and men. We can only hope that the President does not become the first "do nothing" President since the depression.

REPRESENTATIVES OF 52 NEW YORK COLLEGES PROTEST CHANGES IN TAX LAW ON CONTRIBUTIONS

Mr. JAVITS. Mr. President, representatives of 52 private colleges in New York and of the State University of New York met with my colleague from New York (Mr. GOODELL) and me today to protest provisions of the tax reform bill pending in the Senate which they feel strongly will gravely endanger gifts and grants from private sources indispensable to their ability to continue to meet today's high educational standards.

The spokesman for the group was John W. Chandler, president of Hamilton College. He was accompanied by Samuel Babbitt, president of Kirkland College; Joseph Palamountain, president of Skidmore College; and by representatives of other colleges.

It is the overwhelming experience of each of these institutions that gifts of appreciated property represent the backbone of their contributions—particularly the very large contributions which are so vitally essential.

These representatives have also expressed considerable concern that the proposed tax treatment of the so-called "charitable remainder trust" will severely restrict the present desirability of this type of trust as a means of making charitable gifts. Such trusts also represent a significant source of contributions to these institutions of higher learning.

Educational requirements are increasing at a tremendous rate. It is these institutions which must rise to meet these needs. It is vital to our national interests that we do not disastrously weaken these institutions in the name of tax reform.

I ask unanimous consent that the statement of position of these 52 New York Universities and a news release from Hamilton College be printed in the RECORD.

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

NEWS RELEASE FROM HAMILTON COLLEGE

CLINTON, N.Y.—A group of college and university officials from New York State will go to Washington next week to urge the Senate not to restrict tax incentives for gifts to educational institutions.

John W. Chandler, president of Hamilton College and spokesman for the group, said it will include about 12 officials, representing the views of 34 private institutions and the State University of New York.

President Chandler said he expects the group to include other college presidents as well as vice presidents and officials concerned with fund-raising and development.

They will meet with Senators Jacob K. Javits and Charles Goodell at 3 p.m. on Tuesday (October 7) at the Capitol, Mr. Chandler said. The group will present to Senators Javits and Goodell a statement outlining the colleges' position, he reported. The statement was drafted by a group of development officers and has been endorsed by all the institutions represented.

In essence, the colleges are asking that owners of securities which have gone up in value continue to be allowed to deduct the higher value from their taxable incomes when they give the securities to charitable or educational institutions, President Chandler said.

The institutions which have endorsed the statement are: Alfred University, Canisius College, Cazenovia College, Clarkson College of Technology, Colgate Rochester Divinity School, Colgate University, Cornell University, D'Youville College, Eisenhower College, Elmira College, Hamilton College, Hartwick College, Hobart and William Smith Colleges, Ithaca College, Keuka College, Kirkland College, Le Moyne College, Nazareth College, Niagara University, Paul Smiths College, Rensselaer Polytechnic Institute, Rochester Institute of Technology, Rosary Hill College, Russell Sage College, St. Bernard's College, St. Bonaventure University, St. John Fisher College, St. Lawrence University, St. Rose College, Skidmore College, Syracuse University, State University of New York, Union College, Utica College, Wells College.

STATEMENT OF POSITION BY 52 NEW YORK COLLEGES AND UNIVERSITIES REGARDING PROPOSED 1969 AMENDMENTS TO INTERNAL REVENUE CODE

As Presidents of public and private institutions of higher education, we are deeply concerned over certain features of the program of Federal tax reform now pending. We recognize that the present system requires reform, but we question the need for changes that will drastically limit our ability to meet the urgent and ever-increasing demands for more and better educational facilities and programs.

A single example suggests the degree to which private colleges and universities are dependent on the large individual gifts that would be curtailed by proposed changes in the tax law concerning gifts of appreciated property. Listed below are five buildings under construction or recently completed at Syracuse University. Though the buildings were sorely needed, not one of the projects would have been undertaken without the major individual contributions of appreciated securities that provided crucial incentive for additional private support.

Building	Cost	Major individual donation
The Ernest Stevenson Bird Building	$13,100,000	$3,095,349
The William Bayard Heroy Geology Building	2,867,000	1,000,000
The Ruth Van Arsdale Henry Health Center and Hospital of the Good Shepard	1,000,000	400,000
Dr. Perle B. Brockway Hall	2,030,000	629,000
Ronald K. Lawrinson Hall	4,090,000	600,000
Total	23,087,000	5,724,349

You will note that Syracuse was able to initiate a building program, in this case, of $23,087,000 on the strength of major gifts in the amount of $5,724,349. Assuming a cost basis of zero for the appreciated securities comprising these gifts, the maximum tax revenue to be realized would be $1,431,087.25. There is substantial evidence to indicate a loss of revenue in the amount of $350,000 was more likely.

The benefit to society in this case is $23,000,000 in educational physical plant. Congress must weigh the total social benefit justly against the individuals' tax savings benefit.

More is at stake than buildings, of course. The privately supported educational institutions can venture imaginatively into unknown and untested areas of research, development and experimentation. They can explore new areas of study, areas which, though not of immediate public interest, may prove with time to produce the greatest benefits to society. Much of the daring to find "a better way to do it" in this country has been generated by the private support of higher education.

Obviously the private colleges and universities would be hardest hit by tax reform that curtailed private contributions, but public education is threatened as well. All colleges and universities, not only the private ones, receive financial support from alumni and friends. Furthermore, if the private institutions are rendered less able to meet their responsibilities, the already heavy demands made upon the public ones will increase accordingly. Without substantial private gifts to higher education, in other words, public colleges and universities will require appreciably increased tax support.

Because of the crucial role that philanthropy plays in the financing of higher education in the United States, Federal legislation has long recognized the wisdom of granting tax incentives for contributions to colleges and universities. Gift-supported institutions require these incentives if they are to meet the needs of society. They have always depended upon the contributions of individuals, and now they depend on them more heavily than ever. Campaigns for annual operating expenses today are on a scale previously reserved for "once-in-a-lifetime" capital campaigns. And, as the representative figures set forth in the appendix to this document demonstrate, gifts in the form of securities are crucial to any successful campaign.

The costs of government must be met; so must the costs of higher education. It is respectfully submitted that the development of human resources provided by our institutions of higher learning should continue to be strengthened through tax incentives to private donors. To undermine those incentives at a time when the youth of our nation will be called upon to assume heavy burdens of leadership in a rapidly changing world may prove disastrous. The financial pressures on the private sector of higher education are severe already, and the possibility of a massive educational deficit is distinct and threatening. The need for better teaching and training, for increased educational innovation and research, and for greater public service from our institutions of higher learning must be met.

While each of our institutions has different constituencies and resources upon which it relies for support, together we submit the following conclusions for your consideration:

Gifts of appreciated property

We urge that donor-tax payers not be taxed on unrealized gains to charities, either directly or indirectly.

Under the Tax Reform Act of 1969, H.R. 13270, the unrealized gains are indirectly and partially taxed because the appreciation on

the charitable gifts reduces the donor's itemized deductions under the "allocation of deductions" provision and may be taxed under the "limit on tax preference" provision. The tax under the allocation of deductions provision would reduce a donor's itemized deductions for interest, taxes, medical expenses, and charitable contributions. By indirectly taxing the appreciation on property gifts, such a provision would greatly inhibit important support from the private sector. We see no reason why this incentive should not be retained in the case of all gifts of tangible property and future interests.

Limit on tax preference and allocation of deductions

We urge that unrealized gains not be regarded as "tax preference" income and that charitable contributions not be included under the "allocation of deductions" provision. Unrealized appreciation is, by its nature, not income received by the donor as is true of the other preferences. Giving is a voluntary act, and one which results in actual net costs to those who make gifts to charities. Inclusion of unrealized gains as a preference is really a further limitation on the deductibility of the charitable contribution of appreciated property.

Including charitable contributions under the allocation of deductions provisions places the contributor in the position of decreasing all other deductions by making gifts, as well as decreasing charitable deductions. A contribution should not be considered in the same context as payments of mortgages, state and sales taxes, and medical expenses.

The computations required by these provisions are so involved as to make it virtually impossible for a donor to plan major gifts. The effect, in fact, would be to discourage substantial gifts, which are so important in the support of colleges and universities, public and private.

Gifts of remainder interests (life income plans)

We urge that the present laws governing charitable remainder trusts and life income contracts be continued. The present law provides that there is no capital gain on the transfer of appreciated property to fund a charitable remainder trust or life income plan; nor is there a capital gain if the property transferred is later sold by the trust and the gain permanently set aside for the charity. H.R. 13270 would require payment of a fixed percentage of the principal or a fixed dollar amount on an annual basis and, thus, would almost certainly lead to an invasion of the principal to the detriment of the college or university. With respect to irrevocable trusts, no tax should be imposed on subsequent gains which under the current law escaped taxation as being "permanently set aside" for the benefit of the college or university.

Retroactive legislation

We urge Congress make all new tax law prospective. The possible retroactive effect of the proposed legislation has already caused serious loss of support to charitable institutions.

The Presidents of the following institutions are signatories to this statement.

Alfred University, Alfred.
Canisius College, Buffalo.
Clarkson College of Technology, Potsdam.
Colgate Rochester Divinity School, Rochester.
Colgate University, Hamilton.
College of New Rochelle, New Rochelle.
Cornell University, Ithaca.
Dowling College, Oakdale.
D'Youville College. Buffalo.
Eisenhower College, Seneca Falls.
Elmira College, Elmira.
Finch College, New York City.
Good Counsel College, White Plains.
Hamilton College, Clinton.
Hartwick College, Oneonta.
Hobart and William Smith Colleges, Geneva.
Ithaca College, Ithaca.
Iona College, New Rochelle.
Keuka College, Keuka Park.
Kirkland College, Clinton.
LeMoyne College, Syracuse.
Manhattan College, Bronx.
Manhattanville College, Purchase.
Marist College, Poughkeepsie.
Mills College, New York City.
Mount Saint Mary College, Newburgh.
Nazareth College, Rochester.
Niagara University, Niagara.
Pace College, New York City.
Paul Smiths College of Arts & Sciences, Paul Smiths.
Polytechnic Institute of Brooklyn, Brooklyn.
Pratt Institute, Brooklyn.
Rensselaer Polytechnic Institute, Troy.
Rochester Institute of Technology, Rochester.
Rosary Hill College, Troy.
Russell Sage College, Troy.
St. Bernard's College, Rochester.
St. Bonaventure University, St. Bonaventure.
St. John Fisher College, Rochester.
St. Lawrence University, Canton.
St. Rose College, Albany.
Sarah Lawrence College, Bronxville.
Siena College, Loudonville.
Skidmore College, Saratoga Springs.
State University of New York.
Syracuse University, Syracuse.
Union College, Schenectady.
University of Rochester, Rochester.
Utica College, Utica.
Vassar College, Poughkeepsie.
Wagner College, Staten Island.
Wells College, Aurora.

APPENDIX

An average of 46.5% of gifts received from individuals by twenty-three New York colleges and universities during the past six years consisted of securities. In dollar value, the total is $94,709,000.

Institution	Years involved	Value of securities donated by individuals	Ratio of securities to total gifts from individuals
Alfred	1968-69	$138,000	29
Canisius	1964-69	136,000	25
Clarkson	1968-69	518,000	45
Colgate	1964-69	6,236,000	66
Cornell	1963-69	39,500,000	49
Eisenhower	1967-69	768,000	24
Elmira	1964-69	1,977,000	50
Hamilton	1964-69	5,759,000	79
Hartwick	1964-69	2,348,000	64
Keuka	1964-69	730,000	76
Kirkland	1968-69	412,000	54
Le Moyne	1967-69	115,000	51
Rensselaer Polytechnic Institute	1968-69	1,290,000	70
Rochester Institute of Technology	1963-68	3,963,000	25
Russel Sage	1964-69	1,050,000	66
St. John Fisher	1964-69	623,000	46
St. Lawrence	1964-69	4,100,000	66
Skidmore	1964-69	1,516,000	23
Syracuse	1964-69	14,951,000	38
Union	1964-69	601,000	17
University of Rochester	1968-69	6,863,000	81
Utica	1964-69	75,000	3
Wells	1965-69	1,040,000	29
Total		$94,709,000	46.5

A RISKY NEW AMERICAN SPORT: THE BREAKING OF THE PRESIDENT

Mr. GRIFFIN. Mr. President, the distinguished columnist, David S. Broder, has written a penetrating article concerning contemporary American politics.

The article is particularly timely in light of a demonstration which is being planned for October 15 to protest the war in Vietnam. This demonstration has been given the name of "The Vietnam Moratorium".

Mr. President, I seriously wonder whether the promoters of this demonstration have considered fully the potential ramifications of their actions.

Is the cause of peace served by efforts which may possibly undermine the President's capacity to lead us to a lasting peace in Southeast Asia?

Mr. President, with the hope that all the backers and all the participants of the so-called Vietnam moratorium will read Mr. Broder's thoughtful article, I ask unanimous consent that it be printed at this point in the RECORD.

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

A RISKY NEW AMERICAN SPORT: "THE BREAKING OF THE PRESIDENT"

(By David S. Broder)

CAMBRIDGE, MASS.—If there are any smart literary agents around these days, one of them will copyright the title "The Breaking of the President" for the next big series of nonfiction best-sellers. It is becoming more obvious with every passing day that the men and the movement that broke Lyndon B. Johnson's authority in 1968 are out to break Richard M. Nixon in 1969.

The likelihood is great that they will succeed again, for breaking a President is, like most feats, easier to accomplish the second time around. Once learned, the techniques can ready be applied as often as desired—even when the circumstances seem less than propitious. No matter that this President is pulling troops out of Vietnam, while the last one was sending them in; no matter that in 1969 the casualties and violence are declining, while in 1968 they were on the rise. Men have learned to break a President, and, like any discovery that imparts power to its possessors, the mere availability of this knowledge guarantees that it will be used.

The essentials of the technique are now so well understood that they can be applied with little waste motion.

First, the breakers arrogate to themselves a position of moral superiority. For that reason, a war that is unpopular, expensive and very probably unwise is labeled as immoral, indecent and intolerable. Critics of the President who are indelicate enough to betray partisan motives are denounced. (That for you, Fred Harris.) Members of the President's own party who, for reasons perhaps unrelated to their own flagging political careers, catapult themselves into the front ranks of the opposition are greeted as heroes. (Hooray for Charley Goodell.)

The students who would fight in the war are readily mobilized against it. Their teachers, as is their custom, hasten to adopt the students' views. (News item: The Harvard department of biochemistry and molecular biology last week called for immediate withdrawal from Vietnam.)

Next, a New England election (the New Hampshire primary is best but the Massachusetts Sixth Congressional District election will do as well) surprisingly shows that peace is popular at the polls. The President's party sees defeat staring it in the face unless it repudiates him, and the Harris poll promptly comes along to confirm his waning grip on public trust. The Chief Executive, clearly panicky, resorts to false bravado and says he will never be moved by these protests and demonstrations, thus confirming the belief that he is too stubborn to repent and must be broken.

And then, dear friends, Sen. Fulbright and the Foreign Relations Committee move in to finish off the job.

All this is no fiction; it worked before and it is working again. Vietnam is proving to be what Henry Kissinger once said he suspected it might be—one of those tragic, cursed messes that destroys any President who touches it.

That being the case, any President interested in saving his own skin would be well-advised to resign his responsibility for Vietnam and publicly transfer the assignment of ending the war to Congress or the Vietnam Moratorium Committee or anyone else who would like to volunteer for the job.

But he cannot. And that is the point the protesters seem to overlook. Assume that they and the President are both right when they assert the time has come to end this war. Assume that the protesters know better than the President how to do so—despite the conspicuous absence of specific alternatives to the President's policies in their current manifestos.

There is still a vital distinction, granting all this, to be made between the constitutionally protected expression of dissent, aimed at changing national policy, and mass movements aimed at breaking the President by destroying his capacity to lead the nation or to represent it at the bargaining table.

The point is quite simple. Given the impatience in this country to be out of that miserable war, there is no great trick in using the Vietnam issue to break another President. But when you have broken the President, you have broken the one man who can negotiate the peace.

Hanoi will not sit down for secret talks with the Foreign Relations Committee. Nor can the Vietnam Moratorium's sponsors order home a single GI or talk turkey to Gen. Thieu about reshaping his government. Only the President can do that.

There is also the matter of time. It is one thing to break a President at the end of his term, as was done last year. It is quite another thing to break him at the beginning, as is being attempted now.

The orators who remind us that Mr. Nixon has been in office for nine months should remind themselves that he will remain there for 39 more months—unless, of course, they are willing to put their convictions to the test by moving to impeach him.

Is that not, really, the proper course? Rather than destroying his capacity to lead while leaving him in office, rather than leaving the nation with a broken President at its head for three years, would not their cause and the country be better served by resort to the constitutional method for removing a President?

And what a wonderful chapter it would make for Volume 2 of "The Breaking of the President" series.

THE WHITE REACTION

Mr. BYRD of West Virginia. Mr. President, the recent disturbances in Pittsburgh, where white workmen took to the streets to protest the demands of black militants, have great significance for our entire Nation.

In a current series titled "The White Reaction," the Evening Star of Washington is examining that significance, along with the frustrations of the white working class—frustrations created by the continual surrendering to the demands of a vocal minority of militants. The first part of the five-part series reports on the incidents in Pittsburgh and calls the counterdemonstration by whites "the opening of a new chapter in the story of America's anguish."

The article warns that whites such as the construction workers in Pittsburgh—whites who have heretofore been too busy working to demonstrate—are now "threatening to take things into their own hands."

Mr. President, the article, written by Mr. Haynes Johnson, appeared on Monday, October 6, and I ask unanimous consent that it be reprinted in the RECORD.

There being no objection, the article was ordered reprinted in the RECORD, as follows:

THE WHITE REACTION

(NOTE.—This is the first of five articles examining the reaction of white Americans, from low-income and blue-collar workers to upper-income professional groups to the Negro's drive for full equality. The articles, prepared by a team of reporters consisting of Haynes Johnson, John Mathews, Christopher Wright and Woody West, attempt to report candidly on the changing attitudes of some of those white Americans.)

(By Haynes Johnson)

PITTSBURGH.—There had been black demonstrations, speeches, demands and warnings, and then, at the end of August, the white workers marched on their own. "We Are the Majority and This Is Unrest" and "We Build the City Not Burn It Down," their posters proclaimed.

"I was in my office that day and I could look down and see them coming up Fifth Avenue," a white businessman recalled. "I remember thinking that something new and important was happening right before my eyes. Secretaries were leaning out of the buildings, cheering and throwing confetti down on them, and as they passed along the street, there were tremendous bursts of applause from the white people watching them. And I remember thinking, 'My God, I'm glad they're in a jovial mood. Those guys are big enough and tough enough to tear down a building.' You know, we've never been confronted by the phenomenon of whites really on the rampage. Suppose they get mad?

"What struck me most, I think, was the women. It was like they were cheering their favorite football team. And the other thing that made a strong impression was the police. The police had escorted the other demonstrators—the Negroes—too, but you could see they didn't like it. You could feel it. But when those white construction workers marched, it was, 'Hi, Charlie,' and big waves, and smiles all around. So you've got these white groups with a great cause in common, and don't tell me it isn't racial. It sure as hell is."

He had watched the opening of a new chapter in the story of America's anguish. It is still a story of racial upheaval, but this chapter has a reverse twist. The focus is on a white, not black, revolt. Here, today, in the birthplace of the American labor movement, whites are threatening to take things into their own hands.

"In 30 years in this town, I've never seen anything like the change in attitudes now," says a union president who is proud of having been in the forefront of the civil rights movement. "I'd have to say we're turning anti-Negro."

From businessmen to secretaries, suburban housewives and blue-collar workers, one hears the same report: Antagonism toward blacks is increasing. It would be naive, and misleading, to suggest that white, blue-collar racial prejudice is something new. As one man correctly said, "It's always been there below the surface. Now, it's bubbling up all over. It's there for everyone to see."

What is new and disturbing is the outspokenness, the explicit air of violence, and is heard from whites in Pittsburgh today.

Just a year ago, for instance, after Pittsburgh experienced its first racial disturbances in the wake of Martin Luther King's murder, the city's Human Relations Commission warned that citizens were "living in a tense and polarized atmosphere of hate and distrust." It added: "Blacks and whites do not want to negotiate their differences—more and more, they prefer to act out their hostilities in provocative words and violent actions."

Today, the situation is worse.

The immediate source of friction is easily identifiable. Blacks are fighting for admission in numbers into the highest skilled—and highest paid—craft unions. The unions, largely white, are resisting them.

In a sense, this struggle represents the final flowering of a vital phase of the Negro's upward move in America. The craft unions, particularly the building trades, have long been a primary obstacle to Negro progress. The unions, through their apprenticeship programs, their system of passing on jobs from father to son, until now have effectively barred the doors.

Statistics tell only part of the story. Of 24 building trades unions in Pittsburgh, only 2 percent of the membership is black. For other highly paid crafts—electricians and iron workers among them—the membership today is entirely white. And the pattern of discrimination does not end there. For years, even whites who have not been "in" have been unable to join these most favored unions.

The system is the antithesis of democracy: Membership in an all-white fraternal lodge or order is more a guarantee of work than individual merit. It is the system that is being challenged, the system that is drawing so emotional a response here and in the Chicagos, and New Yorks and Seattles of America where the same bitter battle is taking place between whites and blacks.

The result is evident to all: These two sides are dangerously close to outright warfare. In Pittsburgh today, the air is full of talk of stockpiling of weapons and plans for violent action. Whites, their language laced with racial epithets, talk of having it out once and for all. Blacks tell of getting ready to shoot down on the city from the "Hill" district where most of them live.

Taken alone, this labor crisis is disturbing enough to make Pittsburgh a center of national attention. But the Pittsburgh story goes deeper than jobs, economics and opportunities.

What is coming to the surface here is white reaction to a host of problems: high taxes, high prices, inflation, difficulties in schools and neighborhoods, anger at governmental strictures and actions, and vague fears and frustrations over "the way things are going." A single factor binds this all together into one explosive package. Race.

One cannot be sure whether this white reaction reflects a national malaise, the first faint stirrings of a white rebellion to progress won by Negroes. But after a week of interviews in all parts of the city, one comes away with new questions about the prospects for achieving a truly integrated society.

A sense of foreboding persists even though, and despite the depth of the bitterness here, Pittsburgh, like the nation at large, has not experienced unusual racial strife this past year.

Incomes are up, for blacks as well as whites. Businesses are engaged in new programs to guide blacks into higher-paying positions. Negroes continue to move into white neighborhoods with few incidents. And time and again, individual whites will say they have no animus toward blacks, and seem to mean it—in the abstract. It is when they get to specifics that whites begin to condition their statements. They will say they believe that every man should have an equal chance. But, having said that, they will express their fear

and anger over what they say are black efforts to take advantage of the new equality.

In part, of course, this white reaction is the fruit of the past few years of tensions, riots, the threatening voices of militancy and the rise in crime, which, for most whites is a black problem.

Every person interviewed for this article mentioned watching and hearing the scenes and sounds of racial strife in America on their television sets in their homes at night. The impact has been profound.

Fear and unease are overlaid with resentment. Repeatedly, Pittsburgh whites assert that now it is they who are being discriminated against. The constant focus upon black problems has caused the needs of whites to be overlooked, they say.

The resentment has some basis in fact. When the Pittsburgh Human Relations Commission looked into the city's racial tensions last year, it found that community services in some of the poorer white neighborhoods had been neglected, while government money was poured into black areas.

"I think that's partly responsible for some of the trouble we've had on the upper Northside," says David B. Washington, the commission director. Washington, a Negro, says that "in the push to produce new black services, they should have hit the white areas, too."

Washington has this to say about race relations in Pittsburgh and the current hardening in white attitudes:

"I think we have to face the fact that we're starting to come to grips with the real issues and questions. There's a realization that government can't solve all questions. What we're really talking about is attitudes, about people behaving responsibly and trying to live together peacefully with respect for one another."

He is the philosophical view. Others are not so dispassionate. They are emotional, angry, disturbed. Here are some of the voices one hears these days in Pittsburgh:

A supermarket store manager, 32, of German descent, talking about his all-white neighborhood in the suburbs:

"Sure, people are more disgusted. They didn't mind when 'they' wanted this or that. To be honest about it, they felt guilty about the colored. But now, this is it, man, plain and simple: People are talking about killing them. These are people I know, not just people talking in bars. It's a sad state of affairs, and I've got four children myself. The main thing, I think, is fear. Like, they feel if 'they' come, they won't be able to stop them. Now even here in the store (I've got a mixed clientele from white-collar people to workers), people say they're going to take their jobs away. And the news media, they can bring hysteria. . . ."

A butcher, in another store in a different section:

"They don't want to take orders. Their whole attitude is, they don't want to start at the bottom. They want my job. Now, the colored people are entitled to a chance, but they shouldn't be given any privileges the white people aren't given. That's discrimination against the white side. And the people are getting more bitter. Like me. Why, hell, I never thought about it one way or another. If he works next to me, okay. But now everybody's disgusted. That's the kind of talk you hear. I even know people who never had anything to say about the colored people who say, 'They're getting out of hand. Something has to be done about it.' There isn't a day that goes by that you don't hear more demands on those TV programs. They want this. They want that. More often than not, you hear men say, 'There's going to be trouble, there's going to be shooting.' "

A small-shop owner:

"What I don't understand is why this country puts up with it. I mean, my school taxes went up $70 this year and that's from the burning and breaking 'they' did, and why should I pay for it?"

A girl in her 20s, off work in a neighborhood tavern:

"Five years ago, I liked them. I liked them like a white person. I've even smoked a cigarette after one. I've been in their homes. But now it's discrimination against white. They even make more money than I do. And the way they go and mop off. You know how cocky and arrogant they are."

A white minister, in a low-income white neighborhood called "Dutchtown":

"There is a strong feeling against the blacks. What I think they fear are the organized blacks, and this is where I wonder if it's more jealousy than racial prejudice. They see black people, by organizing, getting more things than they have, getting more concessions. But I definitely do see a change. There's a stronger animosity toward the blacks, and quite honestly it does worry me. I hear remarks that I didn't hear a few years ago, remarks from people right here in the church. Like, 'what needs to be done is they ought to shoot the bastards.' They say that to my face. For the most part, I think that kind of talk by most people is just blowing off steam. I do know, though, that on the part of some individuals, it isn't. They mean it."

A white principal in a school where there have been racial disturbances:

"The willingness to fight is more evident now among blacks and whites, and it's no longer fighting one to one. Now it's in groups." He spoke about the problem of combating wild racial rumors, and then told of a young seventh-grade white girl who came to his office in tears. After careful questioning, she admitted that she was afraid to go to school with Negroes. When the principal asked why, she blurted out: "They carry knives." She heard it at home.

That last comment points up perhaps the most disheartening attitude encountered. As the black director of a poverty program put it: "The most discouraging part is to see the young people moving farther apart. Many liberals who were on the fence are sliding off the other side. But it's the kids that get you most. Now you find many black homes where they're teaching as much prejudice today as the whites have done all the years. You know, 'Love Black. Hate White.' This is definitely increasing and it's frightening."

His fears were echoed by another man, the only white working man interviewed who identified himself with the black cause. He summed up this way:

"The white people definitely are waiting for trouble. They expect it, and they almost welcome it—that's the frightening part. It's a feeling that 'we'll put an end to this once and for all.'

"Take the people right here in this store. Last week, I was in the men's room and I heard them talking about Mayor Barr—how he should keep the black people out. They feel the black man is going to take something from them, and I don't believe this is true. If the black man is assured of his rights, we're all better off. But I have to shut up around here . . . if you're for seeing the colored people get a break, you have to keep it to yourself.

"Probably the reason I feel as strongly as I do is I'm one of 14 children. Dad was a carpenter and no matter how hard he worked, we never had enough and I don't think the average middle-class American has any conception of how the Negro feels when he sees that he has no chance of changing his situation. They just can't realize the feeling. And then you hear a guy right here in the store say he won't give any more money to his church because they gave it to the colored. This is the working people starting to fight back. And that's what's happening.

"So in the end I think the blacks are going to have to pay for all our other problems."

That was a voice of blue-collar moderation, not often heard in this part of America these days.

CONCLUSION OF MORNING BUSINESS

The PRESIDING OFFICER. Is there further morning business? If not, morning business is closed.

HOUSE BILLS REFERRED

The following bills were severally read twice by their titles and referred, as indicated:

H.R. 210. An act to eliminate requirements for disclosure of construction details on passenger vessels meeting prescribed safety standards, and for other purposes; and

H.R. 12605. An act to amend section 613 of the Merchant Marine Act, 1936, as amended; to the Committee on Commerce.

H.R. 372. An act to modify the reporting requirement and establish additional income exclusions relating to non-service-connected pensions for veterans and their widows, to liberalize the bar to payment of benefits to remarried widows of veterans, and for other purposes;

H.R. 10106. An act to revise the definition of a "child" for purposes of veterans' benefits provided by title 38, United States Code, to recognize an adopted child as a dependent from the date of issuance of an interlocutory decree; and

H.R. 10912. An act to amend title 38, United States Code, to liberalize the conditions under which the Administrator of Veterans' Affairs is required to effect recoupment from disability compensation otherwise payable to certain disabled veterans; to the Committee on Finance.

H.R. 11711. An act to amend section 510 of the International Claims Settlement Act of 1949 to extend the time within which the Foreign Claims Settlement Commission is required to complete its affairs in connection with the settlement of claims against the Government of Cuba; to the Committee on Foreign Relations.

H.R. 5968. An act to amend the Act entitled "An Act to provide for the establishment of the Frederick Douglass home as a part of the park system in the National Capital, and for other purposes", approved September 5, 1962; and

H.J. Res. 224. A joint resolution to change the name of Pleasant Valley Canal, California, to "Coalinga Canal"; to the Committee on Interior and Insular Affairs.

H.R. 13696. An act to amend the Military Personnel and Civilian Employees' Claims Act of 1964, as amended, with respect to the settlement of claims against the United States by civilian officers and employees for damage to, or loss of, personal property incident to their service; to the Committee on the Judiciary.

H.R. 13304. An act to provide for educational assistance for gifted and talented children; and

H.R. 13310. An act to provide for special programs for children with specific learning disabilities; to the Committee on Labor and Public Welfare.

MESSAGE FROM THE HOUSE

A message from the House of Representatives by Mr. Bartlett announced that the House had passed, without amendment, the following bills of the Senate:

S. 1836. An act to amend the Federal Seed Act (53 Stat. 1275), as amended; and

S. 2462. An act to amend the joint resolution establishing the American Revolution Bicentennial Commission.

The message also announced that the House had passed the joint resolution (S.J. Res. 112) to amend section 19(e) of

the Securities Exchange Act of 1934, with amendments, in which it requested the concurrence of the Senate.

The message further announced that the House had passed the following bills and joint resolution, in which it requested the concurrence of the Senate:

H.R. 210. An act to eliminate requirements for disclosure of construction details on passenger vessels meeting prescribed safety standards, and for other purposes;

H.R. 372. An act to modify the reporting requirement and establish additional income exclusions relating to non-service-connected pensions for veterans and their widows, to liberalize the bar to payment of benefits to remarried widows of veterans, and for other purposes;

H.R. 5968. An act to amend the Act entitled "An Act to provide for the establishment of the Frederick Douglass home as a part of the park system in the National Capital, and for other purposes", approved September 5, 1962;

H.R. 10106. An act to revise the definition of a "child" for purposes of veterans' benefits provided by title 38, United States Code, to recognize an adopted child as a dependent from the date of issuance of an interlocutory decree;

H.R. 10912. An act to amend title 38, United States Code, to liberalize the conditions under which the Administrator of Veterans' Affairs is required to effect recoupment from disability compensation otherwise payable to certain disabled veterans;

H.R. 11711. An act to amend section 510 of the International Claims Settlement Act of 1949 to extend the time within which the Foreign Claims Settlement Commission is required to complete its affairs in connection with the settlement of claims against the Government of Cuba;

H.R. 12605. An act to amend section 613 of the Merchant Marine Act, 1936, as amended;

H.R. 13304. An act to provide for educational assistance for gifts and talented children.

H.R. 13310. An act to provide for special programs for children with specific learning disabilities;

H.R. 13696. An act to amend the Military Personnel and Civilian Employees' Claims Act of 1964, as amended, with respect to the settlement of claims against the United States by civilian officers and employees for damage to, or loss of, personal property incident to their service; and

H.J. Res. 224. A joint resolution to change the name of Pleasant Valley Canal, California, to "Coalinga Canal."

WATER QUALITY IMPROVEMENT ACT OF 1969

The PRESIDING OFFICER. Pursuant to the previous order, the Chair lays before the Senate Calendar 346, S. 7, which will be stated by title.

The ASSISTANT LEGISLATIVE CLERK. A bill (S. 7) to amend the Federal Water Pollution Control Act, as amended, and for other purposes.

The PRESIDING OFFICER. Without objection, the Senate will proceed to the consideration of the bill.

The Senate proceeded to consider the bill which had been reported from the Committee on Public Works with an amendment to strike out all after the enacting clause and insert:

TITLE I—WATER QUALITY IMPROVEMENT

SECTION 101. This title may be cited as the "Water Quality Improvement Act of 1969".

SEC. 102. Sections 17 and 18 of the Federal Water Pollution Control Act, as amended, are hereby repealed. Section 19 of the Federal Water Pollution Control Act, as amended, is redesignated as section 22. Sections 11 through 16 of the Federal Water Pollution Control Act, as amended, are redesignated as sections 16 through 21. The Federal Water Pollution Control Act, as amended, is further amended by inserting after section 10 five new sections to read as follows:

"CONTROL OF SEWAGE FROM VESSELS

"SEC. 11. (a) For the purpose of this section, the term—

"(1) 'new vessel' includes every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on the navigable waters of the United States, the construction of which is initiated after promulgation of standards and regulations under this section;

"(2) 'existing vessel' includes every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on the navigable waters of the United States, the construction of which has been initiated before promulgation of standards and regulations under this section;

"(3) 'public vessel' means a vessel owned or bareboat chartered and operated by the United States, by a State or political subdivision thereof, or by a foreign nation, except in any case in which such vessel is engaged in commerce;

"(4) 'United States' includes the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Canal Zone, and the Trust Territory of the Pacific Islands;

"(5) 'marine sanitation device' means any equipment for installation on board a vessel which is designed to receive, retain, treat, or discharge sewage;

"(6) 'sewage' means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes;

"(7) 'manufacturer' means any person engaged in the manufacturing, assembling, or importation of marine sanitation devices or of vessels having installed on board such devices; and

"(8) 'person' means an individual, partnership, firm, corporation, or association, but does not include an individual on board a public vessel.

"(b) (1) Not later than two years after the enactment of this section, the Secretary, after consultation with the Secretary of the department in which the Coast Guard is operating, after giving appropriate consideration to the economic costs involved and within the limits of available technology, shall promulgate Federal standards of performance for marine sanitation devices (hereinafter referred to as 'standards') which shall be designed to prevent the discharge of untreated or inadequately treated sewage into or upon the navigable waters of the United States from new vessels and existing vessels, except vessels not equipped with installed toilet facilities. Such standards shall be consistent with maritime safety and the marine and navigation laws and regulations and shall be coordinated with the regulations issued under this subsection by the Secretary of the department in which the Coast Guard is operating. The Secretary of the department in which the Coast Guard is operating shall promulgate regulations, which are consistent with the standards issued under this subsection and with maritime safety and the marine navigation laws and regulations, governing the design, construction, installation, and operation of any marine sanitation device on board such vessels.

"(2) Any existing vessel equipped with a device or devices installed pursuant to the requirements of State statute, regulation, or recommended levels of control set forth in the Handbook on Sanitation and Vessel Construction (Public Health Service, 1965) prior to the promulgation of the initial standards and regulations required by this section shall be deemed in compliance with this section until such time as the device or devices are replaced or are found not to be in compliance with such State statute, regulation, or recommended level.

"(c) (1) Initial standards and regulations under this section shall become effective for new vessels two years after promulgation; and for existing vessels five years after promulgation. Revisions of standards and regulations shall be effective upon promulgation, unless another effective date is specified.

"(2) The Secretary of the department in which the Coast Guard is operating with regard to the regulatory authority established by this section, may distinguish among classes, types, and sizes of vessels as well as between new and existing vessels, and may waive applicability of standards and regulations as necessary or appropriate for such classes, types, and sizes of vessels, and, upon application, for individual vessels.

"(d) The provisions of this section and the standards and regulations promulgated thereunder shall apply to vessels owned and operated by the United States unless the Secretary of Defense finds that compliance would not be in the interest of national security.

"(e) Before the standards and regulations under this section are promulgated, the Secretary and the Secretary of the department in which the Coast Guard is operating shall consult with the Secretary of State; the Secretary of Health, Education, and Welfare; the Secretary of Defense; the Secretary of Commerce; other interested Federal agencies; and the States and industries interested; and otherwise comply with the requirements of section 553 of title 5 of the United States Code.

"(f) After the effective date of any standards and regulations established pursuant to this section, no State or political subdivision thereof shall adopt or enforce any statute or regulation with respect to the design, manufacture, installation, or use of any marine sanitation device in connection with any vessel subject to the provisions of this section, except that nothing in this subsection shall restrict the authority of a State to prohibit the discharge of sewage in any waters within a State where implementation of applicable water quality standards requires such prohibition.

"(g) (1) No manufacturer of a marine sanitation device shall sell, offer for sale, or introduce or deliver for introduction in interstate commerce, or import into the United States for sale or resale any marine sanitation device manufactured after the effective date of the standards and regulations promulgated under this section unless such device is in all material respects substantially the same as a test device certified under this subsection.

"(2) Upon application of the manufacturer, the Secretary of the department in which the Coast Guard is operating shall so certify a marine sanitation device if he determines, in accordance with the provisions of this paragraph, that it meets the appropriate standards and regulations promulgated under this section. The Secretary of the department in which the Coast Guard is operating shall test or require such testing of the device in accordance with procedures set forth by the Secretary as to standards of performance and for such other purposes as may be appropriate. If the Secretary of the department in which the Coast Guard is operating determines that the device is satisfactory from the standpoint of the procedures set forth by the Secretary and any other requirements of maritime law or regulation, and after consideration of the design, installation, operation, material, or other appropriate factors, he shall certify the device. Any device manufactured by such manufacturer which is in all material respects sub-

stantially the same as the certified test device shall be deemed to be in conformity with the appropriate standards and regulations established under this section.

"(3) Every manufacturer shall establish and maintain such records, make such reports, and provide such information as the Secretary or the Secretary of the department in which the Coast Guard is operating may reasonably require to enable him to determine whether such manufacturer has acted or is acting in compliance with this section and regulations thereunder and shall, upon request of an officer or employee duly designated by the Secretary or the Secretary of the department in which the Coast Guard is operating, permit such officer or employee at reasonable times to have access to and copy such records. All information reported to, or otherwise obtained by, the Secretary or the Secretary of the department in which the Coast Guard is operating or their representatives pursuant to this subsection which contains or relates to a trade secret or other matter referred to in section 1905 of title 18 of the United States Code shall be considered confidential for the purpose of that section, except that such information may be disclosed to other officers or employees concerned with carrying out this section.

"(h) After the effective date of standards and regulations promulgated under this section, it shall be unlawful—

"(1) for the manufacturer of any vessel subject to such standards and regulations to manufacture for sale, to sell or offer for sale, or to distribute for sale or resale any such vessel unless it is equipped with a marine sanitation device which is in all material respects substantially the same as the appropriate test device certified pursuant to this section;

"(2) for any person, prior to the sale or delivery of a vessel subject to such standards and regulations to the ultimate purchaser, wrongfully to remove or render inoperative any certified marine sanitation device or element of design of such device installed in such vessel;

"(3) for any person to fail or refuse to permit access to or copying of records or to fail to make reports or provide information required under this section; and

"(4) for a vessel subject to such standards and regulations to operate on the navigable waters of the United States, if such vessel is not equipped with an operable marine sanitation device certified pursuant to this section.

"(i) The district courts of the United States shall have jurisdiction to restrain violators of subsection (h) of this section. Actions to restrain such violators shall be brought by, and in, the name of the United States. In any such action, subpenas for witnesses who are required to attend a district court in any district may run into any other district. In case of contumacy or refusal to obey a subpena served upon any person under this subsection, the district court of the United States for any district in which such person is found or resides or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony or to appear and produce documents, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

"(j) Any person who violates clause (1) or (2) of subsection (h) of this section shall be liable to a civil penalty of not more than $5,000 for each violation. Any person who violates clause (4) of subsection (h) of this section or any regulation issued pursuant to this section, shall be liable to a civil penalty of not more than $2,000 for each violation. Each violation shall be a separate offense. The Secretary of the department in which the Coast Guard is operating may assess and compromise any such penalty. No penalty shall be assessed until the person charged shall have been given notice and an opportunity for a hearing on such charge. In determining the amount of the penatly, or the amount agreed upon in compromise, the gravity of the violation, and the demonstrated good faith of the person charged in attempting to achieve rapid compliance, after notification of a violation, shall be considered by said Secretary.

"(k) The provisions of this section shall be enforced by the Secretary of the Department in which the Coast Guard is operating and he may utilize by agreement, with or without reimbursement, law enfrocement officers or other personnel and facilities of the Secretary, other Federal agencies, or the States to carry out the provisions of this section.

"(l) Anyone authorized by the Secretary of the Department in which the Coast Guard is operating to enforce the provisions of this section may, except as to public vessels, board and inspect any vessel upon the navigable waters of the United States, and execute any warrant or other process issued by an officer or court of competent jurisdiction.

"(m) The several district courts of the United States are invested with jurisdiction for any actions arising under this section. In the case of Guam, such actions may be brought in the district court of Guam, and in the case of the Virgin Islands such actions may be brought in the district court of the Virgin Islands. In the case of American Samoa and the Trust Territory of the Pacific Islands, such actions may be brought in the District Court of the United States for the District of Hawaii and such court shall have jurisdiction of such actions. In the case of the Canal Zone, such actions may be brought in the District Court for the District of the Canal Zone.

"CONTROL OF OIL DISCHARGES

"SEC. 12. (a) For the purpose of this section, the term—

"(1) 'oil' means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil;

"(2) 'discharge' means any spilling, leaking, pumping, pouring, emitting, emptying, or dumping;

"(3) 'vessel' includes every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other than a public vessel;

"(4) 'public vessel' means a vessel owned or bareboat chartered and operated by the United States, or by a State or political subdivision thereof, or by a foreign nation or political subdivision thereof, except in any case in which such vessel is engaged in commerce;

"(5) 'United States' includes the States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin Islands, the Canal Zone, and the Trust Territory of the Pacific Islands;

"(6) 'owner or operator' means, as the context requires, any person owning, operating, or chartering by demise, a vessel, or any person owning or operating an onshore or offshore facility or an onshore or offshore drilling-production facility;

"(7) 'person' includes an individual, firm, corporation, association, or a partnership;

"(8) 'remove' or 'removal' includes removal of the oil from the water and shorelines and the taking of actions as may be necessary to minimize or mitigate damage to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, and public and private shorelines;

"(9) 'contiguous zone' means the entire zone established by the United States under article 24 of the Convention on the Territorial Sea and the Contiguous Zone;

"(10) 'onshore or offshore drilling-production facility' means any facility of any kind and related appurtenances, thereto located in, on, or under, the surface of any land, or permanently or temporarily affixed to any land, including lands beneath the navigable waters of the United States, which is used or capable of being used for the purpose of exploring for, drilling, or producing oil;

"(11) 'onshore or offshore facility' means any facility, other than an onshore or offshore drilling-production facility, of any kind and related appurtenances thereto located in, on, or under, the surface of any land, or permanently or temporarily affixed to any land, including lands beneath the navigable waters of the United States, which is used or capable of being used for the purpose of processing, transporting, or transferring oil, or for the purpose of storing oil for any commercial purpose, but does not include any facility, other than a marine facility, used or capable of being used to store five hundred barrels of oil or less; and

"(12) 'act of God' means an act occasioned exclusively by violence of nature without the interference of any human agency.

"(b)(1) The discharge of oil into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone is prohibited, except (A) in the case of such discharges into the waters of the contiguous zone, where permitted under article IV of the International Convention for the Prevention of Pollution of the Sea by Oil, 1954, and (B) where permitted in quantities and at times and locations or under such circumstances or conditions as the President may, by regulation, deem appropriate. Any regulations issued under this subsection shall be consistent with maritime safety and with marine and navigation laws and regulations and applicable water quality standards.

"(2) Any vessel, onshore or offshore facility, or onshore or offshore drilling-production facility from which oil is knowingly discharged in violation of the provisions of paragraph (1) of this subsection shall be subject to an in rem civil penalty of not more than $2,500 for each offense. No penalty shall be assessed unless the owner or operator of the vesesl or of the onshore or offshore facility has been given notice and an opportunity for a hearing with respect to such discharge. Any such penalty also may be compromised. In determining the amount of such penalty, or the amount agreed upon in compromise, the gravity and nature of the violation, the history of discharges by such vessel or facility, the giving of notice pursuant to subsection (c), and any action taken to minimize or mitigate damage, including removal of discharged oil in accordance with the provisions of this section and the regulations promulgated thereto, shall be taken into consideration.

"(c) In order to facilitate the removal of oil and minimize or mitigate damage resulting from the discharge thereof, any person in charge of a vessel, an onshore or offshore facility, or an onshore or offshore drilling-production facility shall, as soon as he has knowledge of any discharge of oil from such vessel or facility in violation of subsection (b) of this section or the regulations promulgated thereunder, immediately notify the appropriate agency of the United States Government of such discharge. Any such person who fails to notify immediately such agency of such discharge shall, upon conviction, be fined not more than $5,000, or imprisoned for not more than one year, or both. Notification received pursuant to this subsection shall not be used by the United States Government to enforce the provisions of any other Federal law or to provide any information obtained from such notice to any State for the purpose of any criminal prosecution.

"(d)(1) Within one hundred and eighty days after the effective date of this section, the President shall, consistent with maritime safety, marine and navigation laws, and applicable water quality standards, issue regulations (A) relative to the procedures,

methods, and equipment for preventing discharges of oil, (B) establishing criteria relating to the procedures, methods, means, and equipment used in the removal of discharged oil, and (C) establishing criteria for the development and implementation of oil removal contingency plans. The regulations shall also provide procedures for the review and approval of such plans, where appropriate.

"(2) Any owner or operator of a vessel, onshore or offshore facility, or onshore or offshore drilling-production facility who fails or refuses to comply with the provisions of any regulation issued under paragraph (1) of this subsection, shall be subject to an in rem civil penalty of not more than $1,000 for each such failure or refusal. No penalty shall be assessed until such owner or operator has been given notice and an opportunity for a hearing on such charge. Any such penalty also may be compromised. In determining the amount of the penalty, or the amount agreed upon in compromise, the gravity and nature of the violation, the history of previous violations, and the demonstrated good faith of the owner or operator charged in attempting to achieve rapid compliance, after notification of an offense, shall be taken into consideration.

"(e) Whenever any oil is discharged in violation of subsection (b) of this section, unless removal is immediately undertaken by the owner or operator of the vessel, onshore or offshore facility, or onshore or offshore drilling-production facility from which the discharge occurs pursuant to the regulations promulgated under subsection (d) of this section, the President shall remove or arrange for the removal thereof. Nothing in this subsection shall be construed to restrict the authority of the President to act to remove or arrange for the removal of such oil at any time.

"(f)(1) Except where an owner or operator can prove that a discharge was caused solely by (A) an act of God, (B) an act of war, (C) negligence on the part of the United States Government, or (D) an act of a third party, such owner or operator of any vessel from which oil is discharged, or which causes the discharge of oil, into or upon the navigable waters of the United States or adjoining shorelines or the waters of the contiguous zone shall, notwithstanding any other provision of law, be liable to the United States Government for the actual costs incurred under subsection (e) for the removal of such oil by the United States Government in an amount not to exceed $125 per gross ton of such vessel or $14 million, whichever is lesser, except that where such discharge was the result of negligence or a willful act, such owner or operator shall be liable to the United States Government for the full amount of such costs.

"(2)(A) Each owner or operator of a vessel over three hundred gross tons, including any barge of equivalent size, using any port or place in the United States or the navigable waters of the United States, shall establish and maintain, under regulations prescribed by the designated Federal agency, evidence of financial responsibility of $100 per gross ton of the liability to which the vessel could be subjected under paragraph (1) of this subsection. Financial responsibility may be established and maintained by any one of, or a combination of, the following methods acceptable to the designated Federal agency: (i) evidence of insurance, (ii) surety bonds, (iii) qualification as a self-insurer, or (iv) other evidence of financial responsibility satisfactory to the designated Federal agency.

"(B) If a bond is filed with the designated Federal agency, then such bond shall be issued by a bonding company authorized to do business in the United States.

"(C) Any claim for costs incurred by such vessel may be brought directly against the insurer or any other person providing evidence of financial responsibility as required under this subsection.

"(g) Each owner or operator of a vessel subject to the provisions of this subsection shall designate a person in the United States as his legal agent for service of process under this section.

"(h) The Secretary of the Treasury shall, upon request of the delegate of the President, withhold, at the port or place of departure from the United States, the clearance of a vessel, other than a public vessel, required by section 4197 of the Revised Statutes of the United States, as amended (46 U.S.C. 91), which (1) is liable to the United States Government for any costs or penalties under subsection (b) or (f) of this section until such costs or penalties are paid or until a bond or other satisfactory surety is posted, or (2) has failed to meet the requirements of subsection (f)(2) of this section.

"(i)(1) Except where an owner or operator can prove that a discharge was caused solely by (A) an act of God, (B) an act of war, (C) negligence on the part of the United States Government, or (D) an act of a third party, the owner or operator of any onshore or offshore facility from which oil is discharged into or upon the navigable waters of the United States or adjoining shorelines shall be liable to the United States Government for the actual costs incurred for the removal of such oil by the United States Government in an amount not to exceed $125 per ton of oil which such facility is capable of (i) processing, (ii) transporting, (iii) transferring, in any twenty-four hour period, or (iv) storing in the largest unit of such facility, whichever is greater, except where the discharge was the result of negligence or a willful act, the owner or operator shall be liable to the United States Government for the full amount of such costs.

"(2) Except where an owner or operator can prove that a discharge was caused solely by (A) an act of God, (B) an act of war, (C) negligence on the part of the United States Government, or (D) an act of a third party, the owner or operator of an onshore or offshore drilling-production facility from which oil is discharged, or which causes the discharge of oil, into or upon the navigable waters of the United States or adjoining shorelines shall be liable to the United States Government for the actual costs incurred in the removal of such oil by the United States Government in an amount not to exceed $8,000,000 except, where the discharge was the result of negligence or a willful act, the owner or operator shall be liable to the United States Government for the full amount of such costs.

"(j)(1) In any case where an owner or operator removes oil discharged from a vessel into or upon the navigable waters of the United States or adjoining shorelines or the waters of the continguous zone or removes oil discharged into or upon the navigable waters of the United States or adjoining shorelines from an onshore or offshore facility or an onshore or offshore drilling-production facility, such owner or operator shall be entitled to recover the reasonable costs incurred in such removal upon establishing, in a suit which may be brought against the United States Government in the United States Court of Claims, that such discharge was caused solely by (A) an act of God, (B) an act of war, (C) negligence on the part of the United States, or (D) an act of a third party.

"(2) In any case where recovery of costs is obtained by an owner or operator pursuant to this subsection and the discharge involved was caused by an act of a third party, the United States Government shall be subrogated to any rights such owner or operator may have against such third party due to causing such discharge.

"(3) The provisions of this subsection shall not apply in any case where liability is established pursuant to the Outer Continental Shelf Lands Act.

"(4) Any amount paid in accordance with a judgment of the United States Court of Claims pursuant to this section shall be paid from the fund established pursuant to subsection (k).

"(k)(1) The President is authorized to delegate the responsibility of administering the provisions of this section to one or more appropriate Federal agencies. Any moneys in the fund established by this subsection shall be available to such Federal agencies to carry out the provisions of subsections (e) and (j) of this section. Each such agency, in order to avoid duplication of effort, shall, whenever appropriate, utilize the personnel, services, and facilities of other Federal agencies.

"(2) There is hereby authorized to be appropriated to a revolving fund to be established in the Treasury not to exceed $50,000,000. Any funds received by the United States Government under this section shall also be deposited in said fund for such purposes. All sums appropriated to, or deposited in, said fund shall remain available until expended.

"(l) The liability established by this section shall in no way affect any rights which (1) the owner or operator of a vessel, an onshore or offshore facility, or an onshore or offshore drilling-production facility may have against any third party whose acts may in any way have caused or contributed to such discharge, or (2) the United States Government may have against any third party whose actions may in any way have caused or contributed to the discharge of oil.

"(m) Anyone authorized by the President to enforce the provisions of this section may (1) board and inspect any vessel upon the navigable waters of the United States, (2) with or without a warrant arrest any person who violates the provisions of this section or any regulation issued thereunder in his presence or view, and (3) execute any warrant or other process issued by an officer or court of competent jurisdiction.

"(n)(1) Where as determined by the President there is an imminent and substantial threat to the public health or welfare of the United States, including, but not limited to, fish, shellfish, and wildlife and public and private shorelines within the United States, because of an actual or threatened discharge of oil into or upon the navigable waters of the United States from a vessel, the delegate of the President shall have the right to take immediate possession of such vessel so far as to remove it or take such other action as may be appropriate to eliminate or mitigate such threat, and to prevent any unnecessary injury, and no one shall interfere with or prevent such removal or other action, except that the head of the agency charged with removal or other action under this subsection may, in his discretion, give notice in writing to the owner or operator of any such vessel requiring them to act. Any expense incurred under this subsection shall be a cost incurred by the United States Government for the purposes of subsection (f) in the removal of oil.

"(2) In addition to any other action taken by a State or local government, when the President determines there is an imminent and substantial threat to the public health or welfare of the United States, including, but not limited to, fish, shellfish, and wildlife and public and private shorelines within the United States, because of an actual or threatened discharge of oil into or upon the navigable waters of the United States from an onshore or offshore drilling-production facility or an onshore or offshore facility, the President may require the United States attorney of the district in which the threat occurs to secure such relief as may be necessary to abate such threat.

"(o) The several district courts of the United States are invested with jurisdiction for any actions, other than actions pursuant to subsection (j)(1), arising under this section. In the case of Guam, such actions may be brought in the district court of Guam, and in the case of the Virgin Islands such

actions may be brought in the district court of the Virgin Islands. In the case of American Samoa and the Trust Territory of the Pacific Islands, such actions may be brought in the District Court of the United States for the District of Hawaii and such court shall have jurisdiction of such actions. In the case of the Canal Zone, such actions may be brought in the United States District Court for the District of the Canal Zone.

"(p) Nothing in this section shall be construed as affecting or modifying any other existing authority of any Federal agency relative to onshore or offshore facilities or onshore or offshore drilling-production facilities under this Act or any other provision of law or to affect or modify any State or local law not in conflict with the provisions of this section.

"(q) Nothing in this section shall affect or modify in any way the obligations of any owner or operator of any vessel, onshore or offshore facility to any person or agency under any provision of law for damages to any publicly- or privately-owned property resulting from a discharge of any oil or from the removal of any such oil.

"CONTROL OF HAZARDOUS POLLUTING SUBSTANCES

"SEC. 13. (a) The President shall, in accordance with the procedures set forth in this section, develop, promulgate, and revise as may be appropriate, regulations (1) designating as hazardous substances, other than oil as defined in section 12 of this Act, such elements and compounds which, when discharged in any quantity into or upon the navigable waters of the United States or adjoining shorelines or the waters of the contiguous zone, present an imminent and substantial danger to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, shorelines, and beaches; and (2) establishing, if appropriate, criteria for the removal of such substances, including criteria relative to the methods and means of removal.

"(b) In the development of such regulations, the President or his delegate shall consult with other interested Federal agencies, representatives of State agencies, and other interested persons and organizations. Consideration shall be given to the latest available scientific data in the field, the technical feasibility of the regulations, and experience gained under this Act.

"(c) The President shall from time to time publish any such proposed regulations in the Federal Register and shall afford interested persons a period of not less than thirty days after publication to submit written data or comments. Except as provided in subsection (d) of this section, the President may, upon the expiration of such period and after consideration of all relevant matter presented, promulgate such regulations with such modifications as he may deem appropriate.

"(d) On or before the last day of any period fixed for the submission of written data or comments under subsection (c), any interested person may file with the President written objections to a proposed regulation, stating the grounds therefor and requesting a public hearing. As soon as practicable after the period for filing such objections has expired, the President shall publish in the Federal Register a notice specifying the proposed regulations to which objections have been filed and a hearing requested, and shall promptly hold a public hearing for the purpose of receiving relevant evidence. After completion of the hearing, the President shall make findings of fact on such objections, and the President may promulgate the regulations with such modifications as he deems appropriate, or take such other action as he deems appropriate. All such findings shall be made public.

"(e) Any aggrieved person may, within sixty days after promulgation in the Federal Register of any regulation for which a hearing was held under subsection (d), file with the United States Court of Appeals for the District of Columbia a petition praying that such regulation be modified or set aside in whole or in part. A copy of the petition shall forthwith be sent by registered or certified mail to the President, and thereupon the President shall certify and file in such court the record upon which the President made his decision, as provided in section 2112, title 28, United States Code. The court shall hear such appeal on the record made before the President. The findings of the President, if supported by substantial evidence on the record considered as a whole, shall be conclusive. The court may affirm, vacate, or remand the proceedings to the President for such further action as it directs. The review provided by this subsection shall be the exclusive review available to such person of any such regulation and such regulation shall not be the subject of any review during any procedure leading to the enforcement of such regulation. The filing of a petition under this subsection shall not stay the application of the regulation complained of, unless the court so orders, upon finding that there is a substantial likelihood that the President's findings are erroneous, and that irreparable injury will result without such a stay.

"(f) Any regulation promulgated under this section shall be effective upon publication in the Federal Register unless the President specified a later date.

"(g) In order to facilitate the removal, if appropriate, of any hazardous substance any person in charge of a vessel or of an onshore or offshore facility of any kind shall, as soon as he has knowledge of any discharge of such substance from such vessel or facility, immediately notify the appropriate agency of the United States of such discharge. Any such person who knowingly fails to notify immediately such agency of such discharge shall, upon conviction, be fined not more than $5,000, or imprisoned for not more than one year or both. Notification received pursuant to this section shall not be used by the United States Government to enforce the provisions of any other Federal law or to provide any information obtained from such notice to any State for the purpose of any criminal prosecution.

"(h) Whenever any hazardous substance is discharged into or upon the navigable waters of the United States or adjoining shorelines or the waters of the contiguous zone, unless removal is immediately undertaken by the owner or operator of the vessel or onshore or offshore facility from which the discharge occurs or which caused the discharge, pursuant to the regulations promulgated under this section, the President, if appropriate, shall remove or arrange for the removal thereof in accordance with such regulations. Nothing in this subsection shall be construed to restrict the authority of the President to act to remove or arrange for the removal of such hazardous substance at any time.

"(i) Any owner or operator of a vessel or onshore or offshore facility who fails or refuses to comply with the provisions of any regulations promulgated under this section shall be subject to an in rem civil penalty of not more than $5,000 for each such failure or refusal. No penalty shall be assessed until such owner or operator has been given notice and an opportunity for a hearing on such charge. Any such penalty also may be compromised. In determining the amount of the penalty, or amount agreed upon in compromise, the gravity and nature of the violation, the demonstrated good faith of the owner or operator charged in attempting to achieve rapid compliance after notification of a violation, and the history of previous violations shall be considered.

"(j) Nothing in this section shall affect or modify in any way the obligations of any owner or operator of any vessel, onshore or offshore facility to any person or agency under any provision of law for damages to any publicly- or privately-owned property resulting from a discharge of any hazardous substance or from the removal of any such substance.

"(k) Anyone authorized by the President to enforce the provisions of this section may (1) board and inspect any vessel upon the navigable waters of the United States, (2) with or without a warrant arrest any person who violates the provisions of this section or any regulation issued thereunder in his presence or view, and (3) execute any warrant or other process issued by an officer or court of competent jurisdiction.

"(l) The several district courts of the United States are invested with jurisdiction for any actions arising under this section. In the case of Guam, such actions may be brought in the district court of Guam, and in the case of the Virgin Islands such actions may be brought in the district court of the Virgin Islands. In the case of American Samoa and the Trust Territory of the Pacific Islands, such actions may be brought in the District Court of the United States for the District of Hawaii and such court shall have jurisdiction of such actions. In the case of the Canal Zone such actions may be brought in the United States District Court for the District of the Canal Zone.

"(m) (1) For the purpose of this section the definitions in subsection (a) of section 12 of this Act shall be applicable to the provisions of this section, except as provided in paragraph (2) of this subsection:

"(2) For the purpose of this section, the term—

"(A) 'remove' or 'removal' includes removal of the hazardous substances from the water and shorelines and the taking of actions as may be necessary to minimize or mitigate damage to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, and public and private shorelines;

"(B) 'owner or operator' means, as the context requires, any person owning, operating, chartering by demise, or otherwise controlling the operations of, a vessel, or any person owning, operating, or otherwise, controlling the operations of an onshore or offshore facility; and

"(C) 'offshore or onshore facility' means any facility of any kind and related appurtenances thereto which is located in, on, or under the surface of any land, or permanently or temporarily affixed to any land, including lands beneath the navigable waters of the United States and which is used or capable of use for the purpose of processing, transporting, producing, storing, or transferring for commercial purposes and hazardous substances designated under this section.

"(n) The President shall submit a report to the Congress, together with his recommendations, not later than November 1, 1970, on the need for, and desirability of, enacting legislation to impose liability for the cost of removal of hazardous substances discharged from vessels and onshore and offshore facilities subject to this section. In preparing this report, the President shall conduct an accelerated study which shall include, but not be limited to, the method and measures for controlling hazardous substances to prevent this discharge, the most appropriate measures for enforcement and recovery of costs incurred by the United States if removal is undertaken by the United States, and methods of imposing civil or criminal sanctions where removal is impossible or impractical. In carrying out this study, the President shall consult with the interested representatives of the various public and private interest groups that would be affected by such legislation as well as other interested persons.

"(o) The President is authorized to delegate the responsibility of administering the provisions of this section to one or more appropriate Federal agencies. Any moneys in the fund established by section 12 of this Act shall be available to such Federal agencies to carry out the purposes of this section. Each such agency, in order to avoid duplication of effort, shall, whenever appropriate, utilize the personnel, services, and facilities of other Federal agencies.

"AREA ACID AND OTHER MINE WATER POLLUTION CONTROL DEMONSTRATION

"SEC. 14. (a) The Secretary in cooperation with other Federal agencies is authorized to enter into agreements with any State or interstate agency to carry out one or more projects to demonstrate methods for the elimination or control, within all or part of a watershed, of acid or other mine water pollution resulting from active or abandoned mines. Such projects shall demonstrate the engineering and economic feasibility and practicality of various abatement techniques which will contribute substantially to effective and practical methods of acid or other mine water pollution elimination or control.

"(b) The Secretary, in selecting watersheds for the purposes of this section, shall (1) require such feasibility studies as he deems appropriate, (2) give preference to areas which have the greatest present or potential value for public use for recreation, fish and wildlife, water supply, and other public uses, and (3) be satisfied that the project area will not be affected adversely by the influx of acid or other mine water pollution from nearby sources.

"(c) Federal participation in such projects shall be subject to the conditions—

"(1) that the State or interstate agency shall pay not less than 25 per centum of the actual project costs which payment may be in any form, including, but not limited to, land or interests therein that is needed for the project, or personal property or services, the value of which shall be determined by the Secretary; and

"(2) that the State or interstate agency shall provide legal and practical protection to the project area to insure against any activities which will cause future acid or other mine water pollution.

"(d) There is authorized to be appropriated $15,000,000 to carry out the provisions of this section, which sum shall be available until expended. No more than 25 per centum of the total funds available under this section in any one year shall be granted to any one State.

"POLLUTION CONTROL IN GREAT LAKES

"SEC. 15. (a) The Secretary, in cooperation with other Federal agencies, is authorized to enter into agreements with any State, political subdivision, interstate agency, or other public agency, or combination thereof, to carry out one or more projects to demonstrate new methods and techniques and to develop preliminary plans for the elimination or control of pollution, within all or any part of the watersheds of the Great Lakes. Such projects shall demonstrate the engineering and economic feasibility and practicality of removal of pollutants and prevention of any polluting matter from entering into the Great Lakes in the future and other abatement and remedial techniques which will contribute substantially to effective and practical methods of water pollution elimination or control.

"(b) Federal participation in such projects shall be subject to the condition that the State, political subdivision, interstate agency, or other public agency, or combination thereof, shall pay not less than 25 per centum of the actual project costs which payment may be in any form, including, but not limited to, land or interests therein that is needed for the project, personal property or services, the value of which shall be determined by the Secretary.

"(c) There is authorized to be appropriated $20,000,000 to carry out the provisions of this section, which sum shall be available until expended."

SEC. 103. (a) Redesignated section 16 of the Federal Water Pollution Control Act, as amended, is amended to read as follows:

"COOPERATION BY ALL FEDERAL AGENCIES IN THE CONTROL OF POLLUTION

"SEC. 16. (a) (1) Each Federal agency having jurisdiction over any real property, facility or actiivty of any kind, shall, consistent with an approved plan for implementation, insure compliance with applicable water quality standards and the purposes of this Act in the administration of such property, facility, or activity. In his summary of any conference pursuant to section 10(d)(4) of this Act, the Secretary shall include references to any discharges allegedly contributing to pollution from any such Federal property, facility, or activity, and shall transmit a copy of such summary to the head of the Federal agency having jurisdiction of such property, facility, or activity. Notice of any hearing pursuant to section 10(f) of this Act involving any pollution alleged to be effected by any such discharges shall also be given to the Federal agency having jurisdiction over the property, facility, or activity involved, and the findings and recommendations of the hearing board conducting such hearing shall include references to any such discharges which are contributing to the pollution found by such board.

"(2) There is hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of this section.

"(b) Each Federal agency which leases any Federal property or facility of any kind or which contracts for the operation of any Federal property or facility or which contracts for the entire operation of any other facility, shall insure compliance with applicable water quality standards and the purposes of this Act in the administration of such lease or contract. Any certification obtained for a Federal license or permit pursuant to subsection (c) shall be evidence of compliance with water quality standards for the purposes of this subsection.

"(c) (1) Any applicant for a Federal license or permit to construct or operate any facility or to conduct any activity which may result in any discharge into the navigable water of the United States shall provide certification form the State in which the discharge originates or, if appropriate, the interstate water pollution control agency to the licensing or permitting agency and notice thereof to the Secretary that there is reasonable assurance that such facility or activity will comply with applicable water quality standards, except that in any case where standards for interstate water have not been approved or where such standards have been promulgated by the Secretary pursuant to section 10(c) of this Act, such certification shall be obtained from the Secretary. Such State or if appropriate interstate agency or the Secretary shall, within one year of receipt of any application for such certification, notify the applicant of such certification or of intent not to certify. Whenever such discharge may affect, as determined by the Secretary, the applicable water quality standards of any other State or States, the Secretary, within sixty days of the date of notice of application for a Federal license or permit shall notify such other State or States. If, within thirty days after receipt of such notification, such other State or States determine that such discharge will adversely affect their water quality standards, the Secretary, within thirty days after the State or States make such determination, shall review such determination and, if he finds that such discharge will adversely affect the water quality standards of such State or States, shall require before such license or permit is issued such conditions as may be necessary to insure compliance with applicable water quality standards. No license or permit shall be granted without such certification and such conditions as the State or, as appropriate, the interstate agency or, as appropriate, the Secretary may reasonably require, including, but not limited to, provision for suspension or termination of any issued license or permit for failure to be in compliance with applicable water quality standards. In any case where such conditions required by the Secretary are more stringent than, or in conflict with conditions required by the certifying State or, if appropriate, interstate agency, the licensing or permitting agency, upon request of the applicant for a license or permit, shall hold a hearing and make finding of fact on the conditions to be included in any license or permit, except that no such findings shall be adopted that are less stringent than the conditions required by the certifying State. The licensee or permittee shall provide the certifying State or, if appropriate, the interstate agency, or the Secretary, with notification of any changes in the proposed facility or activity which may affect applicable water quality standards.

"(2) The certification obtained pursuant to paragraph (1) of this subsection shall fulfill the requirements of this subsection with respect to any other Federal license or permit required for such facility or activity, unless, after notice of application for such other Federal license or permit has been given by such Federal agency, the State or, if appropriate, the interstate agency or the Secretary, notifies within sixty days after receipt of such notice such Federal agency of a change since providing such certification in (A) the nature of the activity, (B) the design of the facility, (C) the natural characteristics of the waters into which such discharge is made, or (D) the water quality standards applicable to such waters, and that, due to such change, there is no longer reasonable assurance that there will be compliance with applicable water quality standards.

"(3) Prior to the operation of any federally licensed or permitted facility or activity, not subject to a Federal operating license or permit, the licensee or permittee shall provide an opportunity for such certifying State and, if appropriate, the interstate agency or the Secretary to review the manner in which the facility or activity shall be operated or conducted for the purposes of assuring compliance with applicable water quality standards. Upon notification by the certifying State or, if appropriate, the interstate agency or the Secretary that the operation of any federally licensed or permitted facility or activity will not comply with applicable water quality standards, such Federal agency shall suspend such license or permit until notification is received that there is reasonable assurance that such facility or activity will comply with applicable water quality standards.

"(4) Upon notification by the Governor of the certifying State, or, as appropriate, the interstate agency or the Secretary, that any such federally licensed or permitted facility or activity has been found by a court of competent jurisdiction, pursuant to applicable State or Federal law, to be in violation of the applicable water quality standards such license or permit may be suspended or terminated as the circumstances require.

"(5) No Federal agency shall be deemed to be an applicant for the purpose of this subsection.

"(6) In any case where actual construction of a facility for the conduct of any activity has been commenced pursuant to a

Federal license or permit prior to the date of enactment of the Water Quality Improvement Act of 1969, no certification under this subsection shall be required for any Federal operating license or permit respecting that activity issued within two years following such date: *Provided*, That any operating license or permit issued during the two-year period following such date of enactment without such certification shall terminate at the end of that period unless prior to such date the licensee or permittee submits to the Federal agency that issued such license or permit a certification which otherwise meets the requirements of paragraph (1) of this subsection.

"(7) Except as provided in paragraph (6), any application for a license or permit that is (a) pending on the date of enactment of the Water Quality Improvement Act of 1969 and (b) that is issued within one year following the date of enactment shall not require certification pursuant to this subsection for one year following the issuance of such license or permit: Provided, That any such license or permit issued shall terminate at the end of one year unless prior to that time the licensee or permittee submits to the Federal agency that issued such license or permit a certification which otherwise meets the requirements of this subsection.

"(8) (A) In the case of any activity which will affect water quality but for which there are no applicable water quality standards, no certification shall be required under this subsection, except that the licensing or permitting agency shall impose, as a condition of any license or permit, a requirement that the licensee or permittee shall comply with the purposes of this Act.

"(B) Upon notice from the State in which the discharge originates or, as appropriate, the interstate agency or the Secretary, that such licensee or permittee has been notified of the adoption of water quality standards applicable to such activity and has failed, after reasonable notice, or not less than six months, to comply with such standards, the license or permit shall be suspended until notification is received from such State or interstate agency or the Secretary that there is reasonable assurance that such activity will comply with applicable water quality standards.

"(d) Nothing in this section shall be construed to limit the authority of any department or agency pursuant to any other provision of law to require compliance with applicable water quality standards. The Secretary shall, upon the request of any Federal department or agency, or State or interstate agency, or applicant, provide, for the purpose of this section, any relevant information on applicable water quality standards, and shall, when requested by any such department or agency or State or interstate agency, or applicant, comment on any methods to comply with such standards.

"(e) In order to implement the provisions of this section, the Secretary of the Army, acting through the Chief of Engineers, is authorized, if he deems it to be in the public interest, to permit the use of spoil disposal areas under his jurisdiction by Federal licensees or permittees, and to make an appropriate charge for such use. Moneys received from such licensees or permittees shall be deposited in the Treasury as miscellaneous receipts."

SEC. 104. Section 5 of the Federal Water Pollution Control Act, as amended, is amended as follows:

(1) by amending paragraph (2) of subsection (a) to read as follows:

"(2) make grants-in-aid to public or private agencies and institutions and to individuals for research and demonstrations, and provide for the conduct of research and demonstrations by contract with public or private agencies and institutions and with individuals without regard to section 3648 and 3709 of the Revised Statutes; and";

(2) by changing the semicolon at the end of paragraph (3) of subsection (a) to a period and striking paragraphs (4) and (5);

(3) by striking out subsection (g) and inserting the provisions of such subsection in section 21 in lieu of the provisions in subsection (b) thereof, except that in paragraph (4) of such inserted provisions, strike out "and June 30, 1969" and insert in lieu thereof "June 30, 1969, and June 30, 1970";

(4) by redesignating subsection (h) as subsection (k), and by adding the following new subsections after subsection (f):

"(g) (1) For the purpose of providing an adequate supply of trained personnel to operate and maintain existing and future treatment works and related activities, and for the purpose of enhancing substantially the proficiency of those engaged in such activities, the Secretary shall finance a pilot program, in cooperation with State and interstate agencies, municipalities, educational institutions, and other organizations and individuals, of manpower development and training and retraining of persons in, or entering into, the field of operation and maintenance of treatment works and related activities. Such program and any funds expended for such a program shall supplement, not supplant, other manpower and training programs and funds available for the purposes of this paragraph. The Secretary is authorized, under such terms and conditions as he deems appropriate, to enter into agreements with one or more States, acting jointly or severally, or with other public or private agencies or institutions for the development and implementation of such a program.

"(2) The Secretary is authorized to enter into agreements with public and private agencies and institutions, and individuals to develop and maintain an effective system for forecasting the supply of, and demand for, various professional and other occupational categories needed for the prevention, control, and abatement of water pollution in each region, State, or area of the United States and, from time to time, to publish the results of such forecasts.

"(3) In furtherance of the purposes of this Act, the Secretary is authorized to—

"(A) make grants to public or private agencies and institutions and to individuals for training projects, and provide for the conduct of training by contract with public or private agencies and institutions and with individuals without regard to sections 3648 and 3709 of the Revised Statutes;

"(B) establish and maintain research fellowships in the Department of the Interior with such stipends and allowances, including traveling and subsistence expenses, as he may deem necessary to procure the assistance of the most promising research fellowships; and

"(C) provide, in addition to the program established under paragraph (1) of this subsection, training in technical matters relating to the causes, prevention, and control of water pollution for personnel of public agencies and other persons with suitable qualifications.

"(4) The Secretary shall submit, through the President, a report to the Congress by September 30, 1970, summarizing the actions taken under this subsection and the effectiveness of such actions, and setting forth the number of persons trained; the occupational categories for which training was provided, the effectiveness of other Federal, State, and local training programs in this field, together with estimates of future needs, recommendation on improving training programs, and such other information and recommendations, including legislative recommendations, as he deems appropriate.

"(h) The Secretary is authorized to enter into contracts with, or make grants to, public or private agencies and organizations and individuals for (A) the purpose of developing and demonstrating new or improved methods for the prevention, removal, and control of natural or manmade pollution in lakes, including the undesirable effects of nutrients and vegetation, and (B) the construction of publicly owned research facilities for such purpose.

"(1) The Secretary shall engage in such research, studies, experiments, and demonstrations as he deems appropriate relative to the removal of oil from any waters and to the prevention and control of oil pollution, and shall publish from time to time the results of such activities. In carrying out this subsection, the Secretary may enter into contracts with, or make grants to, public or private agencies and organizations and individuals.

"(j) In carrying out the provisions of this section relating to the conduct by the Secretary of demonstration projects and the development of field laboratories and research facilities, the Secretary may acquire land and interests therein by purchase, with appropriated or donated funds, by donation, or by exchange for acquired or public lands under his jurisdiction which he classifies as suitable for disposition. The values of the properties so exchanged either shall be approximately equal, or if they are not approximately equal, the values shall be equalized by the payment of cash to the grantor or to the Secretary as the circumstances require."; and

(5) by amending the first sentence of redesignated subsection (k) to read as follows: "There is authorized to be appropriated to carry out this section, other than subsection (g) (1) and (2), not to exceed $65,000,000 annually for the fiscal years ending June 30, 1969, June 30, 1970, and June 30, 1971. There is authorized to be appropriated to carry out subsection (g) (1) of this section $5,000,000 for the fiscal year ending June 30, 1970, and $7,500,000 for the fiscal year ending June 30, 1971. There is authorized to be appropriated to carry out subsection (g) (2) of this section $2,500,000 annually for the fiscal years ending June 30, 1970, and June 30, 1971.".

SEC. 105. Section 6 of the Federal Water Pollution Control Act, as amended, is amended—

(1) by changing in subsection (e) (1) the word "three" to "five"; and

(2) by changing in subsection (e) (2) and (3) the word "two" to "four".

SEC. 106. Redesignated section 19 of the Federal Water Pollution Control Act, as amended, is amended by deleting the following: "the Oil Pollution Act, 1924, or".

SEC. 107. Section 10 of the Federal Water Pollution Control Act, as amended, is amended by adding in subsection (c) (3) the word "navigation," immediately following "industrial," in the second sentence.

SEC. 108. The Oil Pollution Act, 1924 (43 Stat. 604), as amended (80 Stat. 1246–1252), is hereby repealed.

TITLE II—ENVIRONMENTAL QUALITY

SEC. 201. This title may be cited as the "Environmental Quality Improvement Act of 1969".

FINDINGS, DECLARATIONS, AND PURPOSES

SEC. 202. (a) The Congress finds—

(1) that in the pursuit of social and economic advancement man has caused changes in the environment;

(2) that the degree of such changes endangers a harmonious relationship between man and his environment;

(3) that population increases and urban concentration contribute directly to pollution and the degradation of our environment, increasing the severity of the physical, social, psychological, and economic problems of our society; and

(4) that changes in the environment should be restricted, insofar as possible, to avoid adverse effects on man, other species and the environment itself.

(b) The Congress declares—

(1) that there is a national policy for the environment which provides for the enhancement of environmental quality, which is enuniciated in the—

(A) Federal Water Pollution Control Act;

(B) Clean Air Act;

(C) Solid Waste Disposal Act;

(D) title 23 of the United States Code, relating to highways;

(E) Omnibus Rivers and Harbor and Flood Control Acts;

(F) Appalachian Regional Development Act of 1965;

(G) Public Works and Economic Development Act of 1965; and

(H) Tennessee Valley Authority Act of 1933;

(2) that the primary responsibility for implementing this policy rests with State and local governments;

(3) that the Federal Government shall encourage and support implementation of this policy through appropriate regional organizations; and

(4) that Federal and federally assisted public works programs and projects shall, in all instances, be developed and implemented in a manner consistent with the enhancement of environmental quality.

(c) The purposes of this title are—

(1) to provide for the development of criteria and standards to assure the protection and enhancement of environmental quality in all Federal and federally assisted projects and programs; and

(2) to authorize and to provide staff for an Office of Environmental Quality.

FEDERAL PUBLIC WORKS ACTIVITIES

SEC. 203. Each Federal department or agency conducting or supporting public works activities which affect the environment shall implement the policies established by the President pursuant to this title.

OFFICE OF ENVIRONMENTAL QUALITY

SEC. 204. (a) There is established in the Executive Office of the President an office to be known as the Office of Environmental Quality (herein referred to as the "Office"). There shall be in the Office a Director and a Deputy Director who shall be appointed by the President, by and with the advice and consent of the Senate.

(b) The compensation of the Director and the Deputy Director shall be fixed by the President at a rate not in excess of the annual rate of compensation payable to the Director and the Deputy Director of the Bureau of the Budget.

(c) The Director is authorized to employ such officers and employees as may be necessary to enable the Office to carry out its functions under this title.

(d) In carrying out the provisions of this section the Director shall—

(1) assist and advise the President on policies and programs of the Federal Government affecting environmental quality;

(2) provide staff and support for any cabinet level council or committee established by the President to coordinate Federal activities which affect the environment;

(3) review and appraise existing and proposed projects, facilities, programs, policies, and activities of the Federal Government which affect environmental quality and make recommendations thereon;

(4) review the adequacy of existing systems for monitoring and predicting environmental changes in order to achieve effective coverage and efficient use of research facilities and other resources;

(5) promote advancement of scientific knowledge of the effects of actions and technology on the environment and encourage the development of the means to prevent or reduce adverse effects that endanger the health and well-being of man;

(6) develop proposed policies and programs to protect and enhance environmental quality;

(7) recommend priorities with respect to problems involving environmental quality;

(8) assure evaluation of new and changing technologies for their potential effects on the environment prior to their implementation;

(9) review and comment on the coordination of the programs and activities of Federal departments and agencies which affect, protect, and improve environmental quality;

(10) review and comment on the development and interrelationship of environmental quality criteria and standards established through the Federal Government; and

(11) consult with and advise representatives of State and local governments and assist the President in efforts to achieve environmental quality in the community of nations.

(e) In carrying out the provisions of this section, the Director is authorized to contract with public or private agencies, institutions, and organizations, and with individuals, without regard to sections 3648 and 3709 of the Revised Statutes (31 U.S.C. 529; 41 U.S.C. 5) for research and surveys regarding any potential or existing problem of environmental quality.

(f) In carrying out the provisions of this title the Director shall—

(1) not later than six months after the effective date of this Act and not later than January 10 of each calendar year beginning after such date, report to the Congress on measures taken toward implementing the purpose and intent of this title;

(2) collect, collate, analyze, and interpret data and information on environmental quality and issue reports thereon, as he deems appropriate; and

(3) organize and convene a biennial forum on current problems and issues concerning environmental quality, population, and the future, and publish the proceedings thereof, and participants in such forums shall be selected from among representatives of various State, interstate, and local government agencies, of public or private interests concerned with population growth, environmental quality, and planning for the future, and of other public and private agencies demonstrating an active interest, as well as other individuals in the fields of population, biology, psychology, medical sciences, social sciences, ecology, agriculture, economics, law, engineering, and political science who have demonstrated competence with regard to problems of the environment.

ADVISORY COMMITTEES

SEC. 205. (a) In order to obtain assistance and independent advice in the development and implementation of the purposes of this title, the Director of the Office of Environmental Quality shall from time to time establish advisory committees. Committee members shall be selected from among representatives of various State, interstate, and local government agencies, of public or private interests concerned with population growth, environmental quality, and planning for the future, and of the other public and private agencies demonstrating an active interest, as well as other individuals in the fields of population, biology, medical sciences, psychology, social sciences, ecology, agriculture, economics, law, engineering, and political science who have demonstrated competence with regard to problems of the environment.

(b) The members of the advisory committees appointed pursuant to this title shall be entitled to receive compensation at a rate to be fixed by the Director, but not exceeding $100 per diem, including traveltime, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5 of the United States Code for persons in the Government service employed intermittently.

AUTHORIZATION

SEC. 206. There are hereby authorized to be appropriated for the fiscal year beginning July 1, 1969, and for each of five succeeding fiscal years, such amounts as may be necessary for the purposes of this title.

TITLE III—PROPERTY ACQUISITION

SEC. 301. (a)(1) The Architect of the Capitol, under the direction of the Senate Office Building Commission, is hereby authorized to acquire on behalf of the United States, in addition to the real property heretofore acquired as a site for an additional office building for the United States Senate under the provisions of the Second Deficiency Appropriation Act, 1948, approved June 25, 1948 (62 Stat. 1028) and Public Law 85–591, approved August 6, 1958 (72 Stat. 495–496), by purchase, condemnation, transfer, or otherwise, for purposes of extension of such site, all publicly, or privately owned property contained in lots 863, 864, 892, 893, 894, and 905 in said square 725 in the District of Columbia, and all alleys or parts of alleys and streets contained within the curblines surrounding such square, as such square appears on the records in the Office of the Surveyor of the District of Columbia as of the date of enactment of this Act.

(2) Any proceeding for condemnation brought under paragraph (1) shall be conducted in accordance with the Act of December 23, 1963 (16 D.C. Code, secs. 1351–1368).

(3) Notwithstanding any other provision of law, any real property owned by the United States and any alleys or parts of alleys and streets contained within the curblines surrounding square 725 shall, upon request of the Architect of the Capitol, made with the approval of the Senate Office Building Commission, be transferred to the jurisdiction and control of the Architect of the Capitol, and any alleys or parts of alleys or streets contained within the curblines of said square shall be closed and vacated by the Commissioner of the District of Columbia in accordance with any request therefor made by the Architect of the Capitol with the approval of such Commission.

(4) Upon acquisition of any real property pursuant to this section, the Architect of the Capitol, when directed by the Senate Office Building Commission to so act, is authorized to provide for the demolition and/or removal of any buildings or other structures on, or constituting a part of, such property and, pending demolition, to use the property for Government purposes or to lease any or all of such property for such periods and under such terms and conditions as he may deem most advantageous to the United States and to incur any necessary expenses in connection therewith.

(5) The jurisdiction of the Capitol Police shall extend over any real property acquired under this section and such property shall become a part of the United States Capitol Grounds.

(b) For carrying out the purposes of this section, there is hereby authorized to be appropriated $1,250,000. The Architect of the Capitol, under the direction of the Senate Office Building Commission, is authorized to enter into contracts and to make such expenditures, including expenditures for personal and other services, as may be necessary to carry out the purposes of this section.

PRIVILEGE OF THE FLOOR

Mr. RANDOLPH. Mr. President, during the consideration of S. 7, I ask unanimous consent that the necessary

members of the staff of the Committee on Public Works be permitted to have the privilege of the floor for the purpose of assistance to and consultation with the members of the committee.

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

Mr. ALLOTT subsequently said: Mr. President, I ask unanimous consent that during the consideration of S. 7 or amendments thereto, or S. 1075, two minority members of the staff of the Committee on Interior and Insular Affairs may be permitted on the floor of the Senate.

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

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

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

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

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

Mr. MANSFIELD. Mr. President, a parliamentary inquiry.

The PRESIDING OFFICER. The Senator will state it.

Mr. MANSFIELD. What is the pending business?

The PRESIDING OFFICER. The pending business is S. 7. The question is on agreeing to the committee amendment in the nature of a substitute.

The Senator from Maine is recognized.

Mr. MUSKIE. Mr. President, today the Senate begins consideration of a major water pollution control measure which provides for specific approaches to deal with particular kinds of water pollution problems.

S. 7, if enacted, will authorize the Federal Government to clean up disastrous oil spills which seriously jeopardize the Nation's waters and beaches.

This legislation requires Federal licensees and permittees to comply with water quality standards as a precondition of the license or permit.

Vessel sewage which fouls many of the Nation's marinas, harbors, and ports will be subject to new methods of control.

The bill authorizes the designation and cleanup of hazardous substances which present a substantial endangerment to health and welfare when discharged into the Nation's waters.

Authorizations for continued research and new authority to deal with eutrophication—the natural process of aging of lakes—and acid mine drainage are also important provisions of the bill.

Title II of S. 7 provides for meaningful consideration of the environmental policies set by the Federal Water Pollution Control Act, the Clean Air Act, and the Solid Waste Disposal Act in all federally supported public works activities. Other provisions of title II are intended to bring those environmental policies into all other programs of the Federal Government.

Title III provides for the acquisition of land for use of the U.S. Senate. This title will be discussed by the junior Senator from North Carolina (Mr. JORDAN), chairman of the Subcommittee on Buildings and Grounds.

TITLE I

For the past 6 years, Congress has recognized that the success of our effort to clean up the Nation's waters depends on an urgent commitment of organization, planning, engineering skill, and funds. We have ackowledged the need for clean water in the broadest sense. But the demand for clean water is so great and is growing so rapidly that we cannot afford to overlook any opportunity to increase the available supply of water, or to prevent and control sources of pollution which threaten the existing supply. This legislation will provide new tools to accomplish these tasks.

The provisions of S. 7 are not entirely new. While the committee has refined the language, the basic provisions of this bill are similar to those to which the Senate gave unanimous agreement in S. 3206 last year and in S. 2760 in 1967.

Several of the features of the bill either will be discussed by other members of the committee, or are analyzed in detail in the report. I would like to concentrate my remarks on three principal provisions of title I and on title II in its entirety.

The part of title I which establishes oil pollution liability for vessels and on- and off-shore facilities has received a great deal of attention and consideration from the subcommittee and the full committee.

As introduced, S. 7 provided that liability on vessels and onshore and offshore facilities would be based on a test of negligence with the burden of proof on the owner or operator of the vessel or onshore or offshore facility to show that a discharge of oil was not negligent.

Expert testimony to the committee indicated that while the cost of cleanup of a barrel of oil might average $75, the possibility of any single vessel or facility discharging its entire capacity was remote even in a catastrophic disaster. The figures recommended by the committee, $125 per gross ton for vessels and nonproduction facilities and $8 million for drilling or production facilities, would be adequate in the judgment of the committee, to finance the cleanup cost of the largest oil spills on record.

The type of liability to be imposed presented the committee with troublesome questions. Lengthy testimony was presented in the 13 days of hearings held by the subcommittee and extensive discussion took place in executive sessions concerning the factors which should be considered in determining the type of liability. Among those factors were: First, the effect of a rigid liability on maritime commerce; second, the availability of insurance for the owner of the vessel or the shipper of oil; and, third, the impact of different types of liability on the U.S. Government and the people of the United States.

Heretofore, maritime liability has concerned the vessel, its cargo, and its employees. Insurance covers the hull, the cargo, personal injury, and death, and has been designed to protect people who either work for, use, own, or operate a vessel. Were these risks comparable to those associated with oil pollution, the imposition of negligent liability would not be questioned. However, the discharge of oil often affects the general public, persons, and property wholly unrelated to the vessel, who have no control over it, and who have no interest in it.

It can be argued that the public interest would be completely protected only by absolute and unlimited liability; negligence and limited liability would protect only private interests. If Congress imposed negligence liability, it followed that there should be no limits on such liability.

The representatives of the insurance industry and the oil industry testified that they could not imagine a circumstance where a discharge of oil could occur without negligence. In fact, the witness for the British Maritime Insurance Brokers stated in a letter dated August 1, 1969:

> Presumable (sic) this means negligence of the shipowners servant as I read the words and surely it is realized that almost every marine casualty is caused by negligence.

Therefore, it appeared to the committee that negligence liability with a reverse burden of proof and absolute liability are similar in practical application. One practical advantage to absolute liability is the avoidance of litigation on the question of responsibility.

Parenthetically, it is important to note that this section deals only with the costs of the cleanup of discharges. The bill in no way affects the rights of third parties against the party alleged responsible for the discharge.

After deciding to recommend unlimited negligence liability and limited absolute liability, the committee then determined that some exceptions to absolute liability were justified. The committee decided that an owner or operator of a vessel or facility should not be held liable if he could prove that a discharge was caused solely by an act of war.

The committee also decided that an owner or operator should be exempt from liability if he could prove that the discharge was caused solely by an act of God about which he could have no foreknowledge, could make no plans to avoid, or could not predict. Under this exception, only discharges resulting from grave natural disasters, which could not be anticipated in the design, location or operation of the facility or vesssel in light of historic, geologic, or climatic circumstances or phenomena, would be outside the scope of the owner's or operator's responsibility.

It was brought to the attention of the committee that there have been circumstances in which a negligent act of Government was the cause of a discharge of oil. The committee decided that an owner or operator should not be held liable if he could prove that such act of U.S. Government negligence was the sole cause of discharge.

Finally, the committee included a discharge which occurs solely due to an act of a third party.

The committee decided that while the owner or operator should not be liable if he could prove that a discharge was

caused by one of these acts, it was also necessary that such exceptions be allowed only when the owner or operator proved the discharge to be solely the result of one of the exceptions. Any culpability on the part of the owner or operator would vitiate the exception.

The committee recognized that no discharge of oil from a vessel, affecting the coastal waters of the United States, has approached the liabilities imposed by this bill. However, the risk of such spills and the possibility of major catastrophic discharges from onshore or offshore facilities or from oil-drilling operations must be considered.

During hearings in Washington and throughout the country, representatives of local governments, industrial concerns, community and conservation groups, and the public have questioned repeatedly the justification for requiring compliance with water quality standards in their activities when Federal agencies are not subject to a similar requirement.

If the Nation is to have an effective water pollution control program or any effective environmental control program whatever, Federal agencies must consider the environmental aspects of their programs as a matter of first priority.

Recognizing that point, Mr. President, this committee, under the leadership of the distinguished Senator from Delaware (Mr. BOGGS) has pressed for years for an upgrading of the performance of the Federal Government in the field of pollution control and environmental improvement.

S. 7, as reported, provides an orderly mechanism for insuring that all Federal activities will comply with the philosophy and intent of the Nation's water quality program. This section calls for Federal agencies to control their own wastes and to require control by Federal licensees and permittees. This task will be neither easy nor inexpensive. Nevertheless, the committee expects that it will be accomplished.

The existing water quality standards program envisions preventive policies rather than abatement procedures as the best method of pollution control. This provision of S. 7 applies that policy. It does not impose an unjust burden on any applicant for a Federal license or permit, since the committee assumes that Federal licensees and permittees, like any other organization or individual that intends to use the waters of the United States, will anticipate pollution control in the construction or the modification of any facility.

The committee expects that communication between the applicant and the appropriate pollution control agency relative to the planning of any facility which will affect water quality will take place at the earliest possible time. Site location is an essential aspect of the effective implementation of the Nation's water quality program. There are some sites where no such facility should be constructed because pollution control technology is not adequate to assure the maintenance and the enhancement of water quality. Those who make decisions concerning site locations should be aware of this fact and deal with it before making any investment in new facilities.

Waste from watercraft is one of the many sources of pollution that has an impact on the water quality of our Nation. This pollution is most severe in bays, lakes, harbors, and marinas where the concentration of vessels is heaviest and where there is minimum natural dilution of contaminants. The increasing use of our waterways will further compound these problems. This new section provides for the economic and practical control of discharges of raw or inadequately treated sewage from vessels into the navigable waters of the United States at the earliest possible date.

The committee recognized that many States have moved to control inadequately treated or untreated discharges of waste from vessels and praises the efforts of those States. However, conflicting regulations and standards for marine sanitation devices present a hardship to recreational boaters who move between States and present potentially serious restrictions on the interstate movement of commercial vessels.

In order to avoid these difficulties, the committee has provided for Federal preemption of the authority to regulate the design, use, manufacture, and installation of marine sanitation devices. No State shall have authority to require any device of any kind on any vessel subject to the provisions of this section after the effective date of the standards and regulations.

The committee is nonetheless aware of the necessity to relate any sewage treatment control measure to existing water quality programs. Consistent with this philosophy, the committee has provided authority for the States to prohibit entirely the discharge of any sewage from vessels without regard to the regulations set by this act if an approved plan for the implementation of water quality standards requires such restrictive measures.

This exception is not intended to be broadly construed. A State cannot prohibit vessel waste discharges for all of its rivers, lakes, and coastal waters unless the State has adopted standards which establish uses for all of those waters consistent with an absolute prohibition. The committee intends that any State prohibition apply only to areas designated for the protection of public drinking-water supplies, shellfish beds, and areas designated for body-contact recreation.

The committee expects that the States will provide alternative facilities for disposal of sewage from vessels wherever necessary.

This provision is substantially the same as that passed by the Senate and the House in 1968 and evaluated in the report language found in Senate Report No. 1371 of the 90th Congress which accompanied S. 2525.

The provision for acid mine drainage which was included in S. 2760 in 1967 as two sections has been combined into one section authorizing $15 million for both research and demonstration programs and is substantially the same as provisions passed in 1967.

The clean lakes provision, originally sponsored by Senators WALTER MONDALE and QUENTIN BURDICK, has been expanded to authorize the development of necessary research facilities but is otherwise identical to the legislation which passed the Senate unanimously in 1967.

The committee was also confronted with the dilemma of how to deal with the problem of the discharge of hazardous substances—other than oil—which present an imminent and substantial endangerment to the public health and welfare, but for which there is no clear Federal cleanup authority. The record on this subject was inadequate. Information indicated only that such discharges do occur and that the damage caused by such discharges of oil and other materials is often extensive. The list of discharges of oil and other materials since January of this year, on page 59 of the report, records several discharges of hazardous substances.

S. 7, as reported, authorizes the President to designate as hazardous any substance, the discharge of which in any quantity presents an imminent and substantial endangerment to public health or welfare, and to require notice of the discharge of any such substance after such designation. The Federal Government is authorized to clean up those discharges where practical. The committee recognized that many of the substances which will be designated are water-soluble or for other reasons cannot be cleaned up effectively. This section will primarily serve to notify downstream water users of a dangerous discharge.

The committee expects a report from the President by November of 1970 which will discuss the types and amounts of liability which should be imposed to recover the cost of cleaning up hazardous substances. The findings of that will be the subject of future legislation.

The committee has included in this legislation a provision offered by Senator STEPHEN M. YOUNG and identical to one passed by the House of Representatives. It provides relief for the citizens of the Great Lakes area who are confronted with a rapid deterioration of their vital water resources.

This section authorizes the Secretary to grant up to 75 percent of the cost of projects demonstrating new methods to control and eliminate pollution in the Great Lakes drainage basin. There is no question that this legislation is essential. The Great Lakes are perhaps the Nation's most vital inland water resource, yet Lake Erie is dying and Lake Michigan is the subject of serious concern. No Federal dollars will be better spent than those which produce effective methods to deal with the critical problems of the Great Lakes, for not only will those dollars help remedy an already critical situation but they will undoubtedly demonstrate methods which can be used to prevent the accelerated eutrophication of other lakes and reservoirs which are equally important to other regions of the country.

The committee has been increasingly concerned about the availability of trained technical personnel to operate sewage treatment plants. As a result of that concern the committee authorized a study of manpower and training needs in the Clean Water Restoration Act of 1966. That study was transmitted to the

Congress in mid-1967 and was printed as Senate Document No. 49 on August 31, 1967. On the basis of that report, which indicated a demand for 18,500 new plant operators and the need to upgrade the skills of many existing plant operators, and on the basis of another report prepared for the Subcommittee on Air and Water Pollution by the General Accounting Office on the effects of inadequately trained personnel on the operation of federally assisted sewage treatment plants, the committee was pleased to receive and include in the bill a proposal by Senator HUGH SCOTT to authorize pilot programs for training plant operators and technicians.

The committee recognizes that a great deal more than a pilot program will be required if Federal funds for sewage treatment plant construction are invested wisely, but it believes that experience with a pilot program would provide a sound base for expanded legislation in the near future.

Title I of S. 7 is as significant as any water pollution legislation ever reported by the Committee on Public Works. It provides authority to deal with a variety of critical yet definable water pollution problems. Unlike prior measures which have been reported by this committee, title I does not develop a new policy for water pollution control but rather provides additional tools to implement the national policy of water quality enhancement established by the Water Quality Act of 1965. Effective control of water pollution cannot be obtained without these additional preventive and enhancement measures. The sources covered by this title require specific attention.

TITLE II

In recent years, and especially since 1963, Congress has developed a strong policy for the enhancement of environmental quality. This policy is based on the knowledge that man and his environment are closely interrelated and that environmental quality is necessary to the improvement of living standards for all men—and, indeed, possibly for the survival of the human race.

The legislation which has formed this broad policy has been developed through the efforts of many congressional committees, including the Senate Committee on Agriculture, Banking and Currency, Commerce, Finance, Government Operations, Interior, Labor and Public Welfare, and Public Works. Participation in this development has been broad-based because the problems of environmental quality transcend artificial divisions of committee jurisdiction.

Much of the substantive legislation in this area has come from the Public Works Committee and its Subcommittee on Air and Water Pollution. The committee's work has resulted in the Clean Air Act of 1963, and the 1965 and 1966 amendments; the Air Quality Act of 1967; the Water Quality Act of 1965; the Clean Water Restoration Act of 1966; and the Solid Waste Disposal Act of 1965.

Originally drafted to meet specific pollution problems which demanded immediate abatement actions, legislation from the Public Works Committee evolved to the point where it is based on the concept of the prevention of pollution and the enhancement of the quality of the air, water, and land environment.

A strong partnership among governmental agencies at the Federal, regional, and State levels is the basis for this broad strategy. The States have been delegated the primary responsibility to protect and enhance the quality of the environment within their jurisdictions and—in cooperation with neighboring States—within river basins and air sheds common to those States. Water and air quality standards are to be adopted, implemented, and enforced at the State and regional levels on the basis of criteria promulgated by the Departments of the Interior and Health, Education, and Welfare. The Federal Government has the responsibility to develop these criteria; to act to set or enforce standards where States do not fulfill their obligations; to conduct research to improve our understanding of environmental threats and develop new means of protection; and to protect the environment in the conduct of its own activities.

The opportunity to act first has been given to the States because the national policy of environmental enhancement recognizes the need to involve individual citizens and communities in any decisions concerning the environment in which they live. The best way to put this policy into practice—to make participation in the decisionmaking process as close to individual citizens as possible, within the guidelines of the criteria.

The committee has emphasized, however, that the opportunities for local control are not open-ended. If the States and regions fail adequately to carry out their responsibilities under these sets or are unable to do so, the Congress has expressly authorized the Federal agencies administering these programs to assume the responsibilities.

The States cannot succeed in meeting their obligations without the complete cooperation of all Federal departments and agencies. The Federal responsibility to protect the environment in the conduct of its programs which are not subject to State regulation has often gone unmet. This shortcoming is present in every Federal department and agency and is in direct conflict with the Nation's environmental policy and the purposes and provisions of the legislation which has developed that policy.

It is clear that there is no one answer to the problem of environmental regulation of the Federal Government's own activities. The committee believes that it is the responsibility of each standing committee in Congress to examine carefully the activities of those departments and agencies within its jurisdiction and to insist that the policy of the enhancement of environmental quality is strictly followed.

The Public Works Committee is committed to reviewing all legislation and Federal activity under its jurisdiction with these duties in mind and expects to initiate this review during this Congress. Furthermore, title II of S. 7 explicitly requires that all federally supported public works projects and programs be planned, developed, and administered with full consideration of their impact on our air, water, and land and with strict adherence to the national policy of environmental enhancement.

More and more public officials and individual citizens share this concern of the committee and have recognized the need for the integration of environmental consideration in all programs and policies of the Federal Government. We are confronted with problems of accelerating environmental deterioration on the one hand, and the inadequacies of our public and private institutions to deal with these problems on the other.

The Public Works Committee has focussed on several measures designed to remedy these inadequacies and has concluded that the problems of management are even more urgent than the problems of organization. Therefore, the committee has proposed in title II an Office of Environmental Quality in the Office of the President. This office would have the management capability to bring coherence and consistency into the environmental activities of the Federal Government. The committee has given careful study to other proposals and has concluded that an independent environmental staff in the Executive Office of the President is crucial to the effective coordination and administration of all Federal programs in line with the Nation's policy of environmental enhancement.

The Office of Science and Technology presently supplies the staff for the President's Cabinet Council on Environmental Quality. Unfortunately, the Office of Science and Technology has widespread responsibilities, is thinly staffed, and must look to the departments and agencies of the Federal Government for staff assistance. Thus, the advice and assistance the President receives concerning the programs and policies of the Federal agencies comes from the agencies themselves. No matter how well intentioned, this arrangement will not produce a critical and independent review of Federal departments and agencies.

No Federal department or agency which is not primarily oriented to environmental matters can be expected to have either the sufficient expertise or the proper perspective to evaluate their own programs satisfactorily by themselves. This assumption is the basis for both section 16 of title I and the provision establishing the Office of Environmental Quality in title II.

The most difficult task facing the President and the Congress in the area of environmental quality is the review and analysis of the administration of the environmental programs and policies of the Federal Government, a function which should be coordinated from the Office of the President. The committee strongly feels that the President requires a competent, independent staff, not affiliated with any other Federal agency, to accomplish this purpose.

The Office of Environmental Quality would provide the independent staff required by the new Cabinet Level Council and would make available to the President the professional competence to review and analyze all programs and policies relating to the air, water, and land environment. The office would also pro-

vide reports on environmental issues to the appropriate committees of Congress, the Council, and the public.

The bill reported by the committee does not tell the President how to organize his administration to deal with environmental problems. It provides him with staff for whatever arrangement he determines most appropriate to his approach to the administration of the executive branch.

One of the principal advantages of this legislation is the recognition that progress can be made in enhancing the quality of the environment only if the national policy has the full support of both the President and the Congress. The Office of Environmental Quality should increase the capacity of the President to support that policy.

Mr. President, I conclude what may appear to be a lengthy analysis of the bill, but which, in fact, in the light of its broad coverage, is a brief analysis of the bill.

I would like, at this time, to express my appreciation to all members of the committee, but specifically, to the distinguished Senator from West Virginia (Mr. RANDOLPH), chairman of the full committee, the distinguished Senator from Kentucky (Mr. COOPER), the ranking Republican member of the full committee, and my good friend and longstanding right hand in this fight against pollution, the distinguished Senator from Delaware (Mr. BOGGS), for the excellent cooperation which we have had.

I must say that our experience with this bill has been one of the most reassuring that I have had in my years in the Senate and in my years of dealing with this kind of legislation.

We had long hearings, but, more than that, we had extensive executive sessions beginning in March and continuing through June and July—sessions which were attended most of the time by the full membership of the committee, all of whom participated in the discussion of problems which surfaced in an effort to come to grips with them and solve them soundly, from the legislative point of view, without regard to partisan considerations. I do not believe there is a partisan comma in the bill. It reflects the work of members on both sides of the aisle, and for them I would like to express my appreciation, through Senator BOGGS, to all his colleagues on the Republican side of the committee.

I yield to the distinguished Senator from Delaware.

Mr. BOGGS. Mr. President, I thank the distinguished Senator from Maine, chairman of the subcommittee and manager of this bill, for his very kind and generous remarks.

I rise to support S. 7, the Water Quality Improvement Act of 1969, and to associate myself with the remarks of the distinguished Senator from Maine (Mr. MUSKIE), chairman of the Subcommittee on Air and Water Pollution.

Under his able and thoughtful leadership, we have conducted an exhaustive investigation into the various aspects of the water pollution problem and we have written a bill that I consider as important as any seeking to enhance environmental quality that will come before the Senate for many years.

Before I discuss the merits of this legislation and try to further clarify some points that may be of interest, I wish to thank the Senator from Maine (Mr. MUSKIE) and the other members of the subcommittee for their efforts on behalf of the bill. I also wish to thank especially the distinguished chairman of the full committee, Senator RANDOLPH of West Virginia, and the distinguished ranking minority member, Senator COOPER of Kentucky. They both have been great to work with, and they each have contributed so much in the consideration and writing of this proposed legislation

It has been a great privilege to work on this committee and serve with the distinguished chairman of the subcommittee, who is recognized as an able leader in this field. As he has stated so eloquently, there has been completely bipartisan approach in the consideration of the provisions of this bill. This bipartisan cooperation began with the introduction of the bill, and went through the hearings, the markup, to the bringing of this bill from the committee to the floor.

We have sought legislation that will meet a need—a pressing need. And in this effort, we have received great work and cooperation from the committee staff.

The chairman of the subcommittee has already discussed the need for legislation that will obligate the owner of a vessel or a drilling facility to clean up an oil spill. I shall not detain the Senate by restating his persuasive arguments. However, I should like to point out that such legislation is not new to the Senate. These provisions are an outgrowth of S. 2760, which passed the Senate in December 1967. This earlier legislation imposed unlimited dollar liability for oil cleanup costs, with an exception for acts of God. S. 7 places a dollar limit on liability, except when negligence is proven, and exempts acts of God, acts of war, acts of Government, and acts of a third party. These were limitations that were discussed at great length in committee, and raised repeatedly in hearings with representatives of the oil and shipping industries. It was the committee's belief that such exemptions have the effect of protecting the public in nearly every case, while safeguarding private interests at rare times of great disaster.

There is one important point I should like to add in relation to the oil cleanup liability section of the bill. The emphasis in this section is on the word "cleanup," not "liability." It is the intent of this legislation, and I cannot stress this point too strongly, that the polluter should clean up any oil spill on his own, and that the Government should not need to act. The Government should take action only when the polluter fails, himself, to take prompt and effective action. This is a responsible approach, fitting the sense of public responsibility held by the vast majority of American businesses.

In Delaware, my home State, I recall an incident when an oil barge of the Hess Oil Co. ran aground off Rehoboth, spilling oil. Hess Oil went in at once and cleaned up that spill, spending its time and effort and not throwing the burden on the Government. That is what this bill seeks to encourage. The liability standard only will take effect, I feel certain, in the rare cases of businesses that lack this public spirit.

That 1967 legislation and a bill that the Senate passed in July 1968, S. 3206, dealt with many other aspects of water pollution also handled in the current bill. This bill, S. 7, and the previous legislation, authorizes research and development on problems of lake pollution, demonstration projects for controlling acid mine drainage, and provisions insuring cooperation among all Federal agencies in maintaining water quality standards.

Last year's legislation contained a provision authorizing a national standard for devices to treat sewage from vessels. A similar provision appears in S. 7. I should point out that the new legislation adds wording that gives to each State the right to bar vessel discharge where necessary to protect that State's waters for such purposes as drinking, recreation, shellfish production. This is a right the States should have. This means that if water quality at a specific location would be degraded below applicable water quality standards by a discharge, treated or otherwise, the State may prohibit the discharge in that area to protect the lake, marina, oyster bed, or municipal water intake location.

Some boatowners have argued that States would act capriciously, and establish a variety of restrictive standards in their waters. This cannot happen. There would be only two standards: A discharge standard and a no-discharge standard. When an automobile driver crosses State lines on a trip, he is required to know a new set of laws. Why is it any more of a burden for a boatowner to know where there is a discharge and where there is a no-discharge policy in another State he intends to visit?

It should be emphasized further that the language permits a discharge prohibition only when "applicable water quality standards require such prohibition." Thus, if a State acts capriciously, the boatowners may go to court to halt such unreasonable action by the States.

This provision has created some controversy among boatowners. They argue the provision gives States the rights to bar discharges in some locations, an unnecessary restriction on boatowners.

We have discussed this at great length. Following the filing of the report on this bill, I received a letter from an executive who had forcefully brought to committee members his objections to the S. 7 discharge language. The letter says:

> I also believe that if the administrators will follow the intention and guidance of the Committee, as I understand it in the Report, and if common sense and practicality prevails, the owners and operators of both recreational and small commercial vessels will be able to live with the situation and will be glad to cooperate toward the objective that we all have, namely, cleaner waters for the use and enjoyment of everyone in our great country.

I discuss these several points and their legislative history to demonstrate that

the pending legislation holds a direct inheritance from legislation previously adopted by this body.

The distinguished Senator from Maine has discussed many of the new provisions, such as the authorization of a study on cleanup of other hazardous substances, plus a most essential provision establishing in the White House an Office of Environmental Quality. I endorse these portions of the bill, as I do the entire measure, but, in addition, there is one further provision of the bill I wish to mention briefly. This is section 16(g), dealing with manpower training, suggested to the committee by the distinguished minority leader, Senator SCOTT. The cost to implement this provision is small: $5 million during this fiscal year, $7.5 million in fiscal 1971. But the rewards should be great. The paragraph authorizes pilot projects to train technicians to operate sewage treatment plants. The Federal Water Pollution Control Administration estimates that these funds will finance the training of 9,000 technicians, toward filling a national shortage of 30,000 such technicians. This will offer to the Nation greater assurance that the waste treatment plants we are building under the Clean Water Restoration Act of 1966 will not stand idle or inefficiently utilized. As we look ahead toward the enhancement of our environment, this training section should have an impact for good far beyond its cost.

For the reasons that I have enumerated, I am happy to support this legislation. I urge my colleagues to give it orderly consideration, and I hope they will support it. It is most essential legislation.

I again, in conclusion, wish to thank the distinguished chairman of the committee, the Senator from Maine (Mr. MUSKIE), for his outstanding leadership and ability, and for the great privilege it has been to work with him and the other members of the committee on this legislation.

Mr. SPONG. Mr. President, will the Senator yield?

Mr. MUSKIE. I thank my good friend from Delaware, and I appreciate his comments. I shall yield in a moment to the distinguished Senator from Virginia (Mr. SPONG). Before I do, however, I should like to say, in response to something the distinguished Senator from Delaware has said, that I neglected to give appropriate credit to the distinguished Senator from Kansas (Mr. DOLE) for the provision in the bill dealing with hazardous substances. He took a special interest in that matter, and developed the amendment and presented it to the commitee, and I should like to give him full credit for that provision.

Mr. BOGGS. I join with the distinguished chairman.

Mr. MUSKIE. I yield to the Senator from Virginia.

Mr. SPONG. Mr. President, the bill before the Senate represents a forward-looking response to the national concern over the deteriorating condition of our water resources.

The measure is the product of most careful consideration by the Subcommittee on Air and Water Pollution, and its parent Committee on Public Works. We are indebted to the leadership of the Senator from Maine (Mr. MUSKIE) and the Senator from West Virginia (Mr. RANDOLPH) during the development of this important and far-reaching legislation. We also are grateful for the contributions made by Senators BOGGS, COOPER, and BAKER.

Because I represent a coastal State, I am particularly interested in those provisions of the bill which deal with oil pollution, thermal pollution, and the discharge of wastes from vessels.

After lengthy deliberations, the committee decided to recommend absolute liability upon vessel owners or operators for the cleanup costs of oil spills. Liability would be limited to $125 per gross ton of the offending vessel or $14 million, whichever is lesser. This concept places the risk on the responsible party, not innocent third parties and the general public. Our objective was to protect the taxpayers from potential cleanup costs, without imposing liability in excess of reasonable risks. It is the understanding of the committee that the limits in the bill are sufficient to cover the costs of the most expensive spills.

Fortunately, there have been no spills from vessels in the coastal waters of the United States which even approach the limits. Moreover, the outer limit of $14 million would be sufficient to cover the liability, at $125 per ton, of any vessel presently capable of using U.S. ports. However, the committee was of the opinion that the danger from potential spills from vessels, as well as from onshore and offshore oil facilities, should be taken into account in the development of this legislation.

The owner or operator, not the Government, would be given first opportunity to clean up a spill. If an owner or operator later proved the discharge was caused solely by an act of God, an act of war, negligence on the part of the U.S. Government, or an act of a third party, he could recover his costs from the Government.

If the owner or operator failed to act, the Government would clean up the spill and be entitled to recover its costs. If the Government could prove a spill is the result of negligence or a willful act, it would be entitled to recover all costs regardless of the liability limits.

Vessel owners or operators would be required to provide evidence of financial responsibility of $100 per gross ton for vessels over 300 gross tons. The committee believes that the exceptions it has recommended with respect to absolute liability will enable owners or operators to obtain insurance to cover their financial responsibility of at least $100 per ton. Owners or operators may then determine the extent to which their risk may exceed their insurance coverage, or self-insurance.

The liability standards for offshore and onshore facilities are similar to those for vessels. However, liability would be limited to $125 per ton of oil which any processing, transporting or transferring facility can pass through in a 24-hour period, or which can be stored by the largest unit of a tank farm. The limit for drilling-production facilities would be $8 million.

The vessel pollution section provides for Federal preemption of authority to regulate the design, use, manufacture, and installation of marine sanitation devices. The committee adopted this approach to avoid a proliferation of conflicting State regulations which would work a hardship upon recreational boaters who enjoy the waters of several States.

However, in order to relate this section of the bill to the water quality standards of the States, the committee has proposed that States be allowed to prohibit the discharge of any sewage from vessels in areas where such a restriction is necessary for the implementation of applicable water quality standards. The committee has emphasized in its report on the bill its intention that a prohibition should apply only to areas from which public water supplies are drawn, to areas where there are shellfish beds, and to areas designated for body contact recreation. In other words, a prohibition against discharges must be tied to water quality standards.

The section would not apply to ships and boats which do not have installed toilets. In addition, the committee recognizes, because of shortcomings in technology, that it may be necessary to waive the applicability of the standards for various classes, types, and sizes of vessels. It obviously will be necessary to exercise common sense in the administration of this aspect of the legislation. This is not to suggest, however, that there should be footdragging in the implementation of the program.

The Secretary of the Interior would be empowered under the vessel pollution section to develop performance standards indicating what a sewage treatment or holding device must accomplish to be acceptable for marine use. Because of its expertise in marine engineering and design, the Coast Guard would be vested with enforcement authority, and with authority to develop regulations governing the design, installation and operation of marine sanitation devices. The Coast Guard is particularly well suited to administer these matters; it has the capability to work out a practical and workable system of implementation.

Mr. President, I hope the Department of Defense will expedite its program to equip naval vessels with sanitation devices, and will request the funds necessary to carry out the intent of this legislation. Pollution from Navy ships constitutes a substantial problem in many of the country's ports. The Navy has a public responsibility to demonstrate by continuing affirmative action its willingness to cooperate in the effort to resolve environmental problems.

The bill takes a preventive approach toward activities over which the Federal Government already exercises a degree of control. Section 16 is directed primarily at thermal discharges, and pollution from dredged spoil.

Applicants for a Federal license or permit to build or operate any facility which might discharge pollutants into navigable waters would be required un-

der the section to provide certification of reasonable assurance that the facility will comply with applicable water quality standards. In most instances, the certification would come from the State in which the discharge occurs.

Nuclear-power electric generating facilities and other activities requiring more than one Federal license or permit would be required to provide only one certificate of compliance, unless there is a change in the nature or design of the activity, or a change in the water quality standards applicable to the waters involved.

There is provision for the suspension or termination of a certificate in the event a court of competent jurisdiction finds that a facility is operating in violation of water quality standards.

Pollution from dredging posed a special problem to the committee because only one State has developed water quality standards for temporary turbidity and the disposal of spoil resulting from this activity. The committee recommended that certification not be required as a precondition of a dredging permit until such time as the States have developed appropriate water quality standards. However, at any time following the development of water quality standards for dredging, an applicant for a new license or permit would be subject to other provisions of the section.

Mr. President, S. 7, the Water Quality Improvement Act of 1969, is a major piece of legislation carried over as unfinished business from the 90th session of Congress. The measure is not punitive. The committee's overriding interest in the development of the legislation was to establish procedures which will be helpful to preserve and protect our water resources.

Our existing laws have serious gaps which threaten the success of our efforts to abate pollution. This bill will fill the gaps. It will go a long way toward putting the responsibility for pollution control where it rightfully belongs—on the polluter.

I again commend the distinguished Senator from Maine (Mr. MUSKIE) for the leadership he has afforded.

Mr. MUSKIE. I want to thank the distinguished Senator from Virginia for his continuing interest and dedication to solving the pollution crisis. He has been a diligent contributor to the subcommittee's work in this area and the full Senate is indebted to him.

Mr. LONG. Mr. President, I applaud the Senate Public Works Committee and its distinguished chairman, Senator RANDOLPH, and the chairman of its Subcommittee on Water Pollution, Senator MUSKIE, for the devoted efforts they have made since the beginning of this Congress to meet the mounting public concern over the depletion and spoilage of our waterways by various types of pollution. Obviously, it is in the national interest to update and extend the requirements and prohibitions of the Federal Water Pollution Control Act and to assure that, for centuries to come, the water resources of the United States will meet the highest possible standards of purity.

However, as chairman of the Senate Merchant Marine Subcommittee and as one who only last week urged the Senate to provide millions of dollars of additional Federal funds for the construction of new merchant ships to save our merchant fleet from sinking into almost total obscurity, I feel I must express my deep concern regarding the very adverse effect the provisions of sections 12(f) (1) and (2) of S. 7 might have upon the ability of the American merchant marine to continue to operate at all.

As I read section 12(f) (1) of the bill, in the event a vessel of the American merchant marine is involved in an oil spill which its owner cannot prove was caused by, first, an act of God; second, an act of war; third, negligence on the part of the U.S. Government, or, fourth, by an act of a third party, the owner is automatically liable to the United States for the actual costs of the cleanup, up to an amount equal to $125 per gross ton of the vessel or $14,000,000, whichever is lesser. If, on the other hand, the Government can show that such discharge was the result of simple negligence on the part of the vessel, then the vessel owner is liable to the United States "for the full amount of such costs," even if they far exceed $14,000,000.

Section 12(f) (2) of the bill, however, permits vessels of the American merchant marine to sail if they are able to establish "financial responsibility" (in the form of insurance or a bond) of only $100 per gross ton for any and all oil cleanup costs. Thus, under the bill, a vessel of 10,000 gross tons is authorized to sail if it can establish to the satisfaction of the Federal Government that it carries $1,000,000 worth of insurance for oil cleanup costs; while a vessel of 100,000 gross tons, including tankers, is permitted to sail if it carries $10,000,000 of insurance to cover cleanup costs in the event it becomes involved in an oil spill.

Clearly, therefore, S. 7 makes vessels of the American Merchant Marine subject to liabilities ranging up to $125 per gross ton for oil cleanup costs while the bill simultaneously requires them to carry insurance of only $100 per ton—and the first mentioned liability of $125 per ton can arise even in cases where an oil spill occurs without any negligence whatsoever on the part of the vessel owner or operator involved.

Indeed, if negligence is proved to exist, under S. 7, the owner has an unlimited liability, whereas, as indicated, the bill permits him to sail with insurance in an amount equal to only $100 per ton.

Obviously, if this were only an oversight or mistake in the drafting of this bill, it would be a simple matter to correct it here on the Senate floor. We could merely increase the "financial responsibility" requirement of section 12(f) (2) to $125 per gross ton, and then, absent negligence, American merchant marine vessels would be covered against at least the minimum, automatic liability provisions of section 12(f) (1). The "unlimited liability" exposure would thereby be limited to cases of proved negligence only.

Unfortunately, however, I am advised that these serious, substantial liability differences are not the result of mistake at all. On the contrary, it is my understanding that section 12(f) (2) enables American vessels to sail with proof of "financial responsibility" of only $100 per gross ton because, in fact, that is the maximum amount of insurance for oil cleanup costs which can be obtained, both here in the United States and from all of the other worldwide marine insurance underwriters located in England.

Thus, if S. 7 required each and every American vessel to establish "financial responsibility" of $125 per gross ton under section 12(f) (2), the result would be that most American vessels would have to remain in port, that is without insurance—and thus without clearance from the Government under S. 7—they would be unable to sail. S. 7, as I have said, avoids that catastrophe by limiting the "ability to sail" requirements to only $100 per ton—that is, to a clearly insurable amount.

But, simultaneously section 12(f) (1) of the bill goes on to provide that, when and if an oil spill actually occurs, the American vessel is liable for cleanup costs up to $125 per ton; that is, in an amount which apparently S. 7 itself recognizes to be uninsurable. And, of course, if $125 per ton is not insurable, it follows, as day follows night, that unlimited liability for a negligent oil spill is equally uninsurable beyond the $100 per ton figure mentioned before.

The result for the American merchant marine is obviously intolerable and it promises to force many of the smaller vessel operators out of business. In effect, each vessel operator must, under S. 7, become a self-insurer for the difference in liability between $100 per ton, which is insurable, and the unlimited amount of liability which can be assessed against him in the event of a negligent oil spill.

Thus, in a moment, a small operator whose vessel is insured for only $1,000,000 can, under S. 7, become liable for $14,000,000 or more in oil cleanup costs if his vessel unavoidably collides with an oil tanker off the coast of the United States. Sudden liability in such a staggering uninsured amount would immediately bankrupt most American shipping concerns which are struggling to continue to remain in business today.

And, sadly, the inability of such a vessel to pay the oil cleanup costs assessed against it would still leave the United States in the position where it would have to pay the costs of the oil cleanup itself.

For all of these reasons, therefore, as chairman of the Senate Merchant Marine Subcommittee, I have come to the conclusion that the better solution, for both the United States and the American merchant marine, would be to adopt the provisions of section 17(e) of H.R. 4148, which the House unanimously passed on April 16 of this year, whereby each vessel of the American merchant marine would be held liable for oil cleanup costs in the clearly insurable amounts of $100 per gross ton or $10,000,000, whichever is lesser, unless it is able to prove affirmatively that it had no responsibility whatsoever for the oil spill which made the cleanup necessary in the first place.

Under the House bill, the liabilities assessed are clearly insurable and funds

will thus be available up to those insurable limits to defray for the United States at least the statutory portion of all oil spill costs for which a vessel of the American merchant marine is responsible.

Because of the very complicated situation which has been created for all concerned by the conflicting provisions of section 12(f) of S. 7 mentioned above, I shall not endeavor by amendment here on the Senate floor to resolve that which the committee has been unable fairly to rectify after months of consideration. However, because the two differing versions of this legislation will ultimately have to be ironed out in conference, I strenuously urge the Senate conferees to keep in mind during those crucial deliberations the existing plight of our American merchant marine; the fact that it is presently at its lowest ebb in modern history and is thus unable to self-insure risks far beyond that which the marine insurance industry will dare to underwrite; that the merchant marine is vital to the national defense of the United States; and that both Congress and the administration are currently seeking to establish programs whereby hundreds of million of dollars of Federal funds will be spent on ship construction simply to keep the merchant marine alive. In the face of these conditions and developments, it seems academic to me that we should not simultaneously proceed to try to drive large segments of the industry out of business by saddling its fleet with statutory liabilities which cannot be insured either here in the United States or abroad.

Mr. President, I ask unanimous consent to have printed at this point in the RECORD a statement which was prepared for delivery today by the Senator from Alaska (Mr. GRAVEL), who is necessarily absent.

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

STATEMENT OF SENATOR MIKE GRAVEL

Mr. President, I would like to associate myself with the remarks of the distinguished Chairman of the Senate Merchant Marine Subcommittee. Like him, I strongly favor and support the basic purposes of the pending legislation which are to combat pollution of our nation's waters and to provide means whereby cleanup costs connected with damaging oil spills or oil leaks along our coastlines will be defrayed, to the maximum extent possible, by those who are actually responsible for such water pollution. My State of Alaska is obviously deeply concerned over the possibility of such catastrophes and thus I join the Senator from Louisiana in congratulating the distinguished Chairman of the Public Works Committee, Senator Randolph, and the brilliant Chairman of the Senate Subcommittee on Water Pollution, Senator Muskie, for the untiring efforts they have made to bring this bill to the floor for early action.

At the same time, I am also deeply disturbed by those provisions of Section 12(f) of the bill which require all vessels over 300 tons which utilize American ports or waterways to establish "financial responsibility" for oil cleanup costs of only $100. per gross ton, but which simultaneously provide that, in the event of an *actual oil spill*, the vessel's statutory liability for cleanup costs, depending on the circumstances involved, might be as high as

(1) $125 per gross ton, or

(2) an unlimited sum equal to the "full amount" of such cleanup costs, regardless of how large that amount might be.

My concern regarding these provisions of Section 12(f) would not be so profound if evidence were available that adequate marine insurance could be obtained by all vessels of our merchant fleet to cover these statutory risks and liabilities. Unfortunately, however the testimony presented before the Senate Public Works Committee on this subject, by both the American and British marine insurance industries, was to the contrary. Indeed, during the past several days, as a member of that Committee, I have received copies of letters addressed to our Chairman by representatives of the British insurance underwriters (companies which I understand actually underwrite most of the marine insurance around the world) stating that "the capacity of the market to insure this kind of liability at the present time is *$100 per gross registered ton or $10,000,000, whichever is the less.*" These letters to the Committee bluntly conclude with the statement that "Insurance above those amounts is, we are satisfied, *unobtainable.*"

If these warnings from the marine insurance industry are correct, then under Section 12(f) of the pending bill, the $100 per ton "financial responsibility" requirement in S. 7 actually represents all that can be insured. It follows as the distinguished Senator from Louisiana demonstrated, that the $125 and unlimited oil cleanup liabilities, specified in the bill for assessment against any vessel in the event of an oil spill, are simply uninsurable.

What effect this "uninsurability" might have on some segments of the American Merchant Marine in their present low position of prosperity, I am unable to say at this time. Clearly, all vessels with maximum insurance of only $100. per ton will, in the event S. 7 becomes law, be sailing as *self-insurers* of the two statutory liabilities S. 7 assesses in excess of that amount. Considering the pitiful condition of our merchant fleet, it seems highly unlikely that many would be able to assume this additional risk, but even if they do, patently their vessels will be face-to-face with financial disaster, if, perchance, they become involved, innocently or negligently, in a very costly oil spill.

And, of course, just as Alaska cherishes its beautiful unscarred coastlines and thus strongly favors all measures aimed at protecting its shores against destructive oil spills, it also depends upon the maritime industry for most of its daily needs and to service the requirements of its blossoming oil industry. Therefore, we are concerned, seriously concerned, about the adverse effects the "uninsurable provisions" of Section 12(f) might have upon the Merchant Marine and upon the ability of our shipping interests to continue to operate for the well being and progress of Alaska as they have in the past.

In conclusion, therefore, what I urge here is that every possible effort be made by the distinguished members of the Public Works Committee who are and will be in charge of this legislation both here on the floor and in conference with the House, to reach some acceptable solution with reference to Section 12(f) which will (1) meet the basic needs of water pollution control but (2) establish clean-up liabilities for the Merchant Marine which are, beyond dispute and peradventure, insurable.

Mr. RANDOLPH. Mr. President, the Water Quality Improvement Act of 1969—S. 7—is another significant step toward controlling one of the major environmental problems facing this Nation. It will extend society's control over water quality and insure against further degradation of our priceless water resources both in the inland fresh lakes and streams and along our coastal shores.

Senator MUSKIE, our able and informed chairman of the Subcommittee on Air and Water Pollution, who is floor manager of S. 7, is discussing the general features of this legislation.

I shall focus my remarks on three particular sections of the measure which are especially noteworthy because they attack three of the very real water pollution problems of today. These are: acid and other mine drainage pollution; pollution from dredging operations; and oil pollution.

Acid and alkali pollution discharged into various local watercourses are carried by the natural flow of stream systems into our major river basins, thus creating extensive pollution problems, both intrastate and interstate. The specific impact of mine drainage pollution is characterized by stream sterility. This is a condition in which the normal stream ecology, or balance between living organisms and their environment, is disrupted by the presence of large volumes of acid or alkali mine drainage wastes. If the "wild" upstream portions of streams and rivers are virtually destroyed by such problems as acid mine drainage, how much hope is there that the waters reaching the major cities will be able to serve our growing population?

It has been estimated that 3.5 million tons of acid are discharged into more than 6,000 miles of the Nation's streams, resulting in damage to aquatic life and potential severe loss of recreational capacity of the waterways. In addition, untold damage occurs to vessels, dams, bridges, water and sewer works, and other facilities downstream.

The impact of acid pollution is compounded by other than direct effects on our rivers and streams. The many seepage areas around mines are barren of plantlife to such an extent that as much as 1,000 times as much sediment is washed from them into streams by erosion than from forest and grass lands. There are more than 30,000 surface acres of impounded waters and reservoirs which are seriously affected by surface and subsurface mining operations.

The most serious problem is the fact that 80 percent of acid mine drainage comes from abandoned and orphaned mines. Though laws and regulations in some States control present and future mining operations, there appears to be no simple way to achieve control over the thousands of abandoned mines.

The Department of the Interior has identified several priority areas for the major attack against acid mine drainage under this new legislation. There is, for example, a very real need for more basic research and development into the mechanisms of formation of acid mine drainage in order to find new and different methods of preventing its formation.

In addition to basic research, the Department expects to move quickly to find new techniques and mechanisms at various stages of acid drainage formation. The priorities include: development of new mining techniques to reduce or prevent mine drainage and new or im-

proved mine drainage treatment processes, the most promising of which is the development of rapid oxidation of ferrous iron from the mineral wastes; isolation of byproducts having economic value, with a special emphasis on iron oxide; and new methods for settling and thickening sludges resulting from the neutralization of acid mine waters and new methods for economically disposing of that sludge, including possible use on agricultural lands.

Though much research has been carried out, Federal efforts have been sporadic and poorly coordinated, and current programs of practical scale reclamation are not nearly ambitious enough to meet the problem. Testimony before the committee strongly suggests that the cooperative State-Federal effort envisioned in the demonstration provisions of this bill would be an important step toward the total solution.

The bill would also add a new section to the act authorizing the Secretary of the Interior to make grants to any State, municipality, or intermunicipal or interstate agency for the purpose of assisting in the development of feasible and practical areawide methods of controlling acid pollution resulting from mining activities. Another key provision directs the use of "various abatement techniques" for acid mine water elimination or control rather than limiting the approach to a particular process. This is important because the techniques used and the relative importance of each will vary from area to area.

In the Appalachian areas where the acid mine drainage problem is most severe, quality agricultural land is at a premium. Recreational opportunities have also been limited by the relatively small number of natural lakes. Land reclamation demonstration projects could provide both new and improved agricultural land and new recreation sites near heavily populated metropolitan areas.

This new attack on acid mine drainage will benefit peoples in all parts of the Nation, from those in the depressed mining regions like West Virginia and Ohio to those who depend on the flow of clean, pure waters along the length and breadth of the country. This section of S. 7 not only assures cleaner waters, but less loss of minerals and industrial products, less sedimentation and subsequent silting of our reservoirs, better control of the topographic blight in mining regions, and more areas for farming, building, recreation, and other uses for our expanding population.

A second major area of water pollution which S. 7 will bring under control is sediment from dredging operations in the Nation's lakes and rivers. At the outset, the committee makes it clear that under section 16, all dredging—Federal, State, or private—shall comply with applicable water quality standards.

Approximately 400,000,000 cubic yards of material are dredged annually from the Federal project waterways by the Corps of Engineers. If the amounts dredged by private contractors from slips, berths, private channels and for reclamation work are added to the Federal work, it is estimated that the total may be about three-fourths billion cubic yards.

In enacting section 10(c)(3) of the Water Quality Act of 1965, Congress directed that water quality standards be prepared, considering, in the words of the act, "their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses." The Committee on Public Works has taken the further step of adding language in section 10 of the basic act to specifically include navigation.

Although turbidity, or muddiness, is included as a measure of water quality in existing standards, the committee was informed that, with one exception, such standards were not drawn to accommodate or otherwise consider temporary turbidity relating to dredging. We noted the specific provision dealing with dredging turbidity in the approved water quality standards of Michigan as one approach to the problem. We expect the States to review their standards to deal with this problem of temporary turbidity in order to conform with the intent of section 10(c)(3) of the basic act as amended by this bill.

In order to accomplish the objective of providing for essential dredging without adversely affecting water quality, the committee expects the Secretary to provide the States with technical assistance required to evaluate both the real and potential pollution associated with dredging and disposal of dredge spoil. The pilot study of dredging and water quality problems in the Great Lakes being conducted by the Corps of Engineers should be of material assistance in this effort.

It should be noted that nothing in this bill should be construed as requiring the disposal of all dredge spoil on land. Where spoil is determined to be nonpolluting and causes no long-term environmental damage, we feel it may be properly discharged into lakes or rivers where permitted under appropriate State or Federal license.

In the interim period during which the States will be reviewing their water quality standards, no arbitrary or unreasonable restrictions shall be imposed on dredging essential for the maintenance of interstate commerce. This applies to dredging and disposal activities of private dredgers as well as the Corps of Engineers.

I feel very strongly that this vital operation must continue unimpaired for the period in which the States and the Federal Government are developing standards for temporary turbidity. There is no question that dredging activities for the maintenance of navigation in our waterways are important to the growth and vitality of the Nation. The States must develop meaningful long-term solutions to dredging, and especially to the ultimate disposal of dredging materials, if they are to continue to reap the benefits of these operations.

What this bill provides, therefore, is an interim solution to the problem, allowing a period of adjustment while the States work out their own definitions of water quality and determine the trade-off between continued water quality and necessary dredging. For the long run, however, new answers must be found for the ultimate protection of the overall quality of the Nation's waters.

On another front, S. 7 will provide broad protection against such oil pollution disasters as the one which befell Santa Barbara earlier this year. It would also provide protection against such tanker spills as the 1967 *Torrey Canyon* incident or the spill which took place in the San Juan Harbor when the *Ocean Eagle* broke up.

A vital key to the oil pollution problem is that of adequate research associated with the spilling of oil and its cleanup. A great deal of testimony before the Subcommittee on Air and Water Pollution, especially in light of the difficulties associated with cleanup in Santa Barbara, dealt with the inadequacy of technology to effectively contain and remove oil spills. Several witnesses noted that the use of straw to absorb oil on the water and on the beaches is a technique which has been available for centuries. More modern techniques such as various types of booms are often inadequate due to the nature of the tides and winds. A variety of dispersant chemicals have been applied but, because so little information existed on potential adverse ecological effects, the Department of the Interior is properly reluctant to allow uncontrolled or excessive use.

Dispersal of oil as a method of cleanup must be evaluated on the basis of possible long-term effects. Once oil is dispersed, there is potential for incorporation of hydrocarbons in aquatic organisms harvested for human consumption. The Committee on Public Works expects the Federal agencies to carry out research activities on the potential effects of accumulation of hydrocarbons in the food chain in order to determine the desirability of cleanup methods which do not involve actual physical removal of the oil.

The highest priority, therefore, is the development of effective techniques to deal with oil spills and making those techniques readily available at appropriate locations throughout the country.

The primary responsibility for research is placed in the Department of the Interior, but the committee intends that the Secretary should transfer some research functions and funds to the Coast Guard for those activities over which that agency has significant responsibility. Other agencies should be encouraged to conduct and support research along similar or different lines.

The Department of the Interior must gather and develop information on the effects of oil spills and chemicals and other methods used to disperse oil. The Department should also be investigating improved methods to control oil discharges in connection with ongoing efforts to achieve and maintain compliance with water quality standards.

This oil pollution research section is an integral part of the entire Federal effort to bring under control those types of pollution which have eluded us under the current laws. This is one of the most important parts of the overall ap-

proach of S. 7 to provide the basic framework for continual upgrading of water quality standards to insure that future generations of Americans will have access to pure, clean water.

Throughout our entire deliberations on S. 7, the Committee on Public Works followed a single strong thread, which is woven through the entire fabric of recent legislation by the committee. This thread is the committee concern for maintaining and enhancing the quality of our environment.

The heart of our concern is the growing awareness that we can no longer fail to take into consideration the effects of our activities on the total environment. As the President's Science Advisory Committee report of 1965, "Restoring the Quality of our Environment," so aptly pointed out:

> The public should come to recognize individual rights to quality of living, as expressed by the absence of pollution, as it has come to recognize rights to education, to economic advance, and to public recreation . . . There should be no "right" to pollute.

It is this awareness that brought about title II of the Water Quality Act of 1969. Title II weaves together the many strands of environmental quality which make up the pattern for a national policy for environmental quality, to insure that Americans now and in the future have that right to clean water, clean air, clean land, and freedom from physical and psychological insults of all kinds. This concept, I would point out, was embodied originally in S. 2391 which was cosponsored by myself and 41 of our colleagues in the Senate early this year.

Title II of S. 7 provides for more effective coordination of Federal air quality, water quality, and solid waste disposal programs, for the consideration of environmental quality in all public works programs and projects, and for the coordination of all Federal research programs which improve knowledge of environmental modifications resulting from increased population and urban concentration.

What we have come to realize, of course, is that environmental quality goes beyond water and air pollution and solid waste management. Assurance of environmental quality means that every man, woman, and child has the opportunity to live in a world which will in no way insult his body, mind, or spirit.

It is a sad fact that nearly all of the important and critical environmental problems—air and water pollution, the growing pervasiveness of pesticides, mounting solid wastes, the effects of smoking—have emerged as serious health problems only after a series of crises have crystallized public attention. Each of these problems has been an undesired and unforeseen byproduct of goods or services which society has wanted. But it has been our habit to take action only after a crisis develops, rather than to prevent its occurrence. We fail to heed the old saying that an ounce of prevention is worth a pound of cure.

In the past we have relied on what has been termed the "natural assimilative capacity" of nature to reprocess or destroy most of the waste of our civilization, with little concern for its long-term capability to perform this function. Only recently have we become acutely aware of the fact that we are exceeding nature's ability and capacity to reprocess the kinds and qualities of wastes which are being produced by modern technology.

The majority of the Nation's streams and rivers are no longer able to support the life which has for eons processed the wastes of man and the animals and plants upstream. Experiences in the late 1950's and early 1960's with nondegradable detergents dramatically underscored the lack of planning and understanding of our waste systems and the effects of our newly developed materials on vital water resources.

The urgency of finding new solutions to the problems of water pollution is apparent when we reflect that by 1980 this Nation will be producing enough sewage and other waterborne wastes to consume all of the oxygen of all the flow in dry weather in the 22 river systems of the United States. At the same time the need for fresh, clean water will increase from our present consumption rate of 370 billion gallons per day to 600 billion gallons a day. The supply of fresh water is limited. The total daily flow in the United States is about 1,100 billion gallons. By the year 2000, because of population growth and industrial expansion, our withdrawal rate will be almost four-fifths of the total available supply, and we will return approximately two-thirds of the total available supply with some degree of waste.

Air pollution loomed as a major problem in 1963, when 809 people died in one air pollution catastrophe in New York City, and the Nation suddenly awoke to the perils of tainted air.

The illusion that man has conquered nature through science and technology has been abruptly challenged by nature herself. Only slowly are we beginning to realize that it is not the conquest of nature that we seek to achieve, but a harmonious balance with nature through which we may enhance the quality of human life.

There will never be—on a nationwide basis—absolutely clean air or pristine pure water. There is a necessary and acceptable amount of each pollutant that society will understand and accept. Because of varying uses of land and air and water, the right amount of pollution—the desirable compromise—is not the same everywhere. Some communities may determine the economic and industrial development is more important than fishing, and that some pollution of their streams is acceptable. Others, like the untouched wilderness areas of the great Northwest, will find that low tolerances—but not impossibly low—will be the goal for recreational areas.

The broad problems of solid waste management are just now being recognized as a crisis of gigantic proportions. Americans throw away billions of tons of solid materials each year. From our homes and offices each person contributes almost 5½ pounds of garbage and miscellaneous trash every day to our overstrained and underdesigned refuse system. The cost is more than $4.5 billion a year. And the figure will reach 8 pounds per person a day by 1980. Added to that, industrial solid waste contribute another 3.2 pounds per person per day to the environment; agricultural wastes from animal feedlots, packinghouses, lumbering operations, and related industries produce another 30 pounds per person; and 7 million automobiles are junked each year.

The thrust of these remarks is to remind my colleagues that what is important is not the isolated pollution problem nor the quick solution to an immediate crisis. We are pleased that S. 7 solves some of the problems which we have recently experienced. It clarifies and tightens Federal regulations over water pollution generally and provides rigid penalties for operations like the disastrous oil well blow-out that spilled oil on the beaches around Santa Barbara.

What we must plan for, however, is environmental quality for the future. Today, the Committee on Public Works is working with an official advisory panel of experts—scientists, engineers, and specialists from a variety of disciplines—to help determine the problems of environmental degradation before they become problems. We are assessing the impact of land mismanagement from highway construction, from urban redevelopment, from mining, or from sanitary landfills. We are looking at the question of biological imbalances created by dredging, thermal pollution, pesticides, and air pollution. And we are probing problems connected with flooding and dam construction, the effects of building reservoirs, and the use of nuclear energy for power or construction.

I am aware that the solutions to many of these problems do not now exist and that the search for technology—economically feasible technology—may be a costly one. It is for this reason that I have, as chairman of the Committee on Public Works, emphasized so heavily the importance of Federal coordination and support for research and development in all of these areas.

But the problem is not one of research in itself. Nor can it rest solely on the Federal Government. Industry, the States and local governments must take a big share in the solution, as their share in the product of a clean and wholesome environment will be large.

Today, society places higher priorities on the values of our physical environment, and these priorities must be incorporated in the technology that serves us. Americans are ready, I believe, to improve the environment, and in so doing we will build a better society for ourselves and for future generations.

S. 7—and especially title II—will provide the basis for the long-term enhancement of the quality of the environment for which we are all striving. I urge the speedy adoption of this legislation.

Mr. President, since report No. 91-351

of the Committee on Public Works was filed August 7, 1969, by the distinguished chairman of the Subcommittee on Air and Water Pollution, Senator MUSKIE, of Maine, to accompany S. 7, with amendments, several letters have been addressed to me as chairman of the committee. They offer interpretations of certain sections of the pending measure which are said to impose liabilities on shipowners which are alleged to be commercially uninsurable.

Among the communications to which I make reference is one dated August 20, 1969, from London, England, signed by 14 persons or firms noting in the first paragraph that they are "fourteen of the leading insurers of shipowners' liabilities and represent approximately 705 of the world shipping tonnage."

And, Mr. President, their letter further notes in the opening paragraph:

Even with this wide spread of tonnage it would not be possible for us to insure the liabilities we do without adequate reinsurance and to obtain this it has been necessary to have recourse to the insurance markets of the world. Therefore this letter is also written on behalf of the Reinsurers and, therefore, represents the views of the world market for the insurance of shipowners' liabilities.

Continuing, the letter's second paragraph makes this comment:

We have carefully examined S. 7, in the form reported out by the Senate Committee on Public Works on August 7th and the Committee Report accompanying the Bill, in relation to the shipowners' interests which we represent, and in the light of the insurance markets' capacity to insure the liabilities, which the Bill seeks to impose. While we have nothing but praise for the ideas behind the Bill and no criticism of most of its provisions, we most respectfully wish to bring the following facts to your notice. (1) The provisions of Section 12(f)(2)(C) relating to the rights of direct action against an insurer, *as written*, makes the liability imposed by Section 12 of the Bill *completely uninsurable*. (2) The provisions of Section 12(f)(1) imposes an *unlimited liability* for the discharge of oil resulting from negligent acts—*even those of members of the crew. Such unlimited liability is, as such, uninsurable.*

I will not read the complete letter at this time, but I will make a copy available to the manager of the bill so that he may give cognizance to it and make comments on it.

Also, Mr. President, I ask unanimous consent to have the letter from London on behalf of the 14 insurance firms printed in the RECORD at this point, together with a response I made to it September 18, 1969.

There being no objection, the letters were ordered to be printed in the RECORD, as follows:

THOS. R. MILLER & SON,
(INSURANCE) LTD.,
London, August 20, 1969.

Re S. 7.

Hon. JENNINGS RANDOLPH,
Chairman, Committee on Public Works, Senate Office Building, Washington, D.C.

DEAR SENATOR RANDOLPH: We the undersigned are fourteen of the leading insurers of shipowners' liabilities and represent approximately 70% of the world shipping tonnage. Even with this wide spread of tonnage it would not be possible for us to insure the liabilities we do without adequate reinsurance and to obtain this it has been necessary to have recourse to the insurance markets of the world. Therefore this letter is also written on behalf of the Reinsurers and, therefore, represents the views of the world market for the insurance of shipowners' liabilities.

We have carefully examined S. 7, in the form reported out by the Senate Committee on Public Works on August 7th and the Committee Report accompanying the Bill, in relation to the shipowners' interests which we represent, and in the light of the insurance markets' capacity to insure the liabilities, which the Bill seeks to impose. While we have nothing but praise for the ideas behind the Bill and no criticism of most of its provisions, we most respectfully wish to bring the following facts to your notice.

(1) The provisions of Section 12(f)(2)(C) relating to rights of direct action against an insurer, *as written*, make the liabilities imposed by Section 12 of the Bill *completely uninsurable*.

(2) The provisions of Section 12(f)(1) impose an *unlimited liability* for the discharge of oil resulting from negligent acts—*even those of members of the crew. Such unlimited liability is, as such, uninsurable.*

For the sake of simplicity, we will first set out shortly what can be insured, since we cannot believe that it is the purpose of the Senate to impose on shipowners liabilities which are totally uninsurable; or that to do so is in the best interests of the people of the United States.

(1) As insurers, we have no objection to a requirement of evidence of financial responsibility, but if such provisions include the right of direct action against the insurer certain safeguards must be included in order to make such liabilities insurable.

(2) Limitation of Liability should be permitted in cases of negligence or wilful acts of a member of the crew as distinguished from those of the Owner personally or, in the case of a corporate owner, those of someone in a managerial position. We know that the capacity of the market to insure this kind of liability at the present time is $100- per gross registered ton or $10,000,000-, whichever is the less. Insurance above the maximum of $10,000,000- is, we are satisfied, unobtainable.

We will now proceed to develop in detail the objections which we have to the two mentioned Sections of the Bill. Neither the Protection and Indemnity Associations, nor the world market Underwriters (who together make up the insurance market for shipowners' liabilities) will accept insurance of shipowners' liabilities with provisions for direct action against them unless certain safeguards are incorporated. At the very least, it would be necessary to modify Section 12(f)(2)(C):—

(a) by the inclusion of a provision placing the insurer in exactly the same position vis a vis the Government, as plaintiff, as the assured would have been in, had the action been brought against the assured; i.e. any defences which would have been available to the assured under the law would be equally available to the insurer; and

(b) by the inclusion of a provision expressly preserving to the insurer any defences which would have been available to the insurer in an action by the assured against the insurer under the policy. We attach to this letter suggested language modifying Section 12(f)(2)(C) on the lines of the language in the Draft Convention on Oil Pollution Liability, adopted by the Comite Maritime International at its Tokyo meeting last April. Without some such modification, we must repeat that the provisions of Section 12(f)(2)(C) make the Bill, from the point of view of the shipowners' liabilities which it imposes, *totally uninsurable*.

We now turn to the liabilities imposed by Section 12(f)(1). This section makes an owner liable to the United States Government for the costs of removal of discharged oil, in an amount not exceeding $125 per gross ton or $14,000,000, whichever is the lesser. The Section then continues:

"except that where such discharge was the result of negligence or a wilful act, such owner or operator shall be liable for the full amount of such costs".

These words appear to be in direct conflict with the figures of limitation given in the immediately preceding phrase, since they make a shipowner liable in an unlimited amount in every conceivable circumstance except those of act of God, act of war, act of a third party, and negligence of the U.S. Government where, under the wording of the Section, he can escape liability completely. In our unanimous opinion, and in that of our legal advisers, there is, in practice, no other case to which the purported limitation figures could apply and they are therefore meaningless.

We respectfully submit on this point, that what was quite properly in the minds of the legislators, was that a shipowner should not have the right to limit his liability in the event of *his personal negligence or wilful act* as distinguished from the negligence or willful act of a crew member. To make a shipowner liable for an unlimited amount, where he is guilty of personal negligence or willful misconduct, is in accordance with established principles of international maritime law, including the United States Limitation of Liability Act, Title 46, United States Code, Sections 183–189; however, to make a shipowner liable in an unlimited amount where the negligence is purely that of a member of the crew or other such minor employee, is to impose upon him a burden which is not only unfair but also contrary to universally accepted principles of maritime law on the basis of which marine insurance has been written for centuries. The universal distinction made in the Statutes and International Conventions relating to shipowners Limitation of Liability, is not between negligent and nonnegligent conduct, but between negligence of employees and negligence of the shipowner himself (or in the case of a corporate shipowner, negligence of someone acting in a managerial capacity, e.g., the Operations Manager of the Company).

From the evidence given to both Senate and House Committees, it is clear that such an unlimited liability is uninsurable; such a provision would have no effect whatever on the prevention of oil spills, since, in the case of American vessels at least, the owner has absolutely no choice in the selection of crew members below the rank of Chief Officer and First Assistant Engineer. Moreover, such a provision must have the effect, *as must any provision which imposes on a shipowner liabilities beyond the capacity of the market to insure*, of seriously dislocating trade to the country imposing such liabilities and of a most undesirable proliferation of single ship Companies.

As spokesmen for, and insurers of, 70% of the world's ocean tonnage, we must say to you that unless S. 7 is modified so that shipowners are not to be required to be self-insurers beyond the amounts for which they can get insurance, the Bill will make trading to the United States or between United States ports virtually impossible for many shipowners. Limitation of a shipowner's liability has been universally accepted not out of charity to shipowners but so that the people of all nations can enjoy the benefits of seaborne traffic. When limits of liability are increased to a point at which this is not possible to insure, the nation which imposes such limits is inevitably deprived of the benefits which it could reap from sea-

borne traffic, particularly coastal traffic, such as ability to export its goods or to receive its imports at a reasonable cost or indeed at all. If S. 7 were to become law in its present form, it would surely be a reckless shipowner who allowed his ship to enter United States waters with the liabilities imposed by the Bill uncovered by insurance and a reckless shipowner would be unlikely to be able to provide evidence of financial responsibility. As indicated to you, the practical limits of liability within the capacity of the world market to insure are whichever is the lesser of $100-per gross registered ton or $10,000,000.

You will realize from this letter that we are commenting on only two sections of the Bill. We have already respectfully submitted a rewording of Section 12(f)(2)(C) and now attach the minor amendments which in our opinion, are required in Section 12 (f)(1). In our view it would be better in that Section to omit altogether the words which we have put in parentheses in our suggested redraft. These comments are made in a sincere effort on our part to make the Bill succeed and we trust that the Senate will decide to accept the short but vital amendments we have suggested.

Finally, you will know that an IMCO Convention on the whole subject of oil pollution is imminent. The Senate may well wish to consider not deferring the legislation, but including a section whereby the operation of the provisions concerning shipowners' liabilities are held in abeyance for, say, six months after enactment. This would enable Congress to incorporate in or alter its legislation in any way it felt appropriate in the light of the International Convention. In particular, it is obviously desirable to all concerned that regulations concerning evidence of financial responsibility be common among the 100 or so coastal States who will require such evidence; we submit that any regulations on this subject included in the United States legislation should be deferred until it is known what is internationally agreed.

Yours sincerely,

The Britannia Steamship Insurance Association Limited, per: Tindall, Riley & Company, Managers; The Steamship Mutual Underwriting Association Limited, per: Alfred Stockton & Company Limited, Managers; The Sunderland Steamship Protecting and Indemnity Association, per: John Rutherford & Son, Secretaries; The West of England Steamship Owners Protecting and Indemnity Association Limited, General Manager; The United Kingdom Steamship Owners Mutual Assurance Association Limited, per: Thos. R. Miller & Son, Managers; The United Kingdom Steamship Owners Mutual Assurance Association Limited (Bermuda), per: Thos. R. Miller & Son (Bermuda), Managers.

The Liverpool and London Steamship Protection and Indemnity Insurance Association Limited, for Management; The London Steamship Owners Mutual Insurance Association Limited, per: A. Bilbrough & Company Limited, Managers; The Newcastle Protecting and Indemnity Association, Secretary; The North of England Protecting and Indemnity Association Limited, Deputy General Manager; The Standard Steamship Owners Protecting and Indemnity Association Limited, per: Charles Taylor & Company, Managers.

Assuranceforeningen Skuld, Oslo, Norway; Assuranceforeningen Gard, Arendal, Norway; Sveriges Angfartygs Assurans Forening, Gothenburg, Sweden; Reinsuring Underwriters: Lloyd's Leading Underwriters: Syndicate 615. Guy Janson Esq & Ors; Syndicate 418. R. J. Merrett, Esq & Ors; Syndicate 277. C. B. Gilroy, Esq & Ors.

Lloyd's Syndicates following the above: Insurance Companies Members of the Institute of London Underwriters; Insurance Companies Members of the Liverpool Underwriters Association; Insurance Companies in the United Kingdom, United States of America, Germany, Switzerland, Sweden, Finland, Japan, Australia etc.; Per: Thos. R. Miller & Son (Insurance) Limited, Director.

SUGGESTED REWORDING OF SECTION 12(f)(1)

(New Material Italicized)

"(f)(1) Except where an owner or operator can prove that a discharge was caused solely by (A) an act of God, (B) an act of war, (C) negligence on the part of the United States Government, or (D) an act of a third party, such owner or operator of any vessel from which oil is discharged, or which causes the discharge of oil, into or upon the navigable waters of the United States or adjoining shorelines or the waters of the contiguous zone shall, notwithstanding any other provision of law, be liable to the United States Government for the actual costs incurred under subsection (e) for the removal of such oil by the United States Government in an amount not to exceed *$100 per gross ton of such vessel or $100,000,000*, whichever is lesser (except that where such discharge was the result of *the actual fault or privity of the owner or operator*, such owner or operator shall be liable to the United States Government for the full amount of such costs).

SUGGESTED REWORDING OF SECTION 12(f)(2)(C)

(New Material Italicized)

When the owner or operator of such vessel has applied for a suspension of payments or has been adjudicated bankrupt or, if a company, is being or has been wound up, any claim for costs incurred by such vessel may be brought against the insurer or any other person providing evidence of financial responsibility as required under this subsection, *provided, however, that where such direct action is exercised the insurer or any other person providing evidence of financial responsibility shall be entitled to invoke all rights and defenses which would have been available to the owner or operator if an action had been brought against him by the claimant, and which would have been available to him if an action had been brought against him by the owner or operator.* (Adapted from Article 8(7) of the CMI Draft Convention approved at Tokyo, April 4, 1969).

THOS. R. MILLER & SON
(INSURANCE) LTD.,
London, August 20, 1969.

Re S. 7.

Hon. JENNINGS RANDOLPH,
Chairman, Committee on Public Works, Senate Office Building, Washington, D.C.

DEAR SENATOR RANDOLPH: Just a short personal note to advise you that I have sent copies of this letter to all Members of the Senate Public Works Committee.

I do hope this is correctly in accordance with Senate protocol, but if this is not so please forgive me!

Yours sincerely,

PETER MILLER.

U.S. SENATE,
COMMITTEE ON PUBLIC WORKS,
Washington, D.C., September 18, 1969.

MR. PETER MILLER,
THOS. R. MILLER & SON (INSURANCE) LTD.
London, England.

DEAR MR. MILLER: Thanks for your letter of August 20, 1969, advising me of your position and that of the other thirteen insurers of shipowners' liabilities regarding the provisions of S. 7, The Water Quality Improvement Act of 1969. Your comments are being discussed with the members of the Committee on Public Works.

Your expressed concern relating to rights of direct action against an insurer under the provisions of section 12(f)(2)(C) is noted. It is the Committee's intent that the insurer have available to him any defenses available to the assured, and I would therefore have no objection to further clarification on this matter.

Your question relating to the handling of unlimited liability in the case of the negligence of shipboard employees is a subject to be resolved either during Senate consideration of S. 7 or in the House-Senate Conference on the many points of difference between H.R. 4148, as passed by the House, and S. 7. The issues which you raise are worthy of fullest consideration, and assuredly will have attention.

With appreciation for your further information and counsel, I am

Truly,

JENNINGS RANDOLPH,
Chairman.

Mr. RANDOLPH. Mr. President, in addition to the communication received from London on behalf of the 14 insurance firms whose representatives signed it, letters were received by me as chairman of the Committee on Public Works from the following, to whom I responded substantially as I did to Peter N. Miller and the 13 associated with him in the August 20, 1969, letter:

American Institute of Marine Underwriters, 99 John Street, New York, N.Y., by G. Doane McCarthy, Jr., president, August 18, 1969.

American Petroleum Institute, 1101 Seventeenth Street NW., Washington, D.C., by E. S. Checket, September 18, 1969.

Maritime Law Association of the United States, Special Committee on Oil Pollution, John F. Gerity, chairman, 120 Broadway, New York, N.Y., August 28, 1969.

Labor-Management Maritime Committee, Earl W. Clark and Hoyt S. Haddock, co-directors, 100 Indiana Avenue NW., Washington, D.C., September 3, 1969.

Chamber of Shipping of the United Kingdom, 30–32 St. Mary Axe, London E.C.3, England, by Francis E. Hill, president, August 27, 1969.

Mr. President, I will not read the letters I have cited, but I will make a copy of each available to the manager of the bill so that he may give cognizance to it and make comments on it.

And, Mr. President, I ask unanimous consent to have the five letters printed in the RECORD at this point.

There being no objection, the letters were ordered to be printed in the RECORD, as follows:

AMERICAN INSTITUTE OF MARINE UNDERWRITERS,
New York, N.Y., August 18, 1969.

Hon. JENNINGS RANDOLPH,
Chairman, Committee on Public Works, U.S. Senate, New Senate Office Building, Washington, D.C.

DEAR MR. RANDOLPH: The American Institute of Marine Underwriters representing more than 125 marine underwriting organizations in the United States wishes to record its strong objection to the proposed legislation as set forth in the text of S. 7 as reported by your Committee on August 7 (Report No. 91–351).

It is the considered judgment of this institute that this bill as presently reported will create insurance exposures to American-flag

ship operators which are uninsurable without incorporating underwriting limits set by the insurer as described below.

We base this judgment on the provisions provided in the text of S. 7 *for direct rights of action against the insurer without any adequate safeguards as being the basic reason* which will prevent any insurance capacity in any measurable amount being made available for the insurance exposures created by the proposed legislation.

Clause 12 (F) (2) (C) creates in this proposed legislation a potentially uninsurable situation since in our judgment those American underwriters engaged in undertakings of a shipowner's liability insurances and P&I insurances may, under circumstances to be reviewed in each policy, refuse to accept such insurances of these liabilities when the controlling legislation permits direct action to be available against them.

We would reiterate the advices informally given to the Marine Committee of the New York Brokers Association who testified at earlier hearings that the probably available limits of insurance for this type of coverage are as follows:

(1) If the basis of liability is negligence (including the doctrine of reversal of burden of proof) the probable insurable limit available the world market would be in the area of $100. per gross registered ton or $10,000,000 each accident each vessel, whichever amount proves to be the lesser.

(2) If the doctrine of absolute liability were enforced the probable maximum world market would be in the area of $67. per gross registered ton or $5,000,000 each accident each vessel, again whichever amount is the lesser.

We reiterate that in our judgment there will be no insurance market available if the doctrine of direct rights of action against the insurer, with no adequate safeguards provided, is to be enforced. *Here we strongly feel that any insurer must be permitted to place himself in the same position against the claimant as is the assured.* Further we believe that any defense under the law which the insurer would have against the assured must be preserved.

It must be stipulated—and understood—that while there exists an American insurance capacity to meet American-flag operators' third party marine liabilities, this capacity in America exists to the best of our knowledge only because of the existence of a far greater capacity for such risks in the English market for reinsurance. Such liabilities as the American underwriters enjoy to utilize this English reinsurance market tends to establish the capacity (or limits) beyond which the American underwriter cannot venture.

Sincerely yours,

G. DOANE MCCARTHY, Jr.,
President.

AMERICAN PETROLEUM INSTITUTE,
Washington, D.C., September 18, 1969.

Hon. JENNINGS RANDOLPH,
Chairman, Committee on Public Works, U.S. Senate, New Senate Office Building, Washington, D.C.

DEAR SENATOR RANDOLPH: I believe the testimony on behalf of the American Petroleum Institute before both House and Senate Committees over the past several years is ample evidence of the petroleum industry's deep concern with the problem of oil pollution from vessels and of our desire to see the enactment of meaningful and workable legislation dealing with this problem. If such legislation is to be workable, it must not impose liabilities on shipowners which are commercially uninsurable. Therefore, after having reviewed S. 7 as reported out by the Committee on Public Works, I respectfully call your attention to several provisions of Section 12 of the Bill which in my opinion do make such liabilities uninsurable.

We concur in your earlier comments that some of the previous testimony on what liabilities of a shipowner were insurable and the amount of insurance available to him under varying conditions of liability was confusing to those unfamiliar with marine insurance. However, I do believe, and trust you will agree, that the latest communications from the insurance industry, both in this country and abroad, clarify any past confusion and make the following points crystal clear.

First, Section 12(f)(2)(C) providing for direct action against the insurer means, as a practical matter, that the liabilities imposed by Section 12(f)(1) on the owner or operator of the vessel cannot be underwritten. This results from the fact that marine underwriters simply will not accept policies with this kind of unqualified right of recourse against them, as they have formally advised your Committee. The Bill, therefore, would force shipowners to be totally self-insured for those liabilities when operating within the navigable waters of the United States. This is a risk which, I submit, no prudent independent shipowner would assume.

I feel sure that it was not the intent of the Committee to create such a situation and I accordingly urge your serious consideration of the modifications to Section 12(f)(2)(C), as recently recommended to you by various leading insurance underwriters and reinsurers, to make the shipowner's liability insurable.

Second, the provisions of Section 12(f)(1) impose an *unlimited* liability to the U.S. Government for the cost of cleanup where the discharge of oil was the result of a negligent act—even that of the least skilled crew member.

Such unlimited liability is uninsurable, the underwriters having informed you that they are unwilling to issue policies covering negligent spills in excess of $100 per gross registered ton or $10 million dollars, whichever is the lesser. The shipowner would thus be faced with assuming all of the risk above those amounts. Again, I submit that the small independent ship operator might well refuse to assume such a risk which could force him into bankruptcy.

At the same time we support the proposition that the shipowner or operator should not have a right of limitation for his own personal negligence or willful act and, therefore, we would suggest that the language in question be amended to read as follows:

"Except that where such discharge was the result of the personal fault or privity of such owner or operator, the latter shall be liable to the United States Government for the full amount of such costs."

Third, even with this change in language the dollar limitations in Section 12(f)(1) of $125 per gross ton or $14 million dollars, whichever is lesser, should be reduced to limits that are insurable, i.e. $100 per gross ton or $10 million.

In my testimony before the Subcommittee on Air and Water Pollution, I stated that shipowners through their mutual assurance clubs already are bearing the first $1.4 million of loss per vessel per incident. We believe it is unfair and unrealistic to require a shipowner, particularly a small independent owner, to assume an additional financial burden in excess of what he can protect himself against through insurance.

In conclusion, I should like to reiterate our desire to see legislation enacted which will effectively protect the U.S. harbors, rivers and coastlines against oil pollution but which will not at the same time pose a serious threat to the United States Merchant Marine and the inland waterways industry and present a deterrent to our waterborne commerce, both domestic and international. I must state my conviction that S–7 as presently drawn does pose such a threat and if enacted in its present form will not be in the best interests of the United States. However, if S–7 is modified in line with the foregoing, it will protect the public interest without imposing an unbearable hardship on the shipping industry or our waterborne commerce.

Respectfully yours,

E. S. CHECKET.

MARITIME LAW ASSOCIATION OF THE UNITED STATES, SPECIAL COMMITTEE ON OIL POLLUTION,
New York, August 28, 1969.

Hon. JENNINGS RANDOLPH,
Chairman, Committee on Public Works, U.S. Senate, New Senate Office Building, Washington, D.C.

DEAR SIR: The Maritime Law Association of the United States, through its President, and the statements of the undersigned Special Committee on Oil Pollution, have had the privilege of appearing before the Public Works Committees of the Congress in connection with the above entitled legislation. This committee has also submitted numerous documents in a sincere effort to assist the Congress to enact laws for the betterment and preservation of our environment from pollution by oil of the Inland waters of the United States and of the Seas. Such assistance as we could render for consideration by the Committees of the Congress, we hoped would permit the enactment of legislation upon which the liabilities to be imposed would be insurable and would not be a serious deterrent to the continuity of the domestic and foreign trade and commerce of the United States, including the trade of the Merchant Marine of this and other countries to and from our shores. We submit, with respect, that H.R. 4148 embraces all of the principles required by responsible legislation which apparently shipowners can insure as a risk and, our waters will be adequately protected.

With respect, we are compelled to say that the legislation proposed by material sections of S. 7 do not meet these elementary standards. *On advice we have received, the liability and financial responsibility sections plus unrestricted rights of direct action against underwriters are totally uninsurable as written.* It is equally apparent that S. 7, in these respects, can only work to the serious detriment of the American Merchant Marine as a whole and the ocean commerce of the United States—dry cargo vessels and tankers alike. *Many of the proposals are also repugnant to settled principles of United States' maritime law and the laws of many maritime nations.* We sincerely regret this turn of events in the legislation to be proposed by S. 7.

May we, Sirs, take this opportunity to respectfully urge the Committees of the Congress to fully consider the constructive content of letters which we are advised have been written by what may be substantially described as the world's marine insurance markets and shipping industry associations, so that the uninterrupted continuity of our maritime trade can be preserved. We can foresee situations in which, if S. 7 in material respects is enacted into the law of the United States, many shipowners will be required to either (a) trade at their own risk without insurance, but with realistic risk of ultimate bankruptcy by putting all of their assets at the disposal of our Government to secure any damage by pollution of our waters or (b) obtain some nominal insurance, if available at all, at a cost which may well be commercially prohibitive to an economically depressed Merchant Marine plus needed material assets to meet the financial responsibility requirements or (c) trade elsewhere.

Why must such legislation as proposed in S. 7, as above, be unnecessarily punitive against the entire maritime commerce of the United States? We appeal for maritime legislation rooted in reason and written with legal force and clarity to fully achieve the

intended objective, protection of our waters, such as exemplified by H.R. 4148.

We are, dear Sir,

Respectfully yours,

JOHN F. GERITY,
BURTON H. WHITE,
GORDON W. PAULSEN,
JOHN F. GERITY, *Chairman.*

LABOR-MANAGEMENT
MARITIME COMMITTEE,
Washington, D.C., September 3, 1969.

Hon. JENNINGS RANDOLPH,
U.S. Senate,
Washington, D.C.

DEAR SENATOR RANDOLPH: We have been advised that S. 7, a bill amending the Federal Water Pollution Control Act, known as the Water Quality Improvement Act of 1969, will be on the floor of the Senate for legislative action. We are concerned with the risks imposed by S. 7 which would remove all limits for negligent oil spills and according to marine insurance sources are uninsurable anywhere in the world. This could have an extremely detrimental effect on the entire merchant marine.

We favor H.R. 4148 recently passed by the House of Representatives.

Sincerely yours,

EARL W. CLARK,
HOYT S. HADDOCK,
Co-Directors.

CHAMBER OF SHIPPING
OF THE UNITED KINGDOM,
London, 27th August, 1969.

Hon. JENNINGS RANDOLPH,
Chairman, Committee on Public Works,
Senate Office Building, Washington, D.C.

DEAR SENATOR RANDOLPH: As President of the Chamber of Shipping of the United Kingdom which represents over 19 million gross tons of shipping on the U.K. register, I am taking the liberty of addressing myself to you in view of your particular interest in the problems of oil pollution and your major role in the shaping of S–7.

As you can imagine, it is not only United States shipowners who have been following with interest the progress of S–7. The Bill affects all vessels calling at U.S. ports, whether tankers or dry cargo, and as at present drafted, would have some startling, and we believe, unintended results.

To us the most difficult clause is that which provides that a negligent shipowner shall not be able to limit his liability. As you have heard, the market cannot insure unlimited liability. This proposal would therefore make it impossible for shipowners to insure and yet the Bill goes on to provide that every single vessel over 300 g.r.t. shall produce evidence that it is satisfactorily covered!

British shipowners naturally like to obtain cover against their liabilities for oil pollution; the one certain way to stop them doing so is to make insurance impossible, which is what I am afraid the Bill in its present form does.

As the Senate is aware, it is difficult to produce legislation on liability for oil pollution which is not self-defeating—IMCO itself has narrowly avoided one or two traps of this sort—and we hope that on this point of insurability, you will, in the interests of the United States, heed the expert opinion that has been given by insurance representatives.

There are other features of the Bill which U.K. shipowners do not favour, but I would not wish to complicate this letter by listing them. I would, however, like to leave with you the thought that the interests of the United States, as well as its shipping lines, will best be served by a single worldwide agreement on liability. All the schemes that have been discussed will give the shipowner a powerful incentive to avoid pollution; the choice of one rather than another will therefore not affect by one ounce the amount of pollution on the beaches. That depends on the preventive measures we are all devising; accordingly, nothing would be lost and much might be gained if the special problem of liability was held over until the end of the year when there will be available a finished convention agreed by all coastal states as being a sound and effective solution.

Please let me know if there is any aspect of this subject on which we here can help you further.

I am writing in the same terms to Senator Edmund Muskie.

Yours sincerely,

FRANCIS HILL.

Mr. RANDOLPH. Mr. President, the communications and information which I have placed in the RECORD I am sure will not be of interest for discussion by my colleagues in the Senate this afternoon, but I am sure they will be helpful as Members of the Senate read the RECORD in reference to the legislation which is before us and the position of the insurers from the standpoint of companies that ship in the coastal waters of the United States.

I hope the importance of this legislation will cause the Senate to act, of course, with deliberation, but with a certain promptness.

I have spoken longer than I should have, but I felt that, as chairman of the Public Works Committee, in cooperation with the chairman of the Subcommittee on Air and Water Pollution, I should lay out, as it were, the broad, productive provisions which have been encompassed in Senate bill 7.

Mr. MUSKIE. Mr. President, may I respond to the distinguished Senator's remarks? When I yielded to him earlier, I was engaged in discussion and could not pay proper tribute to his efforts, interest, and cooperation in this field, not only in connection with Senate bill 7, but in air and water pollution legislation over the years. No chairman could have been more cooperative or more understanding, not only in making facilities and staff available, but in contributing to the substance of the legislation with which we deal. I express my appreciation to him.

Mr. RANDOLPH. I thank the Senator. And I wish to acknowledge again the outstanding leadership which the distinguished Senator from Maine has given to environmental improvement legislation in his role as chairman of the Subcommittee on Air and Water Pollution. This effort has been supported and strengthened by a bipartisan approach led by the able junior Senator from Delaware (Mr. BOGGS), ranking minority member of the subcommittee, and my good friend from Kentucky (Mr. COOPER), ranking member of the full committee.

I would add, Mr. President, that S. 7 was reported unanimously, a fact that attests to the effort and attention given to this legislation by every member of the committee; in addition to those I have mentioned I commend for their contributions to this legislation, Senator STEVE YOUNG, Senator B. EVERETT JORDAN, Senator BAYH, Senator MONTOYA, Senator SPONG, Senator EAGLETON, Senator GRAVEL, Senator BAKER, Senator DOLE, Senator GURNEY, and Senator PACKWOOD.

Mr. YOUNG of Ohio. Mr. President, the Water Quality Improvement Act of 1969—S. 7—provides America with a powerful lever against three major sources of pollution which have continued to ravage our water resources; oil pollution, vessel pollution, and thermal pollution.

Despite the enactment of the Water Quality Act in 1965, the quality of the Great Lakes and the territorial and contiguous waters of this Nation has been continuously damaged and seriously polluted and poisoned. Industry, shipping and oil interests have blatantly continued to dump and spill materials often intentionally, into these formerly clear, pure, and precious waters. For 200 years we Americans have had every reason to be proud of our beautiful Great Lakes and their pure uncontaminated waters. Also, we of the Midwestern States have been proud of the fact that the Ohio River and other rivers were free of pollution and contamination.

As our report on S. 7 points out, frequent oil spills from vessels and from on-and-off-shore facilities have ruined Atlantic and Pacific Ocean beaches and lowered the quality of our rivers and shore waters. They have jeopardized not only animal and vegetable life, but human life as well. Terrible tragedies in recent months and years, such as the Santa Barbara oil well leak which spilled tens of thousands of barrels of oil on beautiful beaches along the California coast, have underscored these problems. Spills from the *Torrey Canyon* off the coast of Great Britain and other similar incidents have alerted us to the dangers of having supertankers carrying oil along our shores.

We in Ohio and the Great Lakes region are all too aware of the problems of pollution. We are particularly concerned over the spillage of oil and shipping wastes. Only recently we witnessed several disasters and near-disasters in and around the Great Lakes which should have been avoided.

While many have already written the obituary for Lake Erie and are mourning the imminent deaths of the other Great Lakes, we in the Midwest are determined not to write off these vital bodies of water. These lakes are surrounded by the heartland of America with a dense population with growing needs for clean, fresh water.

However, in Lake Erie great green skiens of algae have broken loose from rocky moorings and washed ashore to rot on the once beautiful beaches. Near Chicago, the beaches of Lake Michigan are lined with dead fish caused by such pollution as the 440 million gallons of waste water dumped daily from United States Steel Corp.'s south works. Amazing as it may seem, the oil-thick Buffalo River, which flows into Lake Erie, has been declared a fire hazard by the Buffalo Fire Department.

This deplorable situation is exactly what the pending legislation is intended to correct. Under provisions of the Water Quality Improvement Act of 1969, this pollution will be halted and the quality of the lakes improved.

Let me point specifically to section

16(h) of the bill, which would authorize the Secretary of the Interior to enter into contracts or issue grants for research aimed at the roots of pollution. These grants and contracts would be "for the prevention, removal, and control of natural or manmade pollution in lakes, including the undesirable effects of nutrients and vegetation." This section would also provide funds for the construction of publicly owned research facilities for such purposes.

Beyond this, however, section 15 would authorize a special demonstration program to attack the unique and critical problems of the Great Lakes region. This program is in addition to the authority in the legislation to control lake pollution or lake eutrophication in general.

Under this program, the Secretary of the Interior, in cooperation with other Federal agencies, is authorized to enter into agreements with any State, regional or local agency. These agreements would provide support for demonstration projects to test new methods and techniques and to develop preliminary plans for the elimination or control of pollution in and around the Great Lakes.

This program goes farther than simply the Great Lakes themselves. It specifically includes "all or any part of the watersheds of the Great Lakes."

The Committee on Public Works recognized that pollution must be controlled at its source before it enters the bodies of water. Only then can we insure the quality of the waters in and around the United States.

The bill would authorize $20 million for the Great Lakes pollution control program. The States or local agencies would share the cost of these projects.

Most of the States adjoining the Great Lakes have already undertaken significant programs against pollution. This underscores their willingness to meet their obligations in this intergovernmental effort.

Special efforts as called for in S. 7 are needed to accomplish substantial remedial action in order to reverse the tide of pollution on the Great Lakes and to insure cleaner waters for future generations.

Thermal pollution has become a nationwide problem only in recent years as nuclear power plants have sprung up and more industries have been built on the edge of the waterways and lakes. They disgorge water at temperatures far exceeding normal ones. This is not only harmful to fish and aquatic animals, but long-term changes in the atmosphere can result from the circulation of air over these waters. The vegetation in and around these areas will change, often to the detriment of animal and human inhabitants.

S. 7 provides the Government with new authority for controlling thermal pollution in the Nation's lakes and streams.

Another key provision of the new water quality bill is section 11, which would control sewage discharges from vessels.

Waste from water craft is one of the most obvious sources of pollution both in the inland waterways and in our coastal waters and contiguous zones. It is most severe in bays, lakes, harbors, and marinas where vessels congregate and traffic is heaviest and water circulates the least. As our use of these waters increases, the problem will become more acute.

Section 11 will assist in preventing discharge of untreated sewage into navigable waters by pleasure or commercial vessels, and provide for continuing upgrading of technology to bring a complete halt to this practice.

To insure and enforce this stronger vessel anti-pollution legislation, the bill gives the Coast Guard fuller and more specific authority to develop and promulgate the regulations concerning the design, installation, and operation of marine sanitation devices and to certify these devices as complying with regulation standards. These regulations must also assure compliance with the standards of performance issued by the Secretary of the Interior.

Many States have already moved to control vessel discharge. However, conflicting regulations and standards have presented hardships to recreational boaters who move between States and present potentially serious restrictions on interstate movement of commercial vessels. For this reason, the bill would provide State authority to prohibit entirely the discharge of any sewage from vessels in line with its designated water quality standards.

This section of the bill, I feel, will go a long way in upgrading the quality of the waters of the Great Lakes Region as well as the inland waterways and coastal waters of the entire Nation.

It is essential, in addition, that America have a coordinated policy for the quality of the environment—a policy which will insure not only cleaner water, cleaner air, and freedom from solid wastes, but will provide future generations of Americans with the type of environment necessary for good health and well-being.

Title II, entitled the "Environmental Quality Improvement Act of 1969," simply and succinctly states that:

> There is a national policy for the environment which provides for the enhancement of environmental quality.

We have come to the point where we can no longer ignore the consequences of our actions in the name of economy. Two hundred years ago, when our country was young and growing and the population was fairly well dispersed, we could afford to turn our backs on the impact of industrial pollution in favor of building our industrial might.

Today, we are more than 200 million, and will be 320 million by the year 2000. Today, industries dot every shore; highways stretch endlessly across the continent; buildings rise where there was once only wilderness. Today, there is little of nature left, except in isolated patches of heretofore unwanted or undevelopable land.

With pollution at the crisis level—air and water pollution, noise pollution, thermal pollution—and space at a premium, it is high time that we squarely face the issue of environmental quality.

Title II of S. 7 intends that all Federal moneys spent on public works activities which affect the environment would be reviewed and found not to be detrimental to the environment. It would establish an Office of Environmental Quality within the Executive Office to assist and advise the President and to help coordinate Federal activities affecting the environment.

There can be no question that this important first step must be taken in the direction of Federal coordination of activities involving our natural environment. We must pledge ourselves to the upgrading of the quality of life—all life—on this planet, now and in the future.

Senator JENNINGS RANDOLPH, chairman of the Committee on Public Works, and the distinguished junior Senator from Maine (Mr. MUSKIE), chairman of the Subcommittee on Air and Water Pollution, deserve the gratitude of all Americans for their outstanding leadership and hard work in formulating the pending bill which is a powerful vehicle for the attack against environmental degradation. I urge its enactment.

AMENDMENTS NOS. 226 AND 227

Mr. AIKEN. Mr. President, I submit two amendments, which I ask to have printed and lie on the table. I hope the chairman of the Public Works Committee and the chairman of the subcommittee handling the bill will see fit to accept these amendments, but if they do not, I shall endeavor to offer and explain them later. At this time I simply submit them.

The PRESIDING OFFICER. The amendments will be received and printed, and will lie on the table.

Mr. MUSKIE. Mr. President, I yield to the distinguished Senator from Florida (Mr. GURNEY), or if the Senator wishes to have the floor in his own right, I yield the floor to him.

Mr. GURNEY. I wanted to make general remarks on the bill. Did the Senator wish to comment on the amendments just submitted?

Mr. MUSKIE. Not at this time.

Mr. GURNEY. Mr. President, I strongly support passage of S. 7. This legislation is a very thorough and comprehensive effort on the part of the Senate Public Works Committee to provide meaningful and effective methods for combating water pollution problems.

Several of my colleagues, especially those who have worked most carefully on the legislation, have already presented the statements on some sections of the bill, describing them in detail. I will make only a few remarks at this time.

Certainly, one of the most controversial areas is that of pollution caused by oil spills, and the process of creating some liability guidelines in this area. As the vessel traffic and volumes of oil increase, this naturally enhances the risk of major oil spills in our waters.

The Public Works Committee, after long discussion and thorough consideration, provided for centralized authority for cleanup and spelled out very specifically financial responsibility in the case of oil spills. Certainly, this part of the bill constitutes major new legislation. It will be landmark law making.

The problem of water pollution has grown to such magnitude that it is imperative for the Congress to enact effective legislation, and certainly the time for S. 7 has indeed arrived.

In spite of the amounts we are spending for pollution—and we have committed large amounts in recent years in the Congress—it appears that the Federal Government itself has been lax in enforcing compliance with water quality standards. The Government has been charged with a leadership role in combating pollution, and has required communities and private industry to make large investments in sewage treatment facilities. Ironically enough, many Federal agencies have made only token efforts in this area.

In my own State of Florida, there are 187 military installations alone. In addition, the Atomic Energy Commission and, of course, NASA have large facilities there. Bearing this in mind, it is not hard to arrive at the conclusion that Florida could certainly suffer from Federal pollution. Other States are in similar circumstances. Certainly, the Federal Government must be willing to share its responsibility for those activities.

I feel we must require that activities over which the Federal Government has direct control be conducted in a manner to assure compliance with applicable water quality standards.

Mr. President, one thing that I would particularly like to call to the attention of my colleagues is the matter of clean lakes, and the necessity of cleaning them up and correcting pollution in that area.

There are over 7,700 lakes in the State of Florida. My native State of Maine, the State from which Senator MUSKIE comes, has about 10,000 lakes.

In Florida many of those lakes have been slowly choked to death by aquatic weeds. Those of you from Louisiana, Alabama, Hawaii, and New York will be especially familiar with this problem. Other States are faced with this problem also.

Several of my colleagues in the House joined me in a bipartisan effort last year to control and eradicate these obnoxious weeds. The main thrust of the legislation was to get some coordination in the field of aquatic weed research so we could expand effective control programs.

During my research on the bill, I found that over 39 different agencies were involved in lake pollution efforts in the State of Florida. It occurred to me that interagency rivalry, lack of authority, and just plain lack of interest in some cases was evident. Needless to say, with a system of centralized control, coordination, and concentration of effort, we could do a better job. That is what my bill sought to do. I was not able to get it passed.

But one thing S. 7 does is provide for a means to concentrate presently scattered efforts into a coordinated attack on lake pollution. The bill creates a Federal Water Pollution Control Administration in the Department of the Interior. This new administration will be charged with centralizing and coordinating the now scattered efforts at weed control. Certainly, this is a major step forward, long overdue, and ought to make a major contribution to water pollution control, at least as far as lakes are concerned.

The problems caused by lake pollution are becoming of such a magnitude that the matter is creating an emergency situation in our waterways, lakes, and streams. In Florida again—and this is true of many other States—water intakes of all sorts of systems are becoming clogged because of the weed problem alone. Dangers of flooding are imminent because runoff water cannot escape. Boats cannot be used in my home city of Winter Park, Fla. We have a system of five lakes that are connected with canals. It is one of the greatest resources we have as far as recreation is concerned. Within the past 2 years, at one time or another, one or two, and sometimes more, of the lakes have been completely closed to boating and water skiing because of the aquatic weed problem.

This bill provides a major step forward to do something about the problem. I think the coordination of the effort and the concentration of money, rather than scattering it out among 39 different agencies, is one of the major factors in getting ahead with the problem.

There are many good features in the bill, as the Senator from Maine, the chairman, the Senator from West Virginia, and the ranking member of the committee have explained to the committee. I hope we will achieve general support in the Senate today or tomorrow, when we vote on this measure, for S. 7 is a major landmark bill in the area of helping solve our great water pollution problem.

Mr. MUSKIE. Mr. President, I wish to express my appreciation to the distinguished Senator from Florida for his very active interest and participation in the development of S. 7. His participation in both the hearings and the mark-up sessions was conscientious and constructive, and extremely useful to all of us.

Mr. GURNEY. I thank the Senator.

Mr. STEVENS. Mr. President, will the Senator yield?

Mr. MUSKIE. I yield to the Senator from Alaska.

Mr. STEVENS. It is my understanding that the committee has a committee substitute for S. 7, and it is my further understanding, from the Parliamentarian, that I should offer the amendment that the Senator from Massachusetts and I have left at the desk before the Senator makes a motion to adopt that substitute.

Will the Senator tell me when he anticipates making that motion?

Mr. MUSKIE. Not until every Senator who has an amendment has had an opportunity to offer it. I will go out of my way to make sure that no Senator is denied such opportunity.

Mr. STEVENS. I thank the Senator. I want him to know that I have listened to his address today, and I think he has done a yeoman's task in this field. I happen to come from a State that has no problems with water or air pollution except in one small area. We are, however, trying to do everything possible to help the rest of the Nation get back to the pristine quality of environment we have thus far been able to maintain.

Mr. MUSKIE. With reference to the Senator's amendment, perhaps I have slipped in not focusing more on that problem. I was not aware that I had, but in any case, I shall do everything I can to help the Senator solve his problem.

Mr. STEVENS. I thank the Senator for that comment.

I point out that the problem of pollution we are dealing with is a problem involving some 178 villages located on rivers. Because of pollution, as you go up the river, the death rate goes down. This is an area where one-fifth of the children die in their first year, and the reason that they die, we now know, is strictly bad water. It is pollution. There are no sanitation facilities, there is no running water, there are no sewers. Only 8 percent of the homes even have inside toilets. Less than 8 percent have running water.

What we are dealing with is the most basic problem of pollution, and that is clean water for the purpose of preserving human life. I think the major part of this bill deals with the esthetic portion of the pollution problem, the problem of how to restore clean rivers and lakes, which is what the Senator from Florida has been talking about.

But we are talking about fighting pollution in the sense of trying to preserve life and give these native children a better chance. It is my hope that the Senator from Maine would not look at this matter casually, when one-fifth of the children die in their first year and their parents have an estimated expectancy of only 34 years, because of the same problem of persistent pollution.

We have done everything we can, and this is a crash program that the Senator from Massachusetts and I tried to devise after our return from the Arctic last spring. I invite the attention of the Senate to this phase of the problem again, before the Senate votes tomorrow.

Mr. MUSKIE. I understand, and I thank the Senator from Alaska.

I yield now to the Senator from Kentucky; and I use this opportunity to thank him for the marvelous cooperation he has given us over the years.

Mr. COOPER. I thank the Senator.

Mr. President, this subject has been discussed very fully and comprehensively by the Senator from Maine, the Senator from Delaware (Mr. BOGGS), and others, I shall dwell on only a few aspects of the legislation.

I should like at this point to say something about the work of the Senate Public Works Committee. I have served on the Committee on Public Works continuously since 1957. Prior to that time, when I spent 2 years in the Senate in 1947 and 1948, I was a member of the Committee on Public Works. In times past, our subjects were matters under the jurisdiction of the Corps of Engineers, which is very important in dealing with flood control, navigation and water supply; the Federal-aid highway system—which is also of vital importance to the country—and public buildings. Later, we added responsibility in connection with large watershed projects.

In the last 8 or 10 years, as the country has become aware—and it is sad that it has been such a short time ago—of this problem of pollution and its effect upon the environment, the Senate Committee on Public Works has assumed an entirely new significance and undertaken to deal with new environmental problems of the greatest importance.

Largely due to the initiative of the Senator from Maine (Mr. MUSKIE), this committee has been developing programs for the prevention of water pollution, air pollution, solid waste pollution. Most recently we have considered the special problem of oil spillages, not a new field in the sense that it is an aspect of the pollution problem, but a very difficult topic for legislation and one which has caused long study by the committee.

So I express, without any reservation whatever, my appreciation and that which I think the country owes to the Senator from Maine, who serves as chairman of the subcommittee, and his coworker, the Senator from Delaware (Mr. BOGGS), along with the guidance and help of the chairman, the Senator from West Virginia (Mr. RANDOLPH). I pay tribute also to all the members of the committee. I am particularly proud, upon the minority side, to have noted among those who have worked hard on this bill the Senator from Delaware, to whom I have referred, the Senator from Tennessee (Mr. BAKER), the Senator from Kansas (Mr. DOLE), the Senator from Florida (Mr. GURNEY), and the Senator from Oregon (Mr. PACKWOOD), who, although new members, have been assiduous in their efforts.

In our executive meetings—I believe we had 12, as well as many informal conferences—it was challenging and very helpful that we had a full attendance of the committee membership practically all the time. Everyone was interested, and everyone contributed to the writing of the bill, including the new members of the Senate. While I have not mentioned those on the majority side, I am sure that the Senator from Maine (Mr. MUSKIE) has given them his praise, and I join with him in his accolades—or, as a fellow I talked with the other day said, he was very happy to hear I had an "allocade" for him.

I shall discuss the matter very briefly. S. 7 represents an important step in response to the public's demand that the degradation of our environment be halted and its quality enhanced. S. 7 is a comprehensive bill with provisions dealing with a wide range of difficult water pollution problems. Its provisions relate to nearly every aspect of the water environment and will affect nearly every major industry of our country. In addition to the water quality provisions, S. 7 incorporates in title II a timely contribution to the broad issue of the Federal Government's response to the quest for environmental quality.

The impact of Federal activities is clearly great, especially in the area of public works, and over the years many statutes, agencies, policies, and procedures have been created that, if not running counter to the objective of environmental quality are at least inadequate to meet the challenges that face our environment. Title II will go a long way toward resolving this paradox, and along with other legislation before Congress offers a program to update Federal performance. Such an effort would have great effect beyond the Federal performance and hopefully be duplicated throughout State and local governments as well as the private sector.

S. 7 is extremely important legislation. It is legislation on which the Committee on Public Works, in 1969 alone, held some 13 days of public hearings. These hearings were followed by more than 20 markup executive sessions; the bill has been thoroughly considered, thoughtfully drafted, and has been reported unanimously. In 1968 the Senate and the House each passed a water pollution measure, however, agreement in conference was not obtained and the adjournment of the 90th Congress required that we begin the legislative process once again in the 91st Congress.

The vessel pollution provisions of S. 7 are basically the same as those designed to combat the problem of the discharge of sewage from all types of watercraft contained in the 1968 bill.

I am sure that the Senator from Maine has pointed out that, with respect to the equipment which is required to be installed upon watercraft, the Federal Government preempts authority to regulate the design, manufacture, installation, and use of marine sanitation devices. However, certain matters should be discussed, particularly the matter of Federal preemption.

Because many waters are navigable in nature, and therefore, cross State lines and because watercraft are easily transported for use in many States, it is essential that the boatowner or the vesselowner and the equipment installed on his boat or vessel satisfy uniform requirements and regulations. This, of course, can be achieved through Federal regulations. S. 7 provides that only the Federal Government can adopt and enforce regulations with respect to the design, manufacture, installations, or use of any marine sanitation device in connection with any boat or vessel subject to the provisions of S. 7.

There remains, however, a substantial and vital interest of each State in certain local characteristics of the waters under the jurisdiction of that State. Only a State is in a position to know its waters so well as to know where water supply intakes, bathing beaches, oyster beds, or other use of its waters demand high purity and consequently, only States are in a position to permit the discharge of sewage into these waters. Consequently, the bill, S. 7 makes provision that the States retain authority to prohibit absolutely, and only prohibit absolutely, the discharge of sewage, treated or not, in any waters within such State but only where implementation of applicable water quality standards requires such prohibition. Certainly States cannot act arbitrarily or capriciously. In addition the States have a distinct duty to encourage the development of vessel sewage equipment service facilities; a suitable and effective way of communicating to the boating public the exact areas subject to such a prohibition; and, of course, suitable public participation in the establishment of any prohibited zones.

The committee received much citizen reaction on this provision, and it is carefully drawn to make it clear under what situations the States can act. It is not anticipated that this provision will bring undue hardship to any boat or vessel owner and will result in those regulations which are necessary to achieve, in fact, water quality.

The *Torrey Canyon*, *Ocean Eagle*, Santa Barbara, and most recently the Buzzards Bay oil pollution have caused great damage and have aroused great concern among the public. It is clear that the tremendous increase in the transport of oil, has given rise to the almost certainty that oil will be discharged into the waters of the United States. We must, therefore, take every precaution to see that the public's interest in these waters and the adjacent shores is protected and damage minimized, and at the least direct expense to the public.

The problem is complex, it involves vessels, it involves onshore facilities, and of course it involves offshore facilities. The writing of provisions to deal with these potential threats has been extremely difficult and one on which the committee labored long.

I suppose that one of the most complicated and controversial questions was that of fixing a measure of liability for the cost of removal of oil discharges. In order for legislation to be responsive, it is necessary that it be clear, not complicated, applied equally to all and in all situations, and most importantly, enforceable. It is submitted that the framework adopted by the bill in imposing liability for removal costs meets this standard. Since this is indeed national legislation it is imperative that the standard of liability be a uniform standard. This can only be achieved if, to the fullest extent possible, the common law standard of negligence is avoided. If negligence were to have been the principal test, every discharge of oil would require that the Federal district court, in an action by the United States to recover costs, would be forced to refer to the relevant State law for a determination of negligence. It is likely that many different standards of liability would ensue.

To avoid this the committee adopted a framework of liability that begins with absolute liability; that is, liability without reference to fault, and then provides exceptions to this standard; the exceptions being where the owner or operator can prove either the discharge was caused solely by, first, an act of God; second, an act of war; and third, or an act of a third party, and in the case of vessels, negligence on the part of the U.S. Government. Although this liability has been called absolute, it is not, and the exceptions bring it very close, if not equivalent, to the standard that can be referred to as strict liability which is the standard that the international community is likely to adopt in the International Convention dealing with the discharge of oil. In testimony before the

committee, the legal advisor of the Department of State testified that although the original position advocated by the United States at the international convention was absolute liability, the international community generally preferred a somewhat lesser standard which is referred to as strict liability that makes exceptions, as does the bill S. 7 to what otherwise would be considered absolute liability. It should be pointed out that the international convention when it is finally completed might include in its provisions liability for third party damages. On August 15, the United States notified the Intergovernmental Maritime Consultative Organization—IMCO:

The United States continues in its preference for the strict liability provision set forth in alternative B.

I should like to quote the provisions of alternative B:

1. The owner shall be liable for any pollution damage caused by oil that has escaped or been discharged from his ship, except as provided in paragraphs 2 and 3 of this Article.

2. No liability shall attach to the owner with respect to pollution damage resulting directly from an act of war, hostilities, civil war, insurrection or a grave natural disaster of an exceptional character.

3. If the owner proves that the pollution damage resulted wholly or partially from an act or omission done with intent to cause damage by the person who suffered the damage, the owner shall be exonerated wholly or partially from his liability to such person.

4. No claim for compensation for pollution damage shall be made against the owner otherwise than in accordance with this Convention. No claim for pollution damage under this Convention or otherwise, may be made against the servants or agents of the owner.

5. Nothing in this Convention shall prejudice any right of recourse of the owner against third parties.

This is basically compatible with the liability provisions of S. 7.

The bill, S. 7, imposes liability only for the cost of removal of oil, should it be necessary, by the United States. The provisions of the bill further impose a dollar limit for the standard of liability that I have outlined. In accordance with general concepts of negligence, however, the bill goes on to provide that where the United States can show that a particular discharge was the result of negligence then there shall be no limit to the amount of liability and that such liability will extend to the full cost of removal to the United States. It should be noted that the testimony revealed no discharges in which the costs of cleanup have been as high as the dollar limits of the strict liability provision. Testimony was also received that no spill requiring costs of cleanup in excess of those limits are anticipated. Therefore, the unlimited liability provision, assuming negligence could be proved by the United States, is a highly unlikely eventuality and is included to cover those extreme events such as a negligent discharge, from perhaps a supertanker or a rupture in the proposed pipeline on the north slope of Alaska; hopefully these will never occur but this does not excuse the Government from advance preparation.

In order to impose on all vessels a uniform standard of liability, the bill requires that all vessels using the ports or waters of the United States must show evidence of financial responsibility to meet liability for the cost of removal to a limit of $100 per gross ton. The legislative record developed by the committee clearly indicates that the amount, $100 per ton, is insurable under this standard of liability and has, therefore, been chosen by the committee as a figure that will adequately protect the interests of the public.

It has been alleged that because the bill does not impose a dollar limit for negligent liability that it is uninsurable. This argument is misleading and does no justice to the carefully drawn framework of S. 7.

Under any standard of common law negligence, liability, upon proof of negligence is theoretically unlimited and is measured only by the amount of damage. Thus, each one of us is liable without limit for all damages caused as a result of the negligent act resulting in an automobile collision. Such theoretical liability is, of course, uninsurable. A continuation of this analogy is helpful. Many States require every automobile owner to obtain certain levels of insurance coverage; this is equivalent to the evidence of financial responsibility enclosed in the bill, S. 7. Should a citizen desire, he may negotiate with an auto insurance company for a higher level of coverage based upon anticipated risk and his willingness to pay.

It is anticipated that shipowners will engage in this same type of negotiation with the maritime insurance industry and arrive at a limit of insurability which will at least be $100 per gross ton as required by the bill, and may be higher based upon the anticipated risk and the vessel owner's willingness to pay. The bill, S. 7, does not, I repeat, does not require insurance to the full theoretical amount of liability for the cost of removal.

Of course, because of the great publicity involved in the Santa Barbara occurrence, much attention has been directed toward spillage at sea and in territorial waters. However, the bill also covers onshore facilities. We adapted to the provisions dealing with onshore facilities a formula to measure liability similar to that which was provided for spillage by vessels.

Since onshore facilities is a broad term and covers a wide range of operations, from small storage to large bulk storage, from marinas to large refineries, it was necessary to devise a formula which would base the limit of liability upon some measure of the risk, just as in the case of vessels and discharges from offshore facilities.

I suggested a formula which does not require any great originality. I was following the standard fixed for vessel spillages and suggested a formula that under the standard of strict liability, a dollar limit of liability was imposed of not to exceed $125 per ton of oil which such facility is capable of processing, transporting, transferring in any 24-hour period or storing in the largest unit of such onshore facility. The committee adopted this language unanimously.

In considering this legislation the committee was faced with a difficult problem of dealing with other substances whose discharge poses a threat to the water environment along with oil. Testimony received was inadequate to enable the committee to impose the same framework developed for oil as does the House bill. Therefore, through the initiative of Senator DOLE, the bill proposes to treat hazardous substances separately in section 13 and he is to be commended for his timely and important contribution. This section provides that the President shall designate hazardous substances which when discharged in any quantity in the navigable waters of the United States present a threat to public health and welfare.

The section also provides authority to the President to prepare regulations regarding the removal of such hazardous substances. Both in the designation and the promulgation of regulations the bill requires that the public, especially affected parties, be given full opportunity to participate. One critical problem faced in the discharge of any toxic material into water is notice to downstream water users. In both the oil and the hazardous substance sections, therefore, the bill requires that, upon discharge, the person in charge of a vessel or on- or offshore facilities shall immediately notify the United States. Failure to notify results in a criminal sanction. It is anticipated that under these two authorities, the United States will develop an efficient and wide-ranging network that will enable such information to be received and disseminated almost instantly. Such a system is clearly in the public interest.

Because the record did not support imposing liability for the cost of removal of hazardous substances, as it does in the case of oil, the Committee has authorized the President to submit a report to the Congress specifying what techniques are available for removal of hazardous substances and under what framework of liability costs could be recovered. This report is to be filed with the Congress by November 1, 1970. It is anticipated that this report will enable the Congress to effectively legislate to enable the recovery of the costs of removal of discharged hazardous substances.

There has been some misunderstanding of the kind of discharge to which section 13 would apply. It should be noted that this section does not attempt to alter the basic provisions of the Water Quality Act of 1965 providing for water quality standards and enforcement provisions for such standards. Section 13 is designed to respond to those situations where hazardous substances have been discharged suddenly and inadvertently into waters of the United States. This could be a ruptured pipeline, an overturned truck, a leaking storage tank, or a vessel breaking up at sea. It should be emphasized that this matter does not grant to the Federal Government any authorities in excess of those granted in the Water Pollution Control Act of 1965 dealing with the abatement of continuous pollution from an industrial or other facility.

It is clear to those of us who sit on committees dealing with environmental

matters that research simply does not exist in sufficient amounts to enable the development of programs, regulations, and procedures to remedy many forms of pollution. The research is not only lacking on the effects of these pollution problems; research does not even exist in sufficient quantities on the nature of the pollutant itself. S. 7 should go a long way to remedying the deficiency of knowledge that surrounds acid and mine drainage pollution that confronts many of our Appalachian communities and waterways. This is an urgent problem and I look forward to following the implementation of section 14 of this bill.

Another problem that none of us can be complacent with is the continuing and rapid deterioration of the Nation's Great Lakes. Special efforts are needed by all levels of Government to accomplish such remedial action as necessary to avoid irreversible deterioration of the water quality of the Great Lakes. Section 15 providing for demonstration projects to control pollution in the Great Lakes is designed as a limited step in that direction.

One of the paradoxes of our age is the fact that the Federal Government directly and indirectly contributes substantially to the degradation of the environment. Many Federal activities contribute directly to water pollution and these include such diverse activities as naval vessels discharging sewage and waste into the waters of the United States, dredging activities of the Corps of Engineers, and sewage and waste disposal from Federal facilities of all kinds. Indirectly, the Federal Government contributes to water pollution in its licensing activities over such things as nuclear power plants, hydroelectric power plants licensed by the Federal Power Commission and dredge and fill permits issued by the Army Corps of Engineers. S. 7 will require, without exception, that all Federal activities that have any effect on water quality be conducted so that water quality standards will be maintained. In the case of all Federal activities the bill declares a congressional mandate that these activities be conducted in compliance with water quality standards. This of course raises a problem of enforcement. However, if a Federal agency continues to pollute it would seem that private citizens affected by such pollution, and in a very real sense this would include each and every citizen, should be able to bring an abatement proceeding on their own behalf in a Federal court.

With respect to Federal licensing activity, the bill S. 7 requires that, as a part of the license activity, applicants must furnish certification from the State and affected States that the activity will comply with applicable water quality standards. During the course of consideration of the bill the committee was faced with difficult question regarding the application of this provision to dredging that demands further discussion analysis. Section 16 of the bill provides an integrated and comprehensive program designed to require compliance with applicable water quality standards in all Federal activity and federally licensed or permitted activity. While incorporating certain provisions necessary to provide for special characteristics of certain Federal licensing and permitting procedures, especially dredging, section 16 makes no exception for any licensed or permitted activity from its operative principle of State certification. Furthermore, section 16 is consistent with, and arises out of the policy of the 1965 act that the primary responsibility for controlling water pollution rests with the States. The committee has on innumerable occasions adhered to this principle and section 16 is another manifestation of it.

Under the Rivers and Harbors Act, 33 United States Code 403, no dredging or filling can be conducted in the navigable waters of the United States without a permit from the Corps of Engineers. This includes, inter alia, dredging for navigation purposes, sand and gravel exploitation and, real estate development.

Dredging for any of these purposes can and does affect water quality both in the active removal of spoil and in the open water disposal of dredge spoil. Both activities, it should be noted, in some circumstances, may be accomplished without any long-term degradation of water quality.

In drafting section 16 the committee has intensely studied its provisions vis-a-vis dredging and other federally-licensed or permitted activities. With respect to the special characteristics of dredging, the following steps have been incorporated into section 16.

First. The committee recognized that water quality standards considering temporary turbidity resulting from dredging operations involving otherwise nonpolluting spoil socially do not exist. Consequently, report language to accommodate this fact and give directions to the Secretary and to the States was prepared.

Second. The committee recognized that the disposal of dredged spoil, particularly from the contaminated sediments in major Great Lakes and marine ports, precludes dumping in open water if water quality standards are to be maintained. Consequently, alternative methods of spoil disposal must, in such cases, be adopted. Therefore, subsection (e) has been included in section 16 to make available to private dredgers, at a reasonable charge Federal spoil disposal areas.

Third. The committee has further recognized that the implementation of section 16 will cause an adjustment in practices followed in dredging and, of course, in all other activities conducted pursuant to a Federal license or permit. I suggested a "grace period" in which to develop new practices and procedures in order to achieve compliance with water quality standards in dredging operations. Consequently, paragraph (7) of subsection 16(c) provides that applications for Federal licenses or permits pending on the date of enactment is the Water Quality Improvement Act of 1969, which licenses and permits are issued within 1 year of such date, shall not require certification for 1 year following the date of such issuance. This provides, in effect, that a pending application could have from 1 to 2 years from the date of enactment before a certification of compliance would be required.

Fourth. The committee took the further step of providing that where there are no applicable water quality standards, in being or in preparation, no certification will be required. However, a Federal licensing or permitting agency, in such event, must impose, as a condition of any license or permit, a requirement that the licensee or permittee shall comply with the purposes of the act.

The Federal Water Pollution Control Act accomplished, for purposes relevant to understanding section 16, five things:

First, it states the policy of this Nation that there shall be enhancement of water quality;

Second, it declares that the primary responsibility to control water pollution rests with the States;

Third, it provides a factual test of maintenance and enhancement of water quality; that is, water quality standards;

Fourth, it provides that in the formation of water quality standards other policy interests must be considered;

Fifth, it provides that the court in reviewing alleged violations of standards, shall give consideration to "the practicability and to the physical and economic feasibility of complying with such standards." It should be noted that any court reviewing any challenged standards would look to this language as addition to 10(c)(3).

Consequently, there is built into the water pollution control procedure a system of checks and balances with two levels of objectivity: First, a measurable standard for determining compliance with water quality; and second a measure that can be challenged in a court of law to test whether the standards have been drawn consistent with the intent of Congress with regard to legitimate uses and feasibility. To make it absolutely clear that navigation is to be considered in the development of standards the committee adopted my amendment that inserts "navigation" into the factors to be considered in the development of standards under section 10(c)(3).

Testimony from all sources has revealed a great need for manpower and training to satisfy the technological demands required for pollution abatement. Senator SCOTT submitted an amendment that has been adopted by the committee and incorporated as section 17 to provide for a manpower training program designed to stimulate and develop professionalism, career achievement and satisfy the demand for servicing sewage and waste treatment facilities and operations. Without this kind of a program no amount of money or construction will be truly satisfactory for in the last analysis people are necessary to make programs and facilities operate efficiently. I look forward to the report that will be filed September 30, 1970, that will state future manpower needs and recommended improvements in training programs.

Lake eutrophication, a natural phenomenon, that has been greatly acceler-

ated by man's activity in a process that demands full understanding. If we are to remedy the eutrophication that is now occurring at an accelerated rate on all of our Nation's estimated 10,000 lakes. S. 7 authorizes research necessary to achieve such understanding.

The remaining sections of title I provide necessary research authority to the Secretary of the Interior. I have already dwelled on the essential nature of research to the overall environmental quality effort and I only say now that these provisions should be vigorously implemented by the agency.

The legislative record from all committees on both sides of Congress has given a wealth of information on the Federal Government, its organization and policies, as they relate to environmental quality. It is obvious there is extreme fragmentation, there is poor communication, there is, in fact contradictory authority. For instance, the Department of the Interior is charged with, and has an extensive program in wetland preservation. On the other hand the Department of Agriculture has a program, and expends large amounts of money, for wetland reclamation. These problems have historical components; they have bureaucratic components; they have interest group components, and many others that all combine to make the Federal response to environmental quality one of the most complex problems facing this Congress.

The Committee on Public Works has held hearings on many aspects of environmental quality. It has had testimony from many agencies of government concerning their policies, procedures, and activities. Other committees such as the Committee on Interior and Insular Affairs has received similar testimony, the Committee on Commerce, the Committee on Labor and Public Welfare as well. On the House side the Committee on Merchant Marine and Fisheries, the Committee on Science and Astronautics, the Committee on Government Operations, have all received testimony indicating the depth of this problem.

From all of this testimony, a synthesis or integration can be made and an attempt begun that will enable us to reverse the trend of fragmentation, of overlap, of poor information exchange that now prevails. Title II of S. 7 represents one attempt to learn from all of the experience that is now available to us. It provides that there shall be established in the executive branch in the Office of the Presidency an Office of Environmental Quality. This Office is charged with reviewing the Federal operation and making recommendations to the President to implement through his Council of Environmental Quality, a Cabinet-level action organization designed to implement Presidential decisions and policy.

It is absolutely essential that we avoid placing this kind of responsibility in an agency or office of historical orientation and personnel staffing that would preclude it from operating efficiently in this area. It requires an office in the Executive Office of the President because the problems are found in all agencies and in all departments, therefore, only with the perspective of the Office of the Presidency will it be possible to make the necessary overview and analysis and the proper recommendations. It must be an office, too, that includes staffing of the character that will enable it to consider the broad and diverse issues involved in environmental quality.

These are simply not scientific matters, although there is a scientific component, they are not simply economic matters although there is an economic component, these are not simply fiscal matters although there is a fiscal component; rather these are problems that demand a new approach and orientation that can only be found from a new organization and cannot be found in any existing executive organization.

Many activities of the Federal establishment affecting environmental quality are under the jurisdiction of the Committee on Public Works. These include the rivers and harbors activities of the Corps of Engineers, the Federal highway program, and of course much of the economic development programs. All of these programs must be reviewed for their effect on environmental quality. The Office of Environmental Quality should help perform that review. This does not, however, allow us to escape our responsibilities and I hope that taking the policy enunciated in title II the Committee on Public Works will begin to review the statutory base on which these operations are made, the policies and procedures that have been developed in implementing these statutes, and of course the end product of these activities. It is expected the Committee on Public Works will soon begin a review of all activities within its jurisdiction for an analysis of the effect the operations have for environmental quality.

It is submitted that this Office of Environmental Quality combined with the President's establishment of a Council on Environmental Quality represents a comprehensive program that will contribute to the development of a truly responsive Federal Government.

Mr. President, I close by saying that I echo what the distinguished Senator from Florida (Mr. GURNEY) has said—that this is a landmark bill.

Without a quality environment we will never succeed in developing a quality of life. It is a first priority of this Nation, we cannot escape it and we must face this responsibility. I would hope that all of my colleagues share my concern on these issues because the public demands it and the public deserves it. The matter of environmental quality goes to each individual, rich and poor, white and black. A deteriorating environment does not discriminate, it affects us all and makes all of those problems which we do face much more difficult. When viewed in this light it becomes urgent that we begin to restore the quality to our environment and we must begin now.

AMENDMENT NO. 178

Mr. TYDINGS. Mr. President, I call up my amendment No. 178.

The PRESIDING OFFICER. The amendment will be stated.

The legislative clerk proceeded to read the amendment.

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

The PRESIDING OFFICER. Without objection, it is so ordered; and, without objection, the amendment will be printed in the RECORD.

The amendment is as follows:

AMENDMENT NO. 178

On page 73, between lines 15 and 16, insert the following:

"SEC. 106. Subsection (c) of section 8 of the Federal Water Pollution Control Act is amended to read as follows:

"'(c) In determining the desirability of projects for treatment works and of approving Federal financial aid in connection therewith, consideration shall be given by the Secretary to the public benefits to be derived by the construction and the propriety of Federal aid in such construction, the relation of the ultimate cost of constructing and maintaining the works to the public interest and to the public necessity for the works, and the adequacy of the provisions made or proposed by the applicant for such Federal financial aid for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof. The sums appropriated pursuant to subsection (d) for each fiscal year ending on or before June 30, 1965, and the first $100,000,000 appropriated pursuant to subsection (d) for each fiscal year beginning on or after July 1, 1965, shall be allotted by the Secretary from time to time, in accordance with regulations, as follows: (1) 50 per centum of such sums in the ratio that the population of each State bears to the population of all the States, and (2) 50 per centum of such sums in the ratio that the quotient obtained by dividing the per capita income of the United States by the per capita income of each State bears to the sum of such quotients for all the States. All sums in excess of $100,000,000 and not in excess of $400,000,000 appropriated pursuant to subsection (d) for any fiscal year beginning after June 30, 1969, shall be allotted among the States eligible for reimbursement pursuant to the seventh and eighth sentences of this subsection in the proportion that the amount each State is so eligible to receive on the first day of such fiscal year bears to the total such amounts on such day for all States, and such allotment shall not exceed the sum advanced and shall be available until the termination of six months following the fiscal year for which made only for the purpose of reimbursing such State pursuant to the seventh and eighth sentences of this subsection. All sums in excess of $400,000,000 appropriated pursuant to subsection (d) for each fiscal year ending after June 30, 1969, shall be allotted by the Secretary from time to time, in accordance with regulations, in the ratio that the population of each State bears to the population of all States. Sums allotted to a State under the three preceding sentences which are not obligated within six months following the end of the fiscal year for which they were allotted because of a lack of projects which have been approved by the State water pollution control agency under subsection (b)(1) of this section and certified as entitled to priority under subsection (b)(4) of this section, or for other reasons, shall be reallotted by the Secretary, on such basis as he determines to be reasonable and equitable and in accordance with regulations promulgated by him, to States having projects approved under this section for which grants have not been made for lack of funds: *Provided, however,* That whenever a State has funds subject to reallocation and the Secretary finds that the need for a project in a community in such State is due in part to any Federal institution or Federal construction activity, he may, prior to such reallocation, make an additional grant with

respect to such project which will in his judgment reflect an equitable contribution for the need caused by such Federal institution or activity. Any sum made available to a State by reallotment under the preceding sentence shall be in addition to any funds otherwise allotted to such State under this Act. The allotments of a State under the second, fourth, and fifth sentences of this subsection shall be available, in accordance with the provisions of this section, for payments with respect to projects in such State which have been approved under this section, except that in the case of any project on which construction was initiated in such State after June 30, 1966, which was approved by the appropriate State water pollution control agency and which the Secretary finds meets the requirements of this section but was constructed without such assistance, such allotments for any fiscal year shall also be available, together with the allotments under the third sentence of this subsection, for payments in reimbursement of State or local funds used for such project to the extent that assistance could have been provided under this section if such project had been approved pursuant to this section and adequate funds had been available. In the case of any project on which construction was initiated in such State after June 30, 1966, and which was constructed with assistance pursuant to this section but the amount of such assistance was a lesser per centum of the cost of construction than was allowable pursuant to this section, such allotments shall also be available for payments in reimbursement of State or local funds used for such project to the extent that assistance could have been provided under this section if adequate funds had been available. Neither a finding by the Secretary that a project meets the requirements of this subsection, nor any other provision of this subsection, shall be construed to constitute a commitment or obligation of the United States to provide funds to make or pay any grant for such project. For purposes of this section, population shall be determined on the basis of the latest decennial census for which figures are available, as certified by the Secretary of Commerce, and per capita income for each State and for the United States shall be determined on the basis of the average of the per capita incomes of the States and of the continental United States for the three most recent consecutive years for which satisfactory data are available from the Department of Commerce.'"

On page 73, lines 16, 19, and 23, redesignate sections 106, 107, and 108 as sections 107, 108, and 109, respectively.

Mr. TYDINGS. Mr. President, the amendment is designed to provide urgently required financial relief to those States that have advanced the Federal share of construction costs for water quality treatment plants and have not yet received reimbursement from the Federal Government.

The amendment allocates up to $300 million from the annual appropriations to those States eligible for reimbursement.

This amount would be sufficient to repay the seven States that advanced the Federal share.

The principal method to restore the quality of our waters is by construction of water quality treatment facilities. This is an enormous task, because many plants are required throughout the Nation. Recognizing this, in 1966, Congress passed the Clean Water Restoration Act authorizing $4.7 billion in grants over a period of 6 years to States with pollution programs for construction of such facilities.

To receive Federal assistance, States were required to have their own program. A Federal-State partnership was thus created to clean up our waters. Unfortunately, Federal funds were not forthcoming in the amount either anticipated or required. In fiscal year 1966, $150 million was authorized, $121 million was appropriated. In fiscal year 1967, $150 million was again authorized and this time actually appropriated. But in fiscal year 1968, $450 million was authorized and less than half, $203 million, appropriated. In fiscal year 1969, $700 million was authorized, only $214 appropriated. For fiscal year 1970, a full $1 billion has been authorized, yet the appropriation request of the administration is for only $214 million. Thus, there is a great gap between the authorizations and the monies actually spent or actually appropriated.

To illustrate this gap, Mr. President, I ask unanimous consent to have printed at this point in the RECORD a table I have prepared entitled, "Gap in Funds for Construction of Water Quality Treatment Plants," as well as a chart entitled, "The Water Pollution Control Funding Gap," published in the September 1969 issue of Nation's Cities.

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

GAP IN FUNDS FOR CONSTRUCTION OF WATER QUALITY TREATMENT PLANTS

Fiscal year	Authorized	Appropriated
1961	$50,000,000	$46,000,000
1962	80,000,000	80,000,000
1963	90,000,000	90,000,000
1964	100,000,000	90,000,000
1965	100,000,000	93,000,000
1966	150,000,000	121,000,000
1967	150,000,000	150,000,000
1968	450,000,000	203,000,000
1969	700,000,000	214,000,000
1970	1,000,000,000	[1] 214,000,000
1971	1,250,000,000	
Total, including 1971	4,120,000,000	1,291,000,000
Total, excluding 1971	2,870,000,000	1,291,000,000

[1] Requested.

THE WATER POLLUTION CONTROL FUNDING GAP

AUTHORIZATIONS VERSUS ALLOCATIONS UNDER THE 1966 CLEAN WATERS RESTORATION ACT

[In millions]

States	1968		1969		1970		1968–70 Funding Gap Total [1]			
	Authorized	Allocated	Authorized	Allocated	Authorized	Allocated	Total dollars authorized	Total dollars allocated	Total dollars gap	Percent not funded
Total	$450.0	$203.0	$700.0	$214.0	$1,000.0	$214.0	$2,150.0	$631.0	$1,519.0	70.7
Alabama	8.4	4.1	12.9	4.1	18.3	4.1	39.6	12.3	27.3	68.9
Alaska	1.2	.9	1.5	.9	1.9	.9	4.6	2.7	1.9	41.3
Arizona	3.8	2.0	5.6	2.1	7.8	2.1	17.2	6.2	11.0	64.0
Arkansas	5.2	2.9	7.6	2.8	10.6	2.8	23.4	8.5	14.9	63.7
California	35.3	14.6	56.9	14.9	82.8	14.9	175.0	44.4	130.6	74.6
Colorado	4.7	2.4	7.1	2.4	10.0	2.4	21.8	7.2	14.6	67.0
Connecticut	6.2	2.9	9.7	2.9	13.9	2.9	29.8	8.7	21.1	70.8
Delaware	1.6	1.1	2.3	1.1	3.0	1.1	6.9	3.3	3.6	52.2
District of Columbia	2.3	1.3	3.3	1.3	4.6	1.3	10.2	3.9	6.3	61.8
Florida	11.8	5.3	18.6	5.4	26.8	5.4	57.2	16.1	41.1	71.9
Georgia	9.8	4.6	15.1	4.6	21.6	4.6	46.5	13.8	32.7	70.3
Hawaii	2.2	1.4	3.0	1.3	4.1	1.4	9.3	4.1	5.2	55.9
Idaho	2.5	[2].5	3.4	1.6	4.5	1.6	10.4	3.7	6.7	64.4
Illinois	22.9	9.6	36.7	9.8	53.4	9.8	113.0	29.2	83.8	74.2
Indiana	11.1	4.9	17.5	5.0	25.2	5.0	53.8	14.9	38.9	72.3
Iowa	6.9	3.3	10.7	3.3	15.3	3.3	32.9	9.9	23.0	69.9
Kansas	5.7	2.8	8.6	2.8	12.2	2.8	26.5	8.4	18.1	68.3
Kentucky	7.8	3.7	12.0	3.8	17.0	3.8	36.8	11.3	25.5	69.3
Louisiana	8.3	4.0	12.7	4.0	18.1	4.0	39.1	12.0	27.1	69.3
Maine	3.1	1.9	4.5	1.9	6.1	1.9	13.7	5.7	8.0	58.4
Maryland	7.5	3.5	11.8	3.6	17.0	3.6	36.3	10.7	25.6	70.5
Massachusetts	12.0	5.3	19.1	5.4	27.6	5.4	58.7	16.1	42.6	72.6
Michigan	18.0	7.7	28.7	7.8	41.6	7.8	88.3	23.3	65.0	73.6
Minnesota	8.4	3.9	13.1	3.9	18.7	3.9	40.2	11.7	28.5	70.9
Mississippi	6.2	3.4	9.2	3.4	12.8	3.4	28.2	10.2	18.0	63.8
Missouri	10.3	4.7	16.3	4.8	23.4	4.8	50.0	14.3	35.7	71.4
Montana	2.4	[2].7	3.3	1.5	4.5	1.5	10.2	3.7	6.5	63.7
Nebraska	4.0	2.2	5.9	2.1	8.2	2.1	18.1	6.4	11.7	64.6
Nevada	1.2	.9	1.7	.9	2.2	1.0	5.1	2.8	2.3	45.3
New Hampshire	2.2	1.4	3.0	1.4	4.0	1.4	9.2	4.2	5.0	54.2
New Jersey	14.0	6.1	22.4	6.2	32.4	6.2	68.8	18.5	50.3	73.1
New Mexico	3.1	[2].7	4.4	1.9	6.0	2.1	13.5	4.7	8.8	65.1

Footnotes at end of table.

THE WATER POLLUTION CONTROL FUNDING GAP—Continued

AUTHORIZATIONS VERSUS ALLOCATIONS UNDER THE 1966 CLEAN WATERS RESTORATION ACT—Continue

[In millions]

States	1968		1969		1970		1968–70 Funding Gap Total [1]			
	Authorized	Allocated	Authorized	Allocated	Authorized	Allocated	Total dollars authorized	Total dollars allocated	Total dollars gap	Percent not funded
New York	37.6	15.5	60.7	15.8	88.4	15.8	186.7	47.1	139.6	74.8
North Carolina	11.1	5.2	17.4	5.2	24.9	5.1	53.4	15.5	37.9	71.0
North Dakota	2.3	[2] 3.3	3.3	1.6	4.3	1.6	9.9	3.5	6.4	64.6
Ohio	22.1	9.4	35.5	9.6	51.5	9.6	109.1	28.6	80.5	73.8
Oklahoma	6.1	3.1	9.3	3.1	13.2	3.1	28.6	9.3	19.3	67.5
Oregon	4.7	2.4	7.1	2.4	10.1	2.4	21.9	7.2	14.7	67.1
Pennsylvania	25.7	10.8	41.3	11.0	60.0	11.0	127.0	32.8	94.2	74.2
Rhode Island	2.7	1.6	3.9	1.6	5.3	1.6	11.9	4.8	7.1	59.7
South Carolina	6.5	3.4	9.7	3.4	13.7	3.3	29.9	10.1	19.8	66.2
South Dakota	2.5	[2] .3	3.5	1.7	4.6	1.8	10.6	3.8	6.8	64.2
Tennessee	9.0	4.3	13.9	4.3	19.8	4.3	42.7	12.9	29.8	69.8
Texas	22.0	9.4	35.2	9.6	51.0	9.6	108.2	28.6	79.6	73.6
Utah	2.9	[2] .7	4.1	1.8	5.6	1.8	12.6	4.3	8.3	65.9
Vermont	1.8	1.4	2.4	1.3	3.0	1.3	7.2	4.0	3.2	44.4
Virginia	9.7	4.5	15.1	4.5	21.7	4.5	46.5	13.5	33.0	71.0
Washington	7.0	3.3	11.0	3.3	15.7	3.3	33.7	9.9	23.8	70.6
West Virginia	5.2	2.7	7.8	2.8	10.8	2.8	23.8	8.3	15.5	65.1
Wisconsin	9.5	4.4	15.0	4.4	21.5	4.4	46.0	13.2	32.8	71.3
Wyoming	1.5	[2] .005	2.1	1.2	2.6	1.2	6.2	2.4	3.8	61.3
Guam	1.6	[2] .8	1.6	1.5	1.7	1.4	4.9	3.7	1.2	24.5
Puerto Rico	6.6	3.5	9.8	3.5	13.7	3.5	30.1	10.5	19.6	65.1
Virgin Islands	1.5	1.5	1.5	1.4	1.6	1.4	4.6	4.3	.3	6.5

[1] 1970 appropriations still pending.

[2] Actual amounts used by these 8 States although they were entitled to use more. Unused amount totaling $8,300,000 from these 8 reallocated to other States.

Source: Federal Water Pollution Control Administration.

Mr. TYDINGS. The result of this gap has been a severe setback for pollution control.

Congress did recognize, however, at the time the bill was written and passed, that immediate appropriation of all construction grant funds was not likely and that several States, New York and Maryland, to name just two, were prepared to move ahead on their own more rapidly than the availability of Federal funds. These States recognized the danger to our environment of water pollution and had set aside, or were prepared to set aside, money to help abate it. Yet they were understandably reluctant to forge ahead without sufficient Federal assistance if other States, by waiting until both the scale of authorizations and level of actual funding increased, would receive greater financial support.

These States would then have been penalized for being progressive.

Congress therefore included in the 1966 act a provision permitting Federal reimbursement of those projects, approved by both the State water pollution agency and the Secretary of the Interior, for which the States had advanced the Federal share of project cost. In their partnership with the Federal Government, several States prefinanced the Federal share so as not to lose momentum and time in the task of cleaning up the waters.

They did so, of course, with the understanding and belief that the Federal Government would honor the partnership, live up to the bargain, and repay the amounts advanced.

The Federal Government has not done so. Reimbursables, in the sum of nearly $300 million, have not been forthcoming to those States which have moved ahead in cleaning up their waters.

The inevitable result has been financial trouble for those States which have shown initiative and progress. They have not been repaid, and their water pollution programs are thereby in jeopardy.

The States affected are Connecticut, owed $60,900,000; New York, owed $150,315,000; Maine, owed $3,500,000; Massachusetts, due $8,500,000; Vermont, due $677,000; Pennsylvania, $16,095,000; and Maryland, owed $52,957,000.

The Federal Government owes these seven States a total of $292,944,000.

It is ironic that in a time when we increasingly emphasize the need to revitalize State and local governments, we are penalizing the very States we should be rewarding.

In a time when there is much talk about revitalizing State government, we have before us an example of seven States which acted on their own, with their own money, to meet head on a major problem. They are now being rewarded with sympathy rather than the money they deserve.

These seven States should be paid back. Fair play demands it.

My amendment, if adopted, would do it.

It provides for an allotment of up to $300 million to States eligible for reimbursement. It states that funds appropriated for construction of water quality treatment plants, in excess of $100 million and not more than $400 million, shall be allotted to States which prefinanced the Federal share.

Section 8 of the Federal Water Pollution Control Act deals with construction grants. Subsection (d) provides the authorizations for grants till fiscal year 1971. Subsection (c) determines how funds appropriated will be distributed. It also includes the reimbursement provision and is the section of the act I seek to amend.

Essentially, three patterns or bases of distribution are apparent in 8(c). The first is population. Of the sums appropriated, the first $50 million and all funds in excess of $100 million are distributed on the basis of population of the State. The specific basis is "the ratio that the population of each State bears to the population of all the States." The second pattern is per capita income. Of the first $100 million appropriated, the second $50 million is distributed "in the ratio that the quotient obtained by dividing the per capita income of each State bears to the sum of such quotients for all the States." What this means, in simple language, is that the poorer State gets a little better break. The third pattern of distribution is what I shall call, for lack of a better term, Federal involvement. There is a provision in 8(c) which provides additional funds for a State whose pollution problem is heightened by the presence of Federal installations or construction activities.

In a sense there is another pattern, found in 8(d). There, a provision states that of the first $100 million appropriated for water pollution construction grants, at least half shall go to municipalities with populations of 125,000 or under.

This amendment eliminates none of these patterns of distribution. Funds appropriated would still be allocated on the basis of population, per capita income, Federal involvement, and the size of municipality.

What it does is to add another pattern. Funds appropriated would also be distributed on the basis of the amount of the Federal share a State has advanced in anticipation of reimbursement.

The amendment provides that the second, third, and fourth hundred million dollars appropriated, thus a sum of up to $300 million, shall be alloted to States eligible for reimbursement from the Federal Government. The specific basis for distribution of these money—whether it be $300 million, $200 million, or $100 million—is the ratio that the amount each State has prefinanced bears to the total amount of prefinancing done by all the States.

For example, if a State has prefinanced X and the sum total of all the prefinancing is Y, then the amount the State receives under my amendment is Xk/Y, where k is the money appropriated and allocated by this amendment. In no case, however, could this be over $300 million. It might be less, depending on the 8(d) appropriation.

To make it clearer, I have prepared a small chart entitled "Allocations of Reimbursement Funds Under Proposed

Tydings Amendment, Revised," and I ask unanimous consent that it be printed in the RECORD at the conclusion of my prepared statement. The table shows how my amendment would work.

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

(See exhibit 1.)

Mr. TYDINGS. Mr. President, looking at it, we see that Maine has prefinanced $3.5 million for water pollution control. This represents the Federal portion of Maine's program which the State has advanced on her own. It is the amount she is eligible for reimbursement. It represents 1.19 percent of the $292,944,000 total prefinanced by the seven States.

Under my amendment, which allocates "all sums in excess of $100,000,000 and not in excess of $400,000,000 appropriated pursuant to subsection (d)," Maine would receive $3,700,000 if the appropriation were $400 million or more. If this were the case $300 million would be alloted for reimbursement. Maine's program would be paid for. If it were less, the amount would be reduced proportionately.

The chart indicates that under the maximum amount permitted by the amendment, $300 million—which will be available as long as the 8(d) appropriation exceeds $400 million—the seven States would be allotted funds a little over the amount they actually prefinanced.

The purpose of my amendment is to ensure the Federal Government pay what it owes to these States. It is not to get them additional funds above and beyond what they prefinanced. Thus there is language in the amendment which says that any reimbursement "shall not exceed the sum advanced."

In cases where there are funds left over, where the amendment allocates money that is not obligated, provision is made for these funds to be redistributed by the Secretary according to regulations he promulgates.

Maryland is another example of a State that would justly benefit from this amendment. Conscious of how important her water resources are, Maryland embarked on a major effort to restore their quality. The State has prefinanced 79 projects worth $52,957,000, a significant sum for a State the size of Maryland. Like the other six, she is waiting for the Federal Government to pay her back.

Should the section 8(d) appropriation be $300 million, the amendment would provide $200 million for reimbursement.

Maryland's percentage of total prefinancing is 18.08 percent. She would thus receive 18.08 percent of the funds available—$200 million—which is $36,160,000.

I wish to make it clear that the amendment does not affect the level of fiscal year 1970 appropriations for water quality treatment facilities. This is found in the public works appropriation bill which should come to the floor late in the session. My amendment affects title I of S. 7 which amends the Federal Water Pollution Control Act.

I am concerned, with this amendment, not with the level of appropriations but the distribution of whatever funds are appropriated.

The present appropriation request is $214 million. This is clearly inadequate as the Citizens Crusade for Clean Water has pointed out. It is likely that the Senate committee will up the $214 million to $600 million. I hope they will. I would fully support such an increase and feel it is required if we are ever to clean up our waters and restore the quality of our environment.

The amendment thus does not alter the level of appropriations.

Neither does it eliminate the present distribution pattern of appropriated funds. Population, per capita income and size of municipality are allotted funds prior to the amendment's taking effect. So, in part, is population, although some funds for this pattern could be diverted for reimbursement. Yet with the expected $600 million appropriation there will be ample funds for both population and reimbursement patterns.

Nor does the amendment make forever permanent the section 8(c) distribution patterns; 8(d) authorizations expire at the end of fiscal year 1971. Renewal will require extensive hearings at which further consideration can be given to the prefinancing problem; 8(c) could be changed at this time. In the meantime, however, seven-State water pollution programs are in financial jeopardy. They should be reimbursed now, without having to wait any further.

They require and deserve immediate reimbursement.

Such repayment by the Federal Government is essential. Without it, the financial integrity and stability of these programs are threatened. The success and continuity of the national effort to clean our waters depend on our paying for the water treatment facilities we construct.

The amendment will help us pay what we owe, some $292,944,000. It will help restore the confidence of the States in the grant programs of the Federal Government. This confidence has been severely shaken by instances such as this where the Federal Government fails to reimburse and violates the State-Federal partnership.

By adopting the reimbursement provision, the United States placed its good faith and credit on the line. If the Federal Government fails to meet its end of the bargain, the States trust in Federal programs will erode even further.

As David Dominick, the present Commissioner of the Federal Water Pollution Control Administration has noted:

> It is most important that we make every effort in Washington to keep faith with the states that have already begun construction on their own.

The amendment will reward State initiative and provide an incentive for other States to move ahead.

Indeed, one of the original reasons for accepting the reimbursement provisions was the incentive it would offer States to finance water pollution programs prior to receiviing Federal assistance. That it was successful is evident in a letter of May 17, 1968, which I received from James B. Coulter, then Maryland's Assistant Commissioner Environmental Health Services and now Deputy Secretary of Maryland's Department of Natural Resources. Mr. Coulter wrote:

> The provision for repayment of state funds advanced to cover deficiencies in federal grant offers has made it possible for us to arrange a financing scheme combining state and federal funds designed to eliminate our backlog needs for municipal sewage treatment plants by 1971.

Another advantage to the States was pointed out by the distinguished junior Senator from Maine, Senator MUSKIE, during the 1966 water pollution hearings. Senator MUSKIE noted that the reimbursement provision would actually save money. Said Senator MUSKIE:

> As a matter of fact, I think it is an economy provision, because if we can enable the States like New York, which are in a position to do so, to press ahead with construction early with this prefinancing measure, they will build plants at lower cost than those who have to build them later. I think we will save money.

State government must now play a greater role in our affairs. We have learned that the Federal Government cannot do everything. Yet State responsibility for water quality control has always been primary, as the act's declaration of policy specifically states. Some States have met this responsibility and require now only that the Federal Government keep its part of the bargain. My amendment will bring this about.

It put the money where the action is.

In determining which projects are to receive Federal assistance, the Secretary is required in section 8(c) to consider "the propriety of Federal aid." Surely there are no projects more deserving of such assistance than those whose Federal share of costs have been advanced by the States.

It should be noted that section 8(d) contains the statement:

> Neither a finding by the Secretary that a project meets the requirements of this subsection, nor any other provision of this subsection, shall be construed to constitute a commitment or obligation of the United States to provide funds to make or pay any grant for such project.

But with the acceptance of the reimbursement provision, a promise was undertaken and agreement made.

The term used in drafting the provision was "prefinancing." The use of the prefix indicates that the States were financing before the Federal Government paid its share, not instead of the share itself. Were that the case, there would be no need for a partnership.

Maine, Maryland and the other five States advanced the Federal share of projects costs; they did not assume the share.

The 1966 report on S. 2947—Report No. 1367, 89th Congress, second session, July 11, 1966—in its section on reimbursement speaks of a "prefinancing provision" that will provide the Federal share "as it becomes available." The sentence does not read, "if it becomes available." The presumption is that it will and that the States will be paid back. But they

have not been. My amendment merely provides that they are and is consistent with the philosophy of the water pollution legislation.

The "certain risk" which the report says is assumed by States which prefinance refers to a delay in reimbursement, not to the issue of whether reimbursement takes place. It is a time risk rather than a payment risk.

Mr. President, I would like now to answer three criticisms which this amendment has received. The first concerns the maximum amount available for reimbursement. The amendment provides up to $300 million for this purpose. It is argued that this is too much. Three hundred million dollars is half the expected fiscal year 1970 appropriation, and leaves 43 other States with practically nothing.

I would answer that the sum of $300 million was selected with great care, and for a simple reason. It is approximately what the Federal Government owes the seven States—the actual figure is $292,944,000. It is what they are due. It leaves, moreover, $300 million—assuming a $600 million appropriation—for normal distribution. This is above the $214 million fiscal year 1969 appropriation, above the administration's $214 million fiscal year 1970 budget request, and is a significant sum of money.

The second criticism involves those States that moved ahead in pollution control with their own money prior to the adoption of the reimbursement provision. To be consistent, should not they receive Federal assistance also? Have not these States shown real leadership in meeting their responsibilities? Do they not deserve to be rewarded?

The answer to the last question is no. These States, and I applaud their action indeed—Maryland is also one of them, in this case moved without advancing Federal funds and without anticipating reimbursement. The acceptance of the reimbursement provision constituted a new, distinct, and specific partnership between State and Federal Governments that came into being as soon as the act passed. Reimbursement is due only those States that acted within its framework. It is not due States that acted prior to the existence of the partnership. These States could not and did not expect reimbursement.

Finally, the last criticism involves the amendment's deletion of the provision limiting reimbursement only to July 1, 1971. The reasoning behind the inclusion of the expiration date was to avoid an open ended commitment and insure acceptance of the reimbursement provision by the Senate. But this expiration date has had an unfortunate effect. It has forced the seven States to conclude that quite possibly unless they are reimbursed before July 1, 1971, they may not be reimbursed at all. As can be imagined, this has caused them great concern. The deletion of this provision would be a sign to these States that the Federal Government in good faith intends to repay them, if only eventually. It would assuage their fears and restore some of their confidence in the reimbursement provision and in the Federal Government itself.

Mr. President, the seven States have waited long enough. It is high time they are reimbursed for the funds they advanced in order to have progressive, worthwhile water pollution control programs.

It is the purpose and effect of my amendment to provide these funds.

Mr. President, I ask unanimous consent that following the printing in the RECORD of the tables referred to in my speech, a fourth chart entitled "State Funds Advanced in Lieu of Federal Funds for Construction of Sewage Treatment Facilities" be printed in the RECORD. This chart offers additional information about the prefinancing problem. I also ask unanimous consent that the text of my amendment be printed in the RECORD, as well as a letter to me from James B. Coulter dated June 18, 1969; a letter to me from Louis S. Clapper of the National Wildlife Federation dated September 9, 1969; the testimony of Maryland Gov. Marvin Mandel to the Appropriations Committee's Subcommittee on Public Works dated June 9, 1969; a resolution of the Maryland General Assembly's Legislative Council Committee on Intergovernmental Cooperation; a fifth chart entitled "Tentative State Allocations of Fiscal Year 1970 FWPCA Grant Funds Under Selected Levels of Appropriations" which indicate how different levels of section 8(d) funds would be distributed under present law without my amendment; an excellent article by Raymond L. Bancroft, managing editor of Nation's Cities, in their September 1969 issue entitled, "Are the Cities Trapped in the Water Pollution Control Funding Gap?"; a letter to me from C. W. Metcalf, director municipal services for the New Hampshire Water Supply and Pollution Control Commission dated September 30, 1969; and a letter to me from J. W. Penfold, conservation director of the Izaak Walton League of America dated September 30, 1969.

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

STATE FUNDS ADVANCED IN LIEU OF FEDERAL FUNDS FOR CONSTRUCTION OF SEWAGE TREATMENT FACILITIES

States	Number of projects	Cost	Federal grant entitlement	Federal grants made	State funds advanced (eligible to be reimbursed)
Total	295	$948,787,000	$334,077,000	$41,133,000	$292,944,000
Connecticut	38	121,400,000	64,280,000	3,380,000	60,900,000
New York	70	548,000,000	165,823,000	15,508,000	150,315,000
Maine	7	11,700,000	6,300,000	2,800,000	3,500,000
Massachusetts	12	20,800,000	9,900,000	1,400,000	8,500,000
Vermont	3	2,400,000	1,287,000	610,000	677,000
Pennsylvania	86	125,493,000	27,063,000	10,968,000	16,095,000
Maryland	79	118,994,000	59,424,000	6,467,000	52,957,000

AMENDMENT NO. 178

On page 73, between lines 15 and 16, insert the following:

"SEC. 106. Subsection (c) of section 8 of the Federal Water Pollution Control Act is amended to read as follows:

"'(c) In determining the desirability of projects for treatment works and of approving Federal financial aid in connection therewith, consideration shall be given by the Secretary to the public benefits to be derived by the construction and the propriety of Federal aid in such construction, the relation of the ultimate cost of constructing and maintaining the works to the public interest and to the public necessity for the works, and the adequacy of the provisions made or proposed by the applicant for such Federal financial aid for assuring proper and efficient operation and maintenance of the treatment works after completion of the construction thereof. The sums appropriated pursuant to subsection (d) for each fiscal year ending on or before June 30, 1965, and the first $100,000,000 appropriated pursuant to subsection (d) for each fiscal year beginning on or after July 1, 1965, shall be allotted by the Secretary from time to time, in accordance with regulations, as follows: (1) 50 per centum of such sums in the ratio that the population of each State bears to the population of all the States, and (2) 50 per centum of such sums in the ratio that the quotient obtained by dividing the per capita income of the United States by the per capita income of each State bears to the sum of such quotients for all the States. All sums in excess of $100,000,000 and not in excess of $400,000,000 appropriated pursuant to subsection (d) for any fiscal year beginning after June 30, 1969, shall be allotted among the States eligible for reimbursement pursuant to the seventh and eighth sentences of this subsection in the proportion that the amount each State is so eligible to receive on the first day of such fiscal year bears to the total such amounts on such day for all States, and such allotment shall not exceed the sum advanced and shall be available until the termination of the six months following the fiscal year for which made only for the purpose of reimbursing such State pursuant to the seventh and eighth sentences of this subsection. All sums in excess of $400,000,000 appropriated pursuant to subsection (d) for each fiscal year ending after June 30, 1969, shall be allotted by the Secretary from time to time, in accordance with regulations, in the ratio that the population of each State bears to the population of all States. Sums allotted to a State under the three preceding sentences which are not obligated within six months following the end of the fiscal year for which they were allotted because of a lack of projects which have been approved by the State water pollution control agency under subsection (b) (1) of this section and certified as entitled to priority under subsection (b) (4) of this section, or for other reasons, shall be reallotted by the Secretary, on such basis as he determines to be reasonable and equitable and in accordance with regulations promulgated by him, to States having projects approved under this section for which grants have not been made for lack of funds: Provided, however, That whenever a State has funds subject to reallocation and the Secretary finds that the need for a project in a community in such State is due in part to any Federal institution or Federal construction activity, he may, prior to such reallocation, make an additional grant with respect to such project which will in his judgment reflect an equitable contribution for the need caused by such Federal institution or ac-

tivity. Any sum made available to a State by reallotment under the preceding sentence shall be in addition to any funds otherwise allotted to such State under this Act. The allotments of a State under the second, fourth, and fifth sentences of this subsection shall be available, in accordance with the provisions of this section, for payments with respect to projects in such State which have been approved under this section, except that in the case of any project on which construction was initiated in such State after June 30, 1966, which was approved by the appropriate State water pollution control agency and which the Secretary finds meets the requirements of this section but was constructed without such assistance, such allotments for any fiscal year shall also be available, together with the allotments under the third sentence of this subsection, for payments in reimbursement of State or local funds used for such project to the extent that assistance could have been provised under this section if such project had been approved pursuant to this section and adequate funds hade been available. In the case of any project on which construction was initiated in such State after June 30, 1966, and which was constructed with assistance pursuant to this section but the amount of such assistance was a lesser per centum of the cost of construction than was allowable pursuant to this section, such allotments shall also be available for payments in reimbursement of State or local funds used for such project to the extent that assistance could have been provided under this section if adequate funds had been available. Neither a finding by the Secretary that a project meets the requirements of this subsection, nor any other provision of this subsection, shall be construed to constitute a commitment or obligation of the United States to provide funds to make or pay any grant for such project. For purposes of this section, population shall be determined on the basis of the latest decennial census for which figures are available, as certified by the Secretary of Commerce, and per capita income for each State and for the United States shall be determined on the basis of the average of the per capita incomes of the States and of the continental United States for the three most recent consecutive years for which satisfactory data are available for the Department of Commerce.' "

On page 73, lines 16, 19, and 23, redesignate sections 106, 107, and 108 as sections 107, 108, and 109, respectively.

JUNE 18, 1968.

Hon. JOSEPH D. TYDINGS,
U.S. Senator,
Washington, D.C.

DEAR SENATOR TYDINGS: You hit the nail on the head in your letter of June 4, 1968 when you observed: "Leadership in water pollution control among the states should be rewarded, not penalized." I am sure that is not only your goal but that of our friends in the Federal Water Pollution Control Administration. However, even though I am certain no one intended to harm Maryland's program, two provisions of the Administration's bill, H.R. 15907 and companion bill S. 3206, would hurt us badly. These are the proposals to do away with the reimbursement feature and the requirement that bonds sold to prefinance Federal grant offers be taxable.

I have been in touch with Congressman Fallon's office and he has been very helpful. Enclosed is a copy of a statement I prepared for the record at the request of Congressman Blatnik. Mr. Maurice Tobin in Congressman Blatnik's office talked with me as a result of my correspondence with Congressman Fallon. The statement contains a brief summary of the Federal-State-local program that is working so well for us and the difficulties we would encounter under H.R. 15907. However, I might be able to more precisely pinpoint the exact problems in funding that we visualize.

First of all, Maryland is advancing the full amount of both Federal and State grants as sewage treatment plants are constructed. Therefore, there would be no reason for our communities to enter into the proposed contract arrangement with the Federal Government.

When the General Assembly considered prefinancing of Federal grants, the reimbursement provision added by Section 204, PL 89–753, the Water Quality Act of 1965, proved a powerful incentive. In 1967, the General Assembly authorized 50 million dollars and in this last session an additional 100 million dollars was added to a Sanitary Facilities Fund. When a Federal grant offer is made, money is made available from this fund to cover the outright State grant and any deficiency in the Federal offer. Should future Federal appropriations be sufficient to reimburse the money advanced, the reimbursement would go back into the Sanitary Facilities Fund to be used to finance still more sewage treatment works. With only a moderate degree of optimism, we believed that the fund would insure catching up with backlog needs by 1971 and staying abreast of growth needs into the early 1980's.

It was our hope that the reimbursement feature would be renewed when it expired in 1971. To terminate it on July 1, 1968, as proposed in the current amendments, would be a cruel blow to our program aspirations. I don't see how the State could continue to fund Federal grant offers if there was no statutory basis for hope that the money would be reimbursed. If we cut our rate of construction back to the present rate of Federal dollars allotted to Maryland, it would take 15 years to do what we now plan to do by 1971; i.e., bring all plants up to a level of secondary treatment with disinfection of all effluents by 1971.

We might be able to amend the State law (but that in itself would cause delay and introduce a large element of uncertainty) to take advantage of the contract arrangement whereby the Federal Government would pay principal and interest on bonds sold to finance the Federal share, but the proposed taxable requirement for bonds sold for that purpose rules it out. Our bonds are of the general revenue type retired from real estate taxes. A special issue is not sold to finance sewage treatment plant construction. Rather, from time to time as need dictates, the State borrows money through sale of bonds and distributes the proceeds to various capital improvement projects and funds such as the Sanitary Facilities Fund. Our estimated needs during a quarter, or some other period of time, are lumped with the needs of other activities and one sale of State bonds is made to cover all of the needs.

Assuming, but not conceding, that the taxable provision is justifiable and desirable, placing a Federal tax on general revenue bonds of the State would be objectionable if not downright unconstitutional. If someone wants to fight that issue, I wish they would choose something other than water pollution control works for the test case. Besides, the complications resulting from setting up special bond issues for this purpose, establishing the contracts, and keeping records on the status of repayment on myriads of grant offers would drastically worsen an already bad bookkeeping problem.

Please be assured that we are grateful for your assistance in this matter and your continuing support of Maryland's Environmental Health Program. If we can be of assistance in return, please do not hesitate to call on us.

Sincerely yours,

JAMES B. COULTER,
Assistant Commissioner,
Environmental Health Services.

NATIONAL WILDLIFE FEDERATION,
Washington, D.C., September 9, 1969.

Hon. JOSEPH D. TYDINGS,
U.S. Senate,
Washington, D.C.

DEAR SENATOR: We have been interested in learning of your intention to propose an amendment to S. 7, amending the Federal Water Pollution Control Act, and welcome an invitation to comment upon it.

As we understand it, your proposed amendment would provide that construction funds in excess of $100 million and up to $400 million would be allocated to those States which have pre-financed Federal contributions. In short, this amount (up to $300 million) would go to seven States.

The National Wildlife Federation has been gravely concerned about the failure of the Federal Government to live up to its commitments to the States in grants for the construction of municipal waste treatment plants. It is this reason, principally, that our organization has supported efforts of the "Citizens' Crusade for Clean Waters," asking the President to seek the full $1 billion authorized in construction grants. It naturally follows that in the most precarious financial conditions are those States which prefinanced grants on the assurance that the Federal share would be forthcoming. Therefore, we fully understand and appreciate your concern in this regard, and it is our opinion that the full $1 billion authorized should be appropriated in order that the Federal Government can meet all of its commitments. If this is done, the allocation of $300 million for priority treatment to those States which already have financed the Federal share would not appear to be unreasonable.

Sincerely,

LOUIS S. CLAPPER,
Conservation Director.

RESOLUTION

Resolution of the Legislative Council Committee on Intergovernmental Cooperation concerning appropriations to the states for Water Pollution Control Programs

Whereas, the Congress of the United States enacted a Water Pollution Control Act which became effective in 1957 for the purpose of encouraging and assisting the states in the development of facilities to carry out the intent of the Act; and

Whereas, the State of Maryland has vigorously cooperated in this program since its inception, having authorized bond issues between 1957 and 1968 totalling more than $176 million for this purpose; and

Whereas, the Federal Government has provided funds for the cost of qualifying projects in Maryland only to the extent of about $21,500,000 as opposed to an amount of approximately $90 million more than the State would have received if adequate funds had been authorized and appropriated; and

Whereas, the amount authorized by Congress for Fiscal 1970 is $1 billion, while the administration budget provided for an appropriation of only $214 million—Maryland's share of which would be only approximately $3,550,000; and

Whereas, this State is still faced with a very great cost for facilities to eliminate water pollution; now, therefore, be it

Resolved that the Legislative Council Committee on Intergovernmental Cooperation of the Maryland General Assembly urges its Congressional Delegation to take whatever action may be necessary to increase the appropriation for the 1970 Fiscal Year to the full authorization; and to bring about a sufficient increase in future authorizations and appropriations of monies to fully implement the purposes of the Water Pollution Control Act; and be it further

Resolved, That copies of this Resolution be submitted to each Maryland Congressman and United States Senator.

TENTATIVE STATE ALLOCATIONS OF FISCAL YEAR 1970 FWPCA GRANT FUNDS UNDER SELECTED LEVELS OF APPROPRIATION

Total	$214,000,000	$300,000,000	$600,000,000	$1,000,000,000
Alabama	4,135,700	5,681,300	11,072,900	18,261,700
Alaska	906,100	1,013,100	1,386,300	1,883,900
Arizona	2,125,400	2,741,500	4,890,700	7,756,300
Arkansas	2,835,800	3,681,000	6,629,000	10,559,900
California	14,882,600	22,318,800	48,258,800	82,845,600
Colorado	2,414,900	3,244,800	6,139,500	9,999,100
Connecticut	2,942,200	4,141,700	8,325,700	13,904,600
Delaware	1,100,300	1,311,500	2,047,900	3,029,900
District of Columbia	1,315,300	1,676,800	2,937,600	4,618,900
Florida	5,386,400	7,729,100	15,901,500	26,797,900
Georgia	4,589,000	6,454,600	12,962,500	21,639,600
Hawaii	1,355,700	1,655,000	2,699,400	4,091,800
Idaho	1,589,400	1,905,000	3,005,900	4,474,000
Illinois	9,784,300	14,553,900	31,192,300	53,376,700
Indiana	5,008,400	7,214,300	14,909,400	25,169,300
Iowa	3,311,000	4,615,600	9,166,700	15,234,600
Kansas	2,812,700	3,843,400	7,439,000	12,233,000
Kentucky	3,827,100	5,264,500	10,278,700	16,964,300
Louisiana	4,009,800	5,550,700	10,926,000	18,093,300
Maine	1,853,100	2,311,700	3,911,300	6,044,100
Maryland	3,552,100	5,019,100	10,136,500	16,959,700
Massachusetts	5,382,800	7,818,700	16,315,900	27,645,500
Michigan	7,809,500	11,510,900	24,422,500	41,638,100
Minnesota	3,919,100	5,534,200	11,168,600	18,681,000
Mississippi	3,350,200	4,380,800	7,975,600	12,768,900
Missouri	4,760,400	6,804,100	13,933,700	23,439,700
Montana	1,535,700	1,854,900	2,968,500	4,453,300
Nebraska	2,115,500	2,783,200	5,112,400	8,218,000
Nevada	959,600	1,094,500	1,565,300	2,192,800
New Hampshire	1,409,300	1,696,500	2,698,100	4,033,700
New Jersey	6,176,800	9,4074,100	19,059,900	32,410,300
New Mexico	2,058,000	2,508,000	4,077,600	6,170,400
New York	15,832,500	23,772,500	51,470,200	88,400,700
North Carolina	5,050,800	7,206,300	14,725,900	24,751,900
North Dakota	1,583,900	1,883,100	2,926,700	4,318,300
Ohio	9,555,500	14,147,900	30,167,500	51,527,100
Oklahoma	3,086,900	4,188,400	8,031,200	13,154,700
Oregon	2,429,000	3,265,800	6,184,800	10,076,800
Pennsylvania	11,029,600	16,385,000	35,066,600	59,975,400
Rhode Island	1,568,500	1,975,100	3,393,500	5,284,700
South Carolina	3,342,700	4,470,000	8,402,400	13,645,600
South Dakota	1,777,400	2,099,400	3,222,600	4,720,200
Tennessee	4,314,600	6,002,300	11,889,500	19,739,100
Texas	9,592,800	14,125,200	29,935,800	51,016,600
Utah	1,780,700	2,202,100	3,672,100	5,632,100
Vermont	1,282,200	1,466,600	2,110,200	2,968,200
Virginia	4,510,200	6,387,100	12,934,300	21,663,900
Washington	3,327,200	4,677,100	9,386,300	15,665,000
West Virginia	2,796,100	3,676,300	6,746,700	10,840,700
Wisconsin	4,388,100	6,257,700	12,779,700	21,475,700
Wyoming	1,172,700	1,328,900	1,873,700	2,600,100
Guam	1,445,500	1,477,200	1,588,000	1,735,500
Puerto Rico	3,504,900	4,616,500	8,494,200	13,664,700
Virgin Islands	1,414,000	1,429,200	1,482,400	1,553,100

ARE THE CITIES TRAPPED IN THE WATER POLLUTION CONTROL FUNDING GAP?

(By Raymond L. Brancroft)

(The Gulf Between Congressional Authorizations and Appropriations Grows Wider Each Year as Cities Struggle to Meet Tougher Standards.)

Hopes were high back in 1966 when the Congress approved the Clean Waters Restoration Act. NATION'S CITIES called it "one of the 89th Congress' most sweeping accomplishments."

And indeed it was. The act called for a steady and steep rise in federal assistance for sewage treatment facility construction—from $150 million in fiscal 1967 to $450 million in 1968, $700 million in 1969, $1 billion in 1970, and $1.25 billion in 1971. Financially hard-pressed cities and counties were enthusiastic about the prospects of really being able—with increased federal help—to meet the water quality standards then being drafted by state water agencies under the Water Quality Act of 1965.

While the lofty money authorization levels set in the 1966 act remain intact, however, the appropriations to match them have not been made by Congress. In fact, as the table on page 8 shows, the appropriations from fiscal year 1967 through 1970 (including $214 million asked for '70) totals $781 million, only a third of $2.3 *billion* authorized. Construction grant officials in the Federal Water Pollution Control Administration said in July that applications for non-existent funds continue to pile up. A total of 4,648 applications for construction grants are now languishing in FWPCA regional offices or in state water pollution bureaus.

The result of the lag in federal funds for wastewater construction projects naturally has "put the burden back on the localities" to pay for needed projects, says Robert Canham, acting executive secretary of the Water Pollution Control Federation, a national association representing both industry and government.

"This whole situation has tended to lead to a lack of confidence by local and state officials in what federal aid levels will be," Canham adds. "The states are recognizing the problem where it counts . . . through their taxpayers with the expectation of federal assistance later."

The fact that municipalities and states are taking up the slack in waste treatment facility building left by inadequate federal assistance is borne out in a new WPCF publication, *Water Pollution Control Facts*.

"The influence of the federal grants program for the construction of wastewater treatment facilities, even at its $214-million per year level, assures the proper encouragement of construction by municipalities," the report states. "Witness the 1968 increase over 1967; it showed a 20 per cent increase for a total of $1.35 billion, despite the fact that the level of federal grants funds did not increase. Fiscal 1970 continues at the $214 million level, the same as fiscal 1969. At least this will keep up the momentum."

Canham, however, wonders what will happen to the fight against water pollution when the 1966 act's current authorization expires in fiscal 1971, particularly if increased federal appropriations aren't forthcoming.

"The whole effort is bound to suffer," he says.

In advocating that Congress appropriate the full $1 billion authorized for fiscal 1970 construction grants, the National League of Cities has pointed out the bind in which many cities will find themselves if they cannot get federal assistance.

"Local improvements must be made since the act provides for enforcement through the courts," said NLC President C. Beverly Briley, Mayor of Nashville, in a letter to President Nixon urging his support of the full appropriation.

"Local units will be compelled to proceed with major improvements and expenditures whether or not the federal government meets its obligations. The sad product will be that cities will be forced to clean up the waterways but will do so at the expense of improving housing, education, and other critical local needs which draw upon the same resource base."

Already communities in Pennsylvania, Missouri, Florida, California, and New Jersey have faced state-imposed restrictions on future residential and commercial construction because of water pollution problems.

But many observers, including the NLC, feel it is unfair for cities to be forced to comply with water quality standards while many are not able to financially meet them because Congress has failed to appropriate funds already authorized.

Mayor Briley urged the Administration to either support efforts to get full appropriations or, if this is not possible, to modify the schedule of compliance to permit cities a longer period of time in which to meet water quality standards.

1968 MUNICIPAL WASTE INVENTORY[1]

	Primary treatment			Secondary treatment			No treatment	
Size of place 1960 census	Total plants	Communities identifiable	Population served	Total plants	Communities identifiable	Population served	Communities	Population served
Unknown	112	65	6,284,805	643	302	8,049,603	15	271,725
Under 500	261	239	587,361	1,231	1,117	1,820,942	252	79,640
500 to 1,000	355	338	249,101	1,422	1,334	1,322,214	333	228,444
1,000 to 2,500	623	550	980,302	2,160	1,945	3,422,129	491	685,556
2,500 to 5,000	368	318	1,110,813	1,329	1,103	4,325,341	215	704,898
5,000 to 10,000	279	239	2,532,269	961	781	5,763,512	143	1,649,878
10,000 to 25,000	242	211	3,453,900	771	519	8,875,655	82	1,354,855
25,000 to 50,000	106	83	3,063,100	258	166	6,588,635	25	839,075
50,000 to 100,000	48	41	3,374,220	158	74	6,192,422	14	1,071,710
100,000 to 250,000	35	18	3,419,215	97	39	6,604,168	8	1,224,070
250,000 to 500,000	17	9	3,307,525	76	10	4,200,285	2	858,905
Over 500,000	22	6	15,372,410	77	9	18,620,880	2	2,305,900
Totals	2,468	2,117	43,735,021	9,183	7,399	75,785,786	1,582	11,274,656

[1] Includes 1962 rather than 1968 conditions for the States of New York, New Jersey, Pennsylvania, Iowa, and Arkansas.

Source: "The Cost of Clean Water and Its Economic Impact," vol. 1, 1969 (preliminary data). Federal Water Pollution Control Administration.

The primary reason for lack of adequate federal financing of the 1966 Clean Waters Restoration Act is the same given for other domestic program appropriation lags: the Vietnam War. Under prodding from the budget cutters, the Administration has sent Congress an alternative plan for financing waste treatment plant construction. Under the plan, the Secretary of the Interior could enter into contracts up to 30 years in length with a local or state government to pay the federal share of the costs of treatment plants. This means larger bond issues would have to be floated and the locality or state would have to pick up the interest on the federal share. Federal payments to the state or local government would be made up to 30 years to cover that U.S. share. The National League of Cities and other groups representing local governments are opposed to the plan. "We think it stinks," said one NLC staffer.

As Joe G. Moore, Jr., the former commissioner of the Federal Water Pollution Control Administration, expressed it at a conference earlier this year:

"Congress . . . will again this year wrestle with the problem of how to provide additional funds for the construction of waste treatment facilities without appropriating money."

David D. Dominick, Moore's successor, expresses disappointment at the length of time it took to get the alternate financing proposal to Congress. But, he adds, "we must make the best of a tight budget situation because right now we are lagging in the fight for clean water."

Dominick's FWPCA is caught in the middle of the financing dilemma. It pushed hard for an appropriation of $600 million for construction grants in the proposed 1970 budget but the Bureau of the Budget chopped that request to $214 million, the same as that appropriated in 1969.

"It is most important that we make every effort in Washington to keep faith with the states that have already begun construction on their own," Dominick says. "We must keep faith with the municipalities which need additional financial assistance in order to meet the water quality standards to which they have agreed."

FWPCA officials in the field also feel the pinch of congressional promises in the light of funding realities. Richard A. Vanderhoof, director of FWPCA's Ohio Basin Region, notes the "clearly incompatible" nature of water quality standards and the funds available to meet them.

"We're making progress in water pollution control if everyone would stand still," Vanderhoof says. "But we must run faster. The combination of industrial growth and municipal growth almost puts us in a position of status quo, particularly with the level of funds we have available."

Although it is generally agreed that there is a whopping backlog of unmet sewage treatment needs in the U.S. (a 1967 FWPCA estimate put the total at $8 billion to provide secondary treatment for most of the urban population), the 1969 edition of FWPCA's *The Cost of Clean Water and Its Economic Impact* comes up with a much smaller backlog estimate of less than $2 billion.

"Only a fault in basic assumptions or a significant change in circumstances can account for the variation found to exist between various estimates of the cost of water pollution and control," the agency report says.

"It may be argued," the report continues, "that the concept underlying almost every cost estimate that has been made—that is, the idea of a fixed backlog—is no longer a valid assumption in light of the current status of waste treatment as reflected in the 1968 Municipal Waste Inventory.

"Water pollution is a process as well as a condition. It is dynamic in its occurrence; fluctuating in its circumstances. So water pollution control must be flexible in its approaches; and time forms an essential element in estimates of its cost.

"This document [the report], then, views the municipal costs of water pollution control within a context of dynamism. It gropes with the question of determining an *appropriate rate of investment* rather than establishing a final cost of water pollution control. In substituting the dynamic view for the static one, it recognizes the disagreeable fact that pollution control will continue to require expenditures, that pollution cannot be ended by spending any single sum. It loses something in apparent precision. It is felt, however, that the view compensates for any lack of definition by bringing us closer to a manageable statement of real conditions.

"The changed way of looking at things imposes a broader view and forces recognition of problems in relating federal programs to events in such a way that the programs will not be out of date or mis-scaled by the time they are initiated. While all the ramifications of the approach are not understood, analyses now being undertaken can be expected to yield some insights over the coming year. These may be useful in recasting legislation after the expiration of current authorization in fiscal year 1971."

The FWPCA report also points out that new treatment plant investments are fairly close to the estimated need for construction and that rates of investment for interceptors and outfalls are very close to the level of indicated requirement. "But sewer, replacement, and expansion shortcomings seem to be developing," it adds. "Since 1963 the construction of new waste treatment plants has been declining relative to the other major categories of investment that qualify for FWPCA construction grants—replacements, additions, and installation of interceptor sewers."

But the FWPCA notes that the decline in new treatment projects should not be a surprise. An "enormous number" of new plants—more than 7,500—have been built between 1952 and 1967 and the great majority of the population with sewers now receives some sort of waste treatment.

Since only four cities over 250,000 population (Honolulu, New Orleans, Memphis, and parts of New York City) remain available for *initial* waste treatment investments, the coming investment in new plants is concentrated in small towns. The FWPCA report says communities under 10,000 population now account for almost half of the dollar value of investment for new waste treatment plants, up from slightly more than a third during the 1952–55 period.

Estimates from the states in their program plans indicate that municipal waste handling investments over the 1969 through 1973 period will amount to about $6 billion, roughly equal to that spent over the past five years, the FWPCA report says. It is very likely that spending for upgrading, expansion, and replacement needs in 1969 will exceed the outlays for new plant investments. "There seem to be great expansion and replacement needs in cities of all sizes," the report notes.

Adding to this trend will be the need for advanced waste treatment to meet the stricter state water quality control standards. Tertiary or advanced waste treatment is a state goal for many Indiana communities by 1977, is contemplated for some Ohio towns, is being phased into the Chicago system, and is planned for part of Long Island. Construction costs zoom upward for advanced treatment facilities.

The need for advanced treatment, the increased emphasis on upgrading operational efficiency, and the need to raise operator wages will increase operating and maintenance costs of municipal waste treatment plants "very sharply in the immediate future," the FWPCA report notes. Already these operating and maintenance costs total $150 million to $200 million a year, a doubling in the last decade.

In summarizing its findings, the FWPCA concludes:

"It would appear, then, that there may be a substantial gap opening between the amount the nation expects to spend—as measured by state program plans and by the level of federal construction grant appropriations—and the amount that will be required to complete the connection of all sewered places to waste treatment plants and to expand, replace, and upgrade treatment where it now exists.

"The fact that the states as a group anticipate programs that will involve a level of spending very close to that of the last six years is a cause for major concern, despite the major accomplishments of the last six years.

"The findings of this report show that investment requirements imposed by new plant construction, expansion, replacement and upgrading of plants, accelerating acceptance of industrial wastes in the municipal plant, increasing levels of waste reduction being required, and the fact that a very significant portion of needed new investment occurs in precisely those places where cost experience in the past has been highest, will all result in pressing capital requirements upward significantly for many years."

ST. JOSEPH, MO., FACES ITS FINANCIAL BIND

As an example of one city's efforts to meet its water pollution control responsibilities, here are excerpts from the testimony of Mayor Douglas A. Merrifield of St. Joseph, Mo. (pop. 80,000), before the Public Works Subcommittee of the Senate Appropriations Committee June 9. He was speaking on behalf of the National League of Cities and U.S. Conference of Mayors in support of full funding for fiscal 1970 of the $1 billion authorized for waste treatment project assistance.

"In the past few years, St. Joseph has placed in operation or put under construction nearly $7 million worth of water and sewer improvements. I am proud of this record, and believe it exemplary of the efforts of municipalities around the nation. The city is currently pushing ahead on another $2,512,000 of construction. For this program we have been advised that a grant of $1,290,000 is approved as a reimbursable grant if waste treatment funds are appropriated. In good faith, the city is underwriting this new construction and advising our citizens that the federal government, in due time, will reimburse us for a portion of the improvement costs. St. Joseph has planned another ambitious project, costing about $3 million, to complete its primary treatment program. However, it will be very difficult for us to finance this project unless increased federal aid to provide the 50 per cent matching share is assured. . . .

"Municipal bond interest rates are now at an all time high. In 1961 St. Joseph issued local sewer bonds at a 2.98 per cent interest rate. Today municipal water and sewer bonds are marketed at rates of 5 to 6 per cent and more. This means that debt service charges for long term financing projects such as waste treatment facilities will often exceed principal payments over the life of the bond. Despite record high interest rates, municipal bonds are becoming more difficult to sell. Large commercial banks, the traditional purchasers of municipal bonds, cut their net holdings of municipal bonds by nearly $1 billion in the first quarter of 1969 although a record number of municipal bond issues were presented for sale. . . .

"For clean water programs of the future, even greater levels of financing will be needed. But demands for more local action are simply not realistic unless federal support is increased. In St. Joseph we are told that programs of secondary sewage treatment must be operational by 1972. I do not believe we

can construct the $4 million facility required before 1974, and even that will be impossible unless federal aid is available for the full 50 per cent share.

"In the distant future, the Interior Department is calling for separation of storm and sanitary sewers. Such a program could cost St. Joseph another $13 to $15 million and is estimated to cost between $15 billion and $30 billion nationally. My citizens will never vote bonds for this unless there is assurance of massive federal and state grants to back the local effort."

THE STATE OF NEW HAMPSHIRE
WATER SUPPLY AND POLLUTION
CONTROL COMMISSION,
Concord, September 30, 1969.

Hon. JOSEPH D. TYDINGS,
U.S. Senate,
Washington, D.C.

DEAR SENATOR TYDINGS: Quite recently there appeared in a National Wildlife Federation memorandum a reference to an amendment which you are drafting to the Water Quality Improvement Act. According to the brief statement, special consideration would be given to the "seven States" which have prefinanced at least a portion of the Federal share.

Although we realize it is impossible to be acquainted with legislative action in all fifty states, the Commission is most anxious to have it made a matter of record that the New Hampshire General Court passed a bill in the 1967 session which would prefinance the 50% Federal share.

As indicated in paragraph 376:1 of the enclosed Act, this State will prefinance "a maximum grant of ninety percent of the original costs involved in the construction of needed sewerage and/or sewage or waste treatment facilities". To finance this work over the next two years, New Hampshire's Legislature authorized bonding in the amount of one million, four hundred and ninety-nine thousand dollars. State payments on all prefinanced projects will be made over the life of the municipality's bond issue.

We would like to conclude by pointing out that the prefinancing of pollution abatement facilities has also been assumed by several New Hampshire municipalities. These communities have bonded for the entire cost of treatment works, or about 11½ million dollars up to the present time, with the hope that they will be reimbursed the 50% Federal share at a later date.

Respectfully yours,
C. W. METCALF,
Director, Municipal Services.

H.B. 162

An act to aid municipalities for water pollution control by state contribution for costs prior to receipt of federal funds

Be it Enacted by the Senate and House of Representatives in General Court convened:

376:1 Prefinancing of Federal Grant. When, for lack of adequate federal funds at the time of acquisition and construction of sewage and/or waste disposal facilities by any municipality, hereby defined as county, city, town or village district, the state of New Hampshire, in addition to contributions provided for under RSA 149-B, shall pay not in excess of fifty percent of the yearly amortization charges on the original costs resulting from the acquisition and construction of sewage and/or waste disposal facilities by it. The word "construction" and the term "original costs" shall have the same meaning for the purposes of this section as they have for the purposes of RSA 149-B. The purpose of the additional payment as established herein is to provide each municipality, in the absence of federal funds, with a maximum grant of ninety percent of the original costs involved in the construction of needed sewerage and/or sewage or waste treatment facilities.

376:2 Prefinancing of Secondary Treatment. The state of New Hampshire, in addition to contributions provided for under RSA 149-B, shall pay an additional fifty percent of the yearly amortization charges on the original costs resulting from the acquisition and construction of secondary treatment facilities in the cities of Concord, Lebanon, Manchester, and Nashua, and the town of Plymouth. The word "construction" and the term "original costs" shall have the same meaning for the purposes of this section as they have under the provisions of RSA 149-B. The purpose of the additional payment as established herein is to provide the cities of Concord, Lebanon, Manchester, and Nashua, and the town of Plymouth, in the absence of federal funds, a grant of ninety percent of the original costs involved in the construction of secondary treatment facilities.

376:3 Appropriation. There is hereby appropriated for the purposes of carrying out the provisions of section 1 of this act and to furnish aid provided for in RSA 149-B, for any municipality which shall acquire or construct sewage and/or waste disposal facilities, as authorized hereunder, the sum of seven hundred fifty-nine thousand dollars for the fiscal year ending June 30, 1970, and the sum of seven hundred forty thousand dollars for the fiscal year ending June 30, 1971. The sums hereby appropriated shall be administered by the water supply and pollution control commission and shall not lapse but shall be added to the appropriation of the commission for any succeeding fiscal year to be used for the purposes herein contained.

376:4 Bond Issue. For the purpose of providing funds for the appropriations made in section 3 hereof the state treasurer is hereby authorized, under the direction of the governor and council to borrow upon the credit of the state not exceeding the sum of one million, four hundred and ninety-nine thousand dollars, and to issue bonds and notes in the name and on behalf of the state of New Hampshire. Said bonds and notes shall be issued under terms, and conditions as provided by RSA 6-A, as inserted by 1967, 88:1.

376:5 Effective Date. This act shall take effect July 1, 1969.

Approved July 2, 1969.

THE IZAAK WALTON LEAGUE
OF AMERICA, INC.
Washington, D.C., September 30, 1969.

Hon. JOSEPH D. TYDINGS,
U.S. Senate,
Washington, D.C.

DEAR SENATOR TYDINGS: We have studied with keen interest your proposed amendment No. 178 to S. 7 to amend the Federal Water Pollution Control Act; also your remarks which provide the background and rationale for the amendment. We agree that the Federal Government has a moral obligation to reimburse the 7 states (and some municipalities) which prefinanced the Federal share of construction costs for water quality treatment plants—costs totalling about $300 million. It would be unfair should the Federal Government default on this debt, and thus penalize states which have moved ahead aggressively to fulfill their responsibilities for clean water.

The problem which your amendment would resolve, as far as the 7 states are concerned, is part of the larger problem which affects all 50 states: the failure of Congress to meet the commitment made in the Clean Water Restoration Act of 1966. As you point out, the 1966 Act authorized $150 million for FY 1966, $150 million for FY 1967, $450 million for FY 1968 and $700 million for FY 1969. Appropriations through FY 1969 have totalled $731 million, about half the $1,450 million authorized for that period and upon which sum the 50 states had every reason to base their planning.

Failures to match appropriations with authorizations has seriously hurt the clean water program, slowed the momentum built up over the past two decades and shaken the faith of the public in the Federal commitment to clean water. This larger inequity affects all 50 states, including the 7 which prefinanced the Federal share, and it will be compounded, if Congress fails to appropriate the full billion dollars for FY 1970 as authorized.

It must be noted that an appropriation of $600 million for FY 1970, which you consider to be likely, would be inadequate. Earmarking the 2nd, 3rd and 4th $100 millions to reimburse the 7 states would leave a balance of $300 million for allocation among the 50 states, only $86 million above the budget request figure of $214 million. This is not enough to get the state programs back in high gear or make much of a dent in the 2¼ billion backlog of project applications.

In our judgment the direct way to resolve the problem and eliminate inequities is for Congress to appropriate the full 1 billion dollars for FY 1970 and the full $1,250 million as authorized for FY 1971 and, before the 91st Congress adjourns, extend the program authorizations beyond the end of FY 1971. It would be logical at that time to make such changes in the allocation formulae as are desirable.

Such actions will enable the states to catch up with existing backlogs, permit reimbursement to the seven states and restore the faith and confidence needed at all levels to push on aggressively toward the clean water goal.

Sincerely,
J. W. PENFOLD,
Conservation Director.

P.S.—The attached paper developed by the National League of Cities dramatically points to the fact that the appropriation—direct grant method produces the greatest return on the dollar invested in sewage treatment facilities.

EXHIBIT 1.—ALLOCATIONS OF REIMBURSEMENT FUNDS UNDER PROPOSED TYDINGS' AMENDMENT

States	States funds advanced	Percentage of total prefinancing	Possible appropriations		
			$300,000,000	$200,000,000	$100,000,000
Connecticut	$60,900,000	20.79	$62,370,000	$41,580,000	$20,790,000
New York	150,315,000	51.31	153,930,000	102,620,000	51,310,000
Maine	3,500,000	1.19	3,570,000	2,380,000	1,190,000
Massachusetts	8,500,000	2.90	8,700,000	5,800,000	2,900,000
Vermont	677,000	.23	690,000	460,000	230,000
Pennsylvania	16,095,000	5.50	16,500,000	11,000,000	5,500,000
Maryland	52,957,000	18.08	54,240,000	36,160,000	18,080,000
Total prefinancing	292,944,000				

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

Mr. JAVITS. Mr. President, will the Senator from Virginia kindly withhold his request. I understand that the Senator from Kansas (Mr. DOLE) wishes to speak generally to the bill, and then I will try to get into colloquy on the amendment.

Mr. SPONG. I am glad to withhold my request, and to yield to the Senator from Kansas, but I believe the Senator in charge of the bill has the floor.

Mr. TYDINGS. Mr. President, I ask

unanimous consent that I may yield to the Senator from Kansas without losing my right to the floor.

The PRESIDING OFFICER. Without objection, it is so ordered, and the Senator from Kansas is recognized.

Mr. DOLE. Mr. President, I rise in support of S. 7, the Water Quality Improvement Act of 1969. For the past 9 months, the Subcommittee on Air and Water Pollution of the Senate Public Works Committee has worked industriously to draft appropriate legislation to prevent and control water pollution. Of course, the Santa Barbara incident had a dramatic effect on our deliberations. After that unfortunate incident, it became apparent there would have to be legislative action. This fact is made even more apparent as we read of the increasing size of oil tankers and the potential threat of pollution.

Throughout our subcommittee hearings, there was a wide diversity of views presented on S. 7. All sides were heard and after all the testimony and all our deliberations a bill was offered that will, in my opinion, protect the public interest and at the same time not inhibit the operation of the oil and maritime industries.

Mr. President, I wish to address myself to a specific section of the bill which is of particular interest to me. Each year more and more substances of great toxicity are transported by rail, pipeline, truck, and boat in greater and greater quantities. This, of course, increases the likelihood that substances will be accidentally discharged. The people of this Nation expect the Government to be prepared in advance to respond to such discharges.

During the course of its consideration of the provisions of S. 7, the committee became aware that hazardous substances simply could not be treated as an equivalent of oil and subject to the same provisions of liability for the cost of removal. Two important differences require that hazardous substances be treated separately: First, oil is a readily recognizable substance that is not miscible with water; hazardous substances, on the other hand, cover a tremendous range of chemical elements and compounds with various characteristics, and, second, oil is, at least in most circumstances, removable from water; hazardous substances, on the other hand may or may not be. Faced with this difficult situation, I offered an amendment to segregate hazardous substances out of the oil liability provisions for separate treatment to enable a response to the clear problem of the sudden discharge of hazardous substances into our navigable waterways.

The amendment I proposed, which with certain modifications has been adopted by the committee, provides essential authority to give this Nation the ability to respond. First, section 13 of the bill, S. 7, provides authority and establishes a procedure by which the President shall designate hazardous substances. The test established by this provision is whether the substance, when suddenly discharged into the waters of the United States in any quantity presents a threat to public health and welfare. It is necessary to avoid the use of a subjective test such as "substantial quantities" because the threat to health and welfare depends on many factors such as the characteristics of the water into which the substances are discharged; the concentrations of the substances discharged; and the nature of the substance discharged. The bill therefore provides that the President shall conduct an intensive study of each substance proposed to be designated as hazardous including provision for a detailed procedure involving public participation and recourse to the courts to protect everyone's interest in the designation of a substance as hazardous for the purpose of this act.

The bill further provides that the President shall, along with designating hazardous substances, promulgate regulations, where applicable, for methods and means of removal of said substances. It is necessary that substantial expertise be brought to bear on the technological problems involved in cleanup and only the Federal Government can respond to this demand.

Once a substance has been designated as hazardous pursuant to section 13, the bill provides that for any discharge of such substance from either a vessel or an offshore facility any person in control of such facility must immediately notify the United States of such discharge. This provision is patterned after the notification requirement under the oil pollution provisions and is absolutely essential if we are to avoid damage to downstream water users that may result from the discharge of hazardous substances. It is also essential if remedial measures are to be applied in time.

Because information is simply lacking on what form of liability could be imposed upon a discharger of a hazardous substance, it is necessary to authorize the President to recommend to the Congress, after a detailed study, methods and means of assessing liability against those who discharge hazardous substances. Consequently, section 13(n) of the bill provides that the President submit a report to the Congress on the need for and desirability of legislation imposing liability for the cost of removal of hazardous substances. After this study is made, it is expected that the Congress will be in a position to legislate in this area.

Mr. President, I ask unanimous consent to have printed in the RECORD a letter from the Commissioner of the Federal Water Pollution Control Administration in response to information I requested on the problem of legislating to control the discharge of hazardous substances. This letter includes a tabulation of spills of materials other than oil since June 1, 1967 to March 1, 1969. I think the Commissioner's letter clearly establishes the need for legislation dealing with hazardous substances.

There being no objection, the letter and table were ordered to be printed in the RECORD, as follows:

U.S. DEPARTMENT OF THE INTERIOR,
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION,
Washington, D.C., July 10, 1969.

Hon. ROBERT DOLE,
U.S. Senate,
Washington, D.C.

DEAR SENATOR DOLE: You requested information on the need for regulatory, rather than study, authority in S. 7 to control hazardous substances which when discharged into waterways have adverse effect as serious or more serious than oil on the health and welfare, including fish and wildlife.

The joint Interior-Transportation report of February 1968, which was devoted to the oil pollution problem also recommended "Legislation should be developed making persons who discharge or deposit hazardous substances other than oil into the navigable waters of the United States responsible for removing these substances. The legislation should empower the Secretary of the Interior to act when such persons fail to act and to recover the costs. Such legislation would parallel the cleanup provisions of the Oil Pollution Act of 1924."

At that time, however, the public attention was aimed primarily at the oil problem as depicted by the Torrey Canyon. We had not developed sufficient information on the need for such control measures for other hazardous substances. Subsequently, in October of last year FWPCA's the North Atlantic Water Quality Management Center in New Jersey published a manual on emergency procedures to control hazardous substances in the water environment (copy enclosed).

In addition, a number of spills of hazardous substances other than oil have begun to catch the public's eye and concern. A list of some of these spills is enclosed. The most dramatic of these occurred only a few days ago. This was the massive fish kill in the lower Rhine River in Germany which has now been traced to an insecticide, endosulfan, used on vegetables, trees and other crops. It has been reported that fish placed in the affected water died within seven minutes. (A report on this spill is enclosed.) We note this spill only as an example because if it had occurred in this country, we may not have been able to do much to cleanup the spill even with authority to do so. However, the polluter would have been required to report the spill and downstream users would have had early warning in order to shut down water supply systems and take other measures to protect public health.

1. BASED ON EXPERIENCE, IS CONTROL AUTHORITY NEEDED?

We believe that there is a need for authority to control these spills when they occur with the best means available to us. The Indiana chemical spill of January 1968 which caused a fish kill of 65 miles in Buck Creek serves to emphasize the point. A complete report of the incident is enclosed.

The most recent spill of hazardous material occurred on July 9, 1969, when the acid leaching material, about 450,000 gallons, was released into the San Francisco River where 51,000 dead fish have been counted so far in the first four miles of the River. Additional information on this spill is enclosed.

It should be noted that in 1968, the largest fish kill reported occurred on the Allegheny River, Bruin, Pennsylvania where 4,029,000 fish died. A petroleum refinery lagoon overflowed releasing chemicals into the stream. Suds six feet high were created as the mixture flowed along the stream.

Phosphate mining operations were responsible for the second greatest fish kill in 1967. A settling basin dam broke moving a mass of phosphate slime into the Peach River, suffocating nearly one million fish along 76 miles of the River.

2. DEFINITION OF HAZARDOUS SUBSTANCES

At present, it is very difficult to develop a definition, except in the very broadest of terms, which leaves it open to attack for vagueness and which requires the exercise of judgment by someone on a case-by-case basis, that would cover presently known and future hazardous substances. Thus, we believe that the best approach to this problem is to establish and publish procedures for identifying particular hazardous substances and for developing methods of control

which could be applied by the discharger and Federal and State pollution control agencies. Once finally published they would be enforced in the same manner as oil discharges. This is the approach followed in the drafting service furnished for you to Mr. Jorling of the Committee staff.

The reasons for adopting this approach, rather than defining the term, are based on the fact that if discharged in water numerous factors may be responsible for the concentrations to be found in the critical zone and the degree of associated water pollution hazards. The more important factors include:

1. Quantity and type of material spilled.
2. Distance of spill from the use area.
3. Available dilution.
4. Type and nature of the water body.
5. Flow rate and tidal patterns.
6. Temperature.
7. Biodegradability and other properties of spilled material.
8. Effect of the material or reaction compounds on the water use.

The toxicity of a material may be immediately lethal or accumulative. There may also be synergism or antagonism with substances already in the water or a reaction with chemicals added during treatment. The toxic level for humans is ordinarily estimated from results of animal experimentation and normally expressed as LD_{50}, the single dose which will kill one-half of the animals in the test group. Chronic toxicity generally is not a problem with spills since the material will not remain in the vicinity sufficiently long. The toxicological effect of materials on aquatic life may be direct, or indirect by precipitating changes in the environment, and is normally expressed as TLm, the concentration at which 50% of the aquatic animals can survive. In cases where protection against chronic toxicity is necessary, safety factors of 20 or more are applied to the TLm values.

Substances in water may produce odors directly or by reactions with other materials through oxidation, reduction, etc. The products of these reactions may be more or less odorous than the original substance. The threshold odors of pure compounds may also be modified by synergistic or antagonistic effects. Taste-producing substances in water can be absorbed by the flesh of fish, making them inedible or at least unpleasantly flavored.

The effect of acid and alkali spills will be strongly influenced by the nature of the substance, degree of ionization, natural alkalinity, dilution available in the water body, and particular construction materials comprising pipes, equipment and appurtenances coming in contact with the substance. Acids and alkalis may be toxic to the acquatic environment, harm crops, cause corrosion, impart taste to drinking water or irritate the skin of those using the water for recreational purposes.

3. ARE CONTROL TECHNIQUES AVAILABLE?

Full information is not presently known on effective treatment of all toxic substances, but we do have some knowledge on this problem as explained below.

Pollution control measures are intended as possible alternatives to denying a use until natural conditions dissipate the spilled material from the use area. Control measures would normally be applied when the concentration is low enough to permit effective and practical neutralization, removal or destruction of the pollutant. However, when the spill occurs relatively close to the use and the material is highly resistant to degradation or cannot be rapidly dispersed, the use may be denied until treatment measures can feasibly be employed.

Since the present procedures are only a guide, some judgment must be made in each case to assure the safest course of action. For example, it should be noted that many of the procedures for organic compounds are based on taste and odor controls because these threshold ranges apparently provide a large margin of safety compared to the toxic levels. However, toxic levels are generally derived from tests conducted with rats and other animals. As to taste and odor thresholds, there can be substantial variation among individuals tested, conditions of the test, and effects of other compounds present in the water. Thus, taste and odor measurements must be conducted simultaneously with analytical measurement. If taste or odor are not detected but the concentration is above the maximum of the threshold range reported, the water use should be shut down and reopened only after careful consideration of the actual concentration and toxicological data. In order to estimate a safe limit of concentration for compounds in water supplies where no such limit was previously established, safety factors of 100 to 1000 were applied to the LD50 values. In certain cases, the water pollution control agency may decide to establish a concentration limit lower than the taste and odor thresholds shown herein.

Carbon treatment is the primary procedure recommended for removal of organic contaminants. Effectiveness of adsorption depends on the size and structure of the organic molecule and other factors. However, it appears that 12 to 24 inches of fresh activated carbon placed on top of the sand filter beds would be the most satisfactory treatment method for the organic materials given in the following sheets. Exhausted carbon is removed by backwashing the filter and collecting the material in a screen container. An alternate method is to slurry powdered carbon in water and to effect removal in the settling basins. Organic pollutants may also be removed by oxidation with chlorine or other oxidizing agents. Although breakthrough chlorination may be appropriate with some of the organics, carbon adsorption appears more generally applicable, dependable and practical.

In summary, while the state of the knowledge in this area is far from perfect, we believe that enough is known to institute a control program with the procedures mentioned above. Most importantly, such a program must include requirements for notification of discharges of any substance so that action can be taken to prevent adverse effects. Early warning, even if we do not have adequate cleanup techniques in all cases, will significantly help to protect public health and avoid damage to water use facilities and in some cases protect the fish and wildlife environment.

If we may respond further, or additional information is required, please do not hesitate to let us know.

DAVID D. DOMINICK,
Commissioner.

SPILLS OF MATERIALS OTHER THAN OIL, JUNE 1, 1967, TO MAR. 1, 1969

Location	Material	Quantity/source	Damages	Waters affected	Company responsible	Remarks
Carbo, Va	Alkaline fly ash slurry	400 acre-feet; dike failure	216,000 fish killed. Seriously damaged 102 miles of stream.	Clinch River, Va. and Tenn.	Appalachian Power Co	Study of methods for handling fly ash was initiated.
Dunreith, Ind	Acetone cyanohydrin	1,200 gals. (2,800) lb. cyanide from railroad tank car.	Fish killed. Cattle died after drinking water.	Buck Creek, a tributary of the Big Blue River.	Pennsylvania RR. and Norfolk & Western RR.	Cyanide liberated when chemical got into alkaline waters. H. & H. added to stream water neutralize cyanide. Penn Central RR. reimbursed State for chemical costs. Residents of town evacuated.
Chambersburg, Pa	Ethyl benzene	1,000 gals. from railroad tank car (railroad accident).	None reported	Conococheaque Creek, tributary of Potomac.		Material flowed over ice and evaporated.
Lampson, Ala	Cyanide compound and muriatic acid.	Unknown quantity; 2 railroad cars.	Residents of town evacuated. No report of damage to water resource.	Goose Creek	Southern Railroad	Little, if any, cyanide escaped. Small quantity of muriatic acid escaped, but was contained by dike.
Morgan City, La	Xylene	500 bbls.; ruptured barge	None reported	Atchafalaya River		Area cordoned due to fire hazard. Spilled material evaporated.
Detroit, Mich	Suspected chemical waste and coal dust.	Unknown quantity; effluent from storm sewer.	do	Detroit River	Unknown	Slick dissipated overnight.
Belle, W. Va	Methyl acrylate	1000, gals.; industrial plant	Fish killed, water intakes closed down.	Kanawha River, Winfield.	E. J. Dupont Chemical Co.	Riverflow diluted concentration.
Cheektowga, N.Y	Styrene	10,000 gals.; railroad tank car ruptured.	None reported	Buffalo River	Union Carbide Co./Penn Central RR.	Material flowed from railroad yard into sewer system draining to river.
Freeport, Tex	Caustic soda	400 tons from barge	do		Dow Chemical Co	Company removed remaining cargo from damaged barge and collected samples of water in area of spill. Material apparently diluted because no increase in pH was noted.
Everett, Mass	Xylene	500 gals. from ruptured storage tank.	Potential fire hazard.	Island End River	Carpenter-Morton Paint Co.	Fire department flushed sewer due to fire hazard.
Bordentown, N.J	Ethylated fatty synthetic alcohol.	8,000 gals. discharged from plant	Unsightly accumulation along 2 miles of riverbank.	Delaware River	Stephan Chemical Co	Material contained by tide. Removed from water and shore by the company.
Westbrook, Maine	Chemical wastes	Unknown quantity from papermill.	None reported	Presumpscot River	S. D. Warren Co	Dissipated in less than 24 hours.
Livingston, Tex	Analine	Railroad tank car ruptured	No information on	Trinity River	Santa Fe RR	10 workmen employed by Santa Fe RR. to clean tracks were hospitalized by analine burns.

Mr. DOLE. Mr. President, it has been suggested that the provisions of section 13 of S. 7 are contradictory to the 1965 Water Quality Act in that they provide for the establishment of a Federal effluent standard. Such an interpretation represents a misunderstanding of the provisions of section 13 which like the oil provisions of section 12 are aimed at the sudden and unintended release of hazardous substances into the waters of the United States. These provisions are not directed at the normal release of effluents from a manufacturing or other process. This is clearly the intent of the committee and to interpret otherwise is to misinterpret what the committee desires to achieve.

Mr. President, I urge the Senate to approve this bill.

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

The PRESIDING OFFICER. The clerk will call the roll.

The bill clerk proceeded to call the roll.

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

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

Mr. TYDINGS. Mr. President, my amendment No. 178 is pending, and I would appreciate it if I could get the views of the distinguished chairman of the Subcommittee on Air and Water Pollution.

Mr. MUSKIE. Mr. President, may I say, in response to the distinguished Senator from Maryland, in commenting on his amendment, that I have a great deal of sympathy for it, especially since, as he knows, my own State would benefit from its application.

May I say, in addition, that when the amendments of 1966 were approved, I felt one of the most important provisions in those amendments was the reimbursement provision, to which the Senator's amendment is addressed.

But let me make the third point, that that provision was, nevertheless, geared to the total authorizations of that bill, which, as the Senator in his comments has pointed out, have never been fully funded, or even reasonably funded, I think, since that time.

For that reason, the problem that the Senator's amendment poses for us is whether or not, on the basis of current funding, or even anticipated funding, the Senator's amendment would be a fair allocation of the funds as between the authorization provisions of the public law and this reimbursement provision.

Frankly, I do not consider myself to be in a fair position to pass on that point, so I would like to suggest to the Senator two things: First, that we will hold hearings next year, as we had planned, on the whole question of funding the program; second, we are hopeful, from conversation we have had on this side and from discussions with Members of the House, that the waste treatment program will be funded up to $600 million this fiscal year.

If it is, I think we will have a strong base in next year's hearings to adequately support the principle that the Senator is interested in. We will hold those hearings. We had planned to hold them, in any event. I think, if we can get the favorable action from the Appropriations Committees in both Houses that we expect, we will be in a good position to move next year on the reimbursement provision.

The distinguished Senator from New York is also interested in this problem, and it might be useful to engage in a colloquy at this point.

Mr. JAVITS. Mr. President, will the Senator yield?

Mr. TYDINGS. I yield to the Senator from New York.

Mr. JAVITS. As a Senator from a State which has half of the advance funding, and who has always expressed interest in such funds, naturally I would vote with the Senator from Maryland (Mr. TYDINGS), if it came to a vote.

We have faced this problem, and we realize that we had a pretty slippery hill to climb in trying to allocate an appropriate amount with respect to expenditures. So I proposed an amendment, which I have had printed, which sought to allow the Secretary of the Interior to apply to reimbursable payments at least the difference between what was appropriated for the States and what was actually spent by the States; that is, what was actually left over. For example, if $600 million had been appropriated and $100 million had not been actually spent, the net $100 million would go to reimburse States which had been engaged in advance funding, a total of 32 States actually involved.

I have conferred with the manager of the bill on this matter and with the Senator from Maryland (Mr. TYDINGS).

I hope very much the Senator from Maryland will consider this amendment I now propose as an interim effort intended to be of some help to the 32 States concerned, which include Maryland, my own State, and five other States to which the Senator from Maryland has referred. In addition—not in substitution for, but in addition—to provisions of existing law allowing the Secretary of the Interior to apply unobligated construction grant funds to projects approved under this act for which grants have not been made because of lack of funds, I am suggesting an alternative application of the funds; "or for the purpose of making reimbursements pursuant to the sixth and seventh sentences of this subsection, or both."

The sixth and seventh sentences provide for reallotment in the way I have described for money not actually expended, and now I am suggesting also giving accommodation to States where not only State funds but local funds may have been spent in lieu of Federal funds.

Really, it expands the options of the Secretary.

It may be that, subject to the study which the committee may make which may dictate a mandatory reallocation—which incidentally I think is very properly sought by the Senator from Maryland (Mr. TYDINGS)—this proposal would at least give the Secretary more latitude. Then we would hope, in making our presentation to the committee of the Senator from Maine (Mr. MUSKIE), that the committee would feel persuaded that we ought to have some provision along the lines of what the Senator from Maryland (Mr. TYDINGS) has suggested.

While I favor the amendment of the Senator from Maryland, in view of the position of the chairman of the committee; I doubt very much that it would get anywhere for either of us, so I would hope perhaps that the Senator from Maine (Mr. MUSKIE) could at least expand the options of the Secretary as an interim measure. I hope the Senator from Maryland would join me in such substitute and then that the committee would go ahead and study whether even more might be done for the States which engage in such extended forward operations.

Mr. TYDINGS. Mr. President, as the Senator mentioned, I conferred with him earlier. I think his amendment is a sound one. I would be happy to join with him in the substitution of his amendment for mine. I think one thing it does is put Congress clearly on record that, as funds become available, those States which provide an advanced funding under the Water Quality Standards Act of 1966 will be reimbursed.

Mr. JAVITS. Mr. President, if the Senator will yield for that purpose, I will submit, for the Senator from Maryland (Mr. TYDINGS) and myself, a substitute amendment.

The PRESIDING OFFICER. Does the Senator from Maryland wish to withdraw his amendment or modify his amendment?

Mr. JAVITS. Mr. President, I would suggest that he leave it. Let me offer my amendment. If it is adopted, at least he has not compromised his position.

Mr. TYDINGS. Mr. President, I will follow the suggestion of the Senator from New York.

The PRESIDING OFFICER. The substitute amendment offered by the Senator from New York and the Senator from Maryland will be stated.

The legislative clerk read the amendment, as follows:

On page 73, between lines 15 and 16, insert the following:

"SEC. 106. Section 8(c) of the Federal Water Pollution Control Act is amended in the fourth sentence by inserting after 'because of lack of funds' the following: 'or for the purpose of making reimbursements pursuant to the sixth and seventh sentences of this subsection, or both'."

On page 73, lines 16, 19, and 23, redesignate sections 106, 107, and 108 as sections 107, 108, and 109, respectively.

The PRESIDING OFFICER. The question is on agreeing to the substitute amendment.

Mr. MUSKIE. Mr. President, just a word to express my support of the amendment offered by the Senator from New York and the Senator from Maryland. Each of our States is involved in this problem, and I think it is a healthy thing to reemphasize that there has been, by this amendment, a restatement of the moral commitment which I think we have made. I am delighted to support the amendment at this time.

The PRESIDING OFFICER. The question is on agreeing to the Javits-Tydings substitute amendment for the original Tydings amendment.

The amendment was agreed to.

Mr. JAVITS. Mr. President, I move to reconsider the vote by which the amendment was agreed to.

Mr. TYDINGS. Mr. President, I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. JAVITS. I thank my colleague.

Mr. TYDINGS. I thank the distinguished chairman of the committee.

The PRESIDING OFFICER. The question now recurs on the amendment of the Senator from Maryland as amended by the substitute amendment.

The amendment, as amended, was agreed to.

Mr. JAVITS. Mr. President, I move to reconsider the vote by which the amendment was agreed to.

Mr. TYDINGS. Mr. President, I move to lay that motion on the table.

The motion to lay on the table was agreed to.

MESSAGE FROM THE HOUSE

A message from the House of Representatives by Mr. Hackney, one of its reading clerks, announced that the House insisted upon its amendments to the bill (S. 2546) to authorize appropriations during the fiscal year 1970 for procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, and research, development, test, and evaluation for the Armed Forces, and to authorize the construction of test facilities at Kwajalein Missile Range, and to prescribe the authorized personnel strength of the Selected Reserve of each Reserve component of the Armed Forces, and for other purposes, disagreed to by the Senate; agreed to the conference asked by the Senate on the disagreeing votes of the two Houses thereon, and that Mr. RIVERS, Mr. PHILBIN, Mr. HÉBERT, Mr. PRICE of Illinois, Mr. FISHER, Mr. BENNETT, Mr. STRATTON, Mr. ARENDS, Mr. O'KONSKI, Mr. BRAY, Mr. BOB WILSON, and Mr. GUBSER were appointed managers on the part of the House at the conference.

The message also announced that the House had passed, without amendment, the following bills of the Senate:

S. 265. An act for the relief of John (Giovanni) Denaro;

S. 330. An act for the relief of Dr. Konstantinos Nicholaos Baballaros;

S. 620. An act for the relief of Richard Vigil; and

S. 1110. An act for the relief of Nickalos George Polizos.

The message further announced that the House had agreed to the amendment of the Senate to the bill (H.R. 9825) to amend subchapter III of chapter 83 of title 5, United States Code, relating to civil service retirement, and for other purposes.

ENROLLED BILLS SIGNED

The message also announced that the Speaker had affixed his signature to the following enrolled bills:

S. 1836. An act to amend the Federal Seed Act (53 Stat. 1275), amended;

S. 2462. An act to amend the joint resolution establishing the American Revolution Bicentennial Commission;

H.R. 3165. An act for relief of Martin H. Loeffler;

H.R. 3560. An act for the relief of Arie Rudolf Busch (also known as Harry Bush); and

H.R. 11249. An act to amend the John F. Kennedy Center Act to authorize additional funds for such Center.

ORDER FOR RECESS TO 10 A.M. TOMORROW

Mr. MANSFIELD. Mr. President, I ask unanimous consent that when the Senate completes its business today it stand in recess until 10 a.m. tomorrow.

The PRESIDING OFFICER (Mr. BELLMON in the chair). Without objection, it is so ordered.

ORDER FOR RECOGNITION OF SENATOR HUGHES TOMORROW

Mr. MANSFIELD. Mr. President, I ask unanimous consent that upon disposition of the Journal tomorrow the distinguished Senator from Iowa (Mr. HUGHES) be recognized for not to exceed 1 hour.

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

ORDER FOR RECOGNITION OF SENATOR SMITH OF MAINE TOMORROW

Mr. MANSFIELD. Mr. President, I ask unanimous consent that tomorrow at the conclusion of the remarks of the distinguished Senator from Iowa (Mr. HUGHES), the distinguished senior Senator from Maine (Mrs. SMITH) be recognized for not to exceed 10 minutes.

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

NO PERIOD FOR CONSIDERATION OF ROUTINE MORNING BUSINESS TOMORROW

Mr. MANSFIELD. Mr. President, there will be no period for the transaction of routine morning business tomorrow. It is anticipated that at the conclusion of the remarks of the senior Senator from Maine (Mrs. SMITH) the Senate will resume the consideration of the pending business until approximately the hour of 2 p.m.

ORDER FOR RECOGNITION OF SENATOR CHURCH TOMORROW

Mr. MANSFIELD. Mr. President, I ask unanimous consent that tomorrow at 2 p.m., or as close thereto as possible, the distinguished Senator from Idaho (Mr. CHURCH) be recognized for not to exceed 1 hour.

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

Mr. MANSFIELD. Mr. President, for the information of the Senate, if the pending business is not completed before the Senator from Idaho (Mr. CHURCH) is recognized, we will resume consideration of the pending business after the Senator from Idaho completes his remarks.

MESSAGES FROM THE PRESIDENT

Messages in writing from the President of the United States submitting nominations were communicated to the Senate by Mr. Leonard, one of his secretaries.

EXECUTIVE MESSAGES REFERRED

As in executive session, the Acting President pro tempore laid before the Senate messages from the President of the United States submitting sundry nominations, which were referred to the Committee on the Judiciary.

(For nominations this day received, see the end of Senate proceedings.)

WATER QUALITY IMPROVEMENT ACT OF 1969

The Senate resumed the consideration of the bill (S. 7) to amend the Federal Water Pollution Control Act, as amended, and for other purposes.

Mr. MUSKIE. Mr. President, I have sent a technical amendment to the desk, which I now call up.

The PRESIDING OFFICER. The amendment offered by the Senator from Maine will be stated.

The bill clerk read the amendment, as follows:

On page 44, line 4, after the period insert the following:

"In the case of any action pursuant to this subsection such insurer or other person shall be entitled to invoke all rights and defenses which would have been available to the owner or operator if an action had been brought against him by the claimant, and which would have been available to him if an action had been brought against him by the owner or operator.".

On page 57, line 4 strike out "and".

Mr. MUSKIE. Mr. President, since reporting S. 7 it has come to the attention of the committee, as a result of correspondence from the British maritime insurance underwriters, that the liabilities provided in this legislation will be uninsurable unless the insurer or person providing evidence of financial responsibility, as required by subsection (f)(2), is specifically guaranteed the same rights as available to the owner or operator of a discharging vessel. The amendment which I am now offering carries out that purpose and has the same defenses as would have been available in an action between the insurer and the vessel.

The committee intended that the insurer have the same rights and defenses as an owner or operator. This amendment is technical to the extent that it clarifies the committee intent. The committee wants to make absolutely certain that the liabilities established in this legislation are not made uninsurable by a misunderstanding of the legislative intent.

I move the adoption of the amendment.

The PRESIDING OFFICER. The question is on agreeing to the amendment offered by the Senator from Maine.

The amendment was agreed to.

The PRESIDING OFFICER. The bill is open to further amendment.

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

The PRESIDING OFFICER. The clerk will call the roll.

The bill clerk proceeded to call the roll.

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

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

Mr. MATHIAS. Mr. President, will the Senator yield?

Mr. MUSKIE. I yield to the distinguished Senator from Maryland.

AMENDMENT NO. 205

Mr. MATHIAS. I thank the Senator from Maine for yielding to me.

I call up my printed amendment No. 205, which is a very simple amendment. It merely provides for a further opportunity for the public to participate, where that is appropriate, in the process of the granting of a license or an application, or of some change in an application or a license, and that when proper demand is made, with proper notice, there shall be a right of public hearing.

That is really all that the amendment provides, and I think it is so simple and so consistent with what we have been trying to do in every area of government, which is to provide, for the public interest, that there be a valid explanation or defense, that I respectfully solicit the support of the Senate for this amendment.

The PRESIDING OFFICER. Does the Senator wish to call up his amendment at this time?

Mr. MATHIAS. I call up the amendment.

The PRESIDING OFFICER. The amendment will be stated.

The BILL CLERK. The Senator from Maryland (Mr. MATHIAS) proposes an amendment (No. 205) as follows:

On page 62, line 25, after "cation," insert "and after providing an opportunity to interested persons for a public hearing.".

Mr. MUSKIE. Mr. President, as I understand the amendment of the distinguished Senator from Maryland, it would apply to section 16(c), which requires that there be State certification of compliance with water quality standards on any application for a Federal license or permit. What the Senator from Maryland would propose is that a public hearing be held, or be required, in any State involving certification of such an application.

Mr. MATHIAS. If interested persons so request.

Mr. MUSKIE. That is right. I think it is a reasonable amendment, Mr. President; indeed, I compliment the Senator on offering it. It has been the general thrust of the committee's approach to this problem to require public hearings, so that interested members of the public as well as the parties directly involved could have an influence upon the public policy that is developed.

So I am happy to support the amendment in behalf of the committee.

Mr. GRIFFIN. Mr. President, I rise to voice my support to the amendment offered by the distinguished junior Senator from Maryland.

An important step forward in the prevention of water pollution would be taken in the Water Quality Improvement Act of 1969 by requiring federally licensed facilities to obtain State certification that water quality standards will be met before a construction or operating license is issued.

The amendment before us will strengthen the certification process provided in the legislation by permitting a public hearing to be held at the request of an interested party before certification is granted. One of the primary purposes of this proposal is to deal with the unique problem of thermal pollution from nuclear reactors. Since the Atomic Energy Commission has no jurisdiction to consider environmental effects in its licensing function, the potential hazards of thermal discharges have not received adequate preinstallation consideration. Consequently, in order to provide the fullest opportunity for expert analysis of this problem, provision for a public hearing is absolutely necessary.

Although all of the States have adopted or are in the process of adopting temperature standards, there is still much to be learned in terms of the effect on the reproductive cycle of fish and the development of slime and aquatic weeds through the diminution of dissolved oxygen in the water. A report by a special committee on nuclear discharges appointed by Lake Michigan area States and the U.S. Department of the Interior states:

Because of relatively limited attention to thermal pollution in the past, there are few experts in the disposal of waste heat and many gaps in knowledge of behavior of waste heat in receiving waters, of its effects on water quality and uses, and of the most efficient and economical methods of disposal without damage to the aquatic environment. For example, methods of calculating the patterns that will be assumed in lake waters by heated water discharges, and the rates of cooling that may be anticipated in the receiving waters are in the developmental stage. Much additional research will be necessary before it will be possible to predict with assurance what heated water will do when discharged to a lake.

Probably one of the most uncertain factors is the quantitative effect of many nuclear powerplants. By 1980, it is estimated that 30 percent of the Nation's generating capacity will come from nuclear power. At present, in Michigan, there are two operable nuclear plants with five more in the planning and construction stages. Also, within the next 10 to 15 years there may be as many as 10 nuclear plants discharging into Lake Michigan. Thus, the almost certain large increase in nuclear facilities is reason enough for close scrutiny of each proposed plant.

Mr. President, I believe that the proposed amendment will improve the provisions in S. 7 and, by not requiring a hearing in every instance, will not unduly hamper the certification process. I might point out that Michigan is one of several States which requires that proposed uses of State waters meet applicable water standards and which provides for public hearings before approval of the use is granted. The success and feasibility of Michigan's statutory scheme emphasizes the need to insure that all State pollution standards are adhered to before any damage has occurred.

The PRESIDING OFFICER. The question is on agreeing to the amendment (No. 205) of the Senator from Maryland.

The amendment was agreed to.

The PRESIDING OFFICER. The bill is open to further amendment. What is the will of the Senate?

Mr. MATHIAS. Mr. President, I move to reconsider the vote by which my amendment (No. 205) was agreed to.

Mr. MUSKIE. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

The PRESIDING OFFICER. What is the will of the Senate?

Mr. ELLENDER. Mr. President, will the Senator from Maine yield?

Mr. MUSKIE. I am happy to yield to the Senator from Louisiana.

Mr. ELLENDER. As chairman of the Subcommittee on Public Works of the Appropriations Committee of the Senate, I have under my jurisdiction the duty of providing funds for the Atomic Energy Commission. A question has lately arisen about pollution that may result from the construction of atomic powerplants throughout the United States.

My question is whether or not this bill is broad enough to require that those who apply for a license to construct a nuclear plant will be regulated under the bill now before us.

Mr. MUSKIE. Yes; they will be subject to regulation under the bill, but I think I ought to go into a little bit of detail on that, so that the Senator may fully understand how it does so.

Under section 16(c)(1) there is a requirement, on page 62 of the bill, which reads as follows:

Any applicant for a Federal license or permit to construct or operate any facility or to conduct any activity which may result in any discharge into the navigable waters of the United States shall provide certification from the State in which the discharge originates or, if appropriate, the interstate water pollution control agency to the licensing or permitting agency and notice thereof to the Secretary that there is reasonable assurance that such facility or activity will comply with applicable water quality standards.

In order to trigger that provision of the bill, may I say to the Senator, it is necessary that the States develop water quality standards applicable to this problem. The States have not, up to this point, done so, as they would need to do if we are really to come to grips with the problem which concerns the Senator. It seems to us that this is the machinery which we ought to get started on this problem.

Under the water quality setting standards of the 1965 act, the Secretary can apply pressure, especially following this mandate, upon the States to develop those standards, and once such standards are developed, they are subject to the Secretary's approval, and then subject to enforcement under the 1965 act, first by the States, but ultimately by the Secretary.

So there will be a little time involved,

but this legislation will be effective so that, at some point in the not too distant future, it will begin to bite.

Mr. ELLENDER. But the States, as the Senator has stated, would first have to act?

Mr. MUSKIE. Yes.

Mr. ELLENDER. They would have to set State standards?

Mr. MUSKIE. Yes; most of the States may now have legislation adequate to such standards. I think they do, under the 1965 act.

Mr. ELLENDER. As the Senator may know, I understand that of the 17 or 18 plants that have been completed, some have been closed down because of the fact that there was an indication that water in the neighborhood, or even in the general environment of the place, was becoming polluted from the operation of such atomic-powered electric powerplants; and it would seem to me that we ought to place in this bill, if it is not already there, language which would permit the Federal Government to step in, in order to prevent the construction of powerplants from which there may result pollution, as a result of either their construction or their operation.

Mr. MUSKIE. Mr. President, it is my best judgment, and I so state to the Senator, that I think that we have written that kind of provision into the act, though there will be the inescapable time delay to which I have referred.

May I point out to the Senator that the provision of the bill I read applies to the construction or operation of plants that are subject to Federal license or Federal permit. There are other forms and other sources of thermal pollution, to which the Senator has addressed himself which are not subject to Federal permit or license.

Large industrial plants also discharge heated water into streams. There are coal- and oil-fired plants which do the same. Since those plants do not require Federal licenses or permits unless the construction is under the authority of the Corps of Army Engineers, there will be a great deal of thermal pollution in this country that will not be subject to the provisions of the act.

Mr. ELLENDER. Mr. President, why would it not be advisable to cover that phase of the problem?

Mr. MUSKIE. Mr. President, the States could, under their water standard setting authority, act in the matter. It is our hope that under this example set by the Federal Government they will act to cover other forms of thermal pollution within their borders.

I think we will have to keep putting pressure on.

I point out to the Senator, whose dedication I have learned to respect, that, sitting as he does on the Appropriations Committee, he is in perhaps a more effective position than I am to watch the implementation of the policy upon the nuclear powerplants.

I urge him to do so. I welcome enthusiastically his interest in this matter as I know of his influence.

We are trying to do our job on the legislation, but I welcome the interest of the Senator in it.

Mr. ELLENDER. Mr. President, I have set hearings for next week. Members of the AEC will be present to testify as to the plants already in existence.

Unless we are certain of the environmental effects of these nuclear plants, some day we may find that we have created a monster. Before the matter goes too far, I am very hopeful that we will be able to do something about it. I understand that the discharge in some areas is very bad and that it contaminates not only the water but also the air.

Mr. MUSKIE. The Senator is correct. As I think I told the Senator in conversation the other day, we had testimony in a hearing before our committee that as much as 50 percent of the flow of a river might be necessary to cool the discharge from one of these nuclear powerplants.

JUDGE CLEMENT F. HAYNSWORTH, JR.

Mr. WILLIAMS of Delaware. Mr. President, Judge Clement F. Haynsworth, Jr., has been nominated to fill a vacancy on the Supreme Court, and the Senate will soon be voting on the question of the confirmation of his nomination.

Personally, I have not made any decision as to how I shall vote on this nomination and will not do so until I have had a chance to study the record and hear the arguments regarding the allegation that some of his financial transactions may have been improper or that they interfered with his court duties.

But there is one point which has been raised that in my opinion needs to be answered; and that is, the argument that since Mr. Haynsworth and Bobby Baker had at one time—in 1958, 5 years prior to Mr. Baker's exposure—both owned stock in the same company, this association automatically raises a cloud over his qualifications.

In 1963, I took no small part in exposing the questionable financial transactions of Bobby Baker and his associates, and it was upon my insistance that those charges were presented to the Department of Justice. I am not here today to defend either Mr. Baker or any of his partners who were engaged in these questionable financial arrangements; they were a major scandal and a disgrace to the Senate.

During the 2 years of the Senate investigation into Mr. Baker's activities I spent many hours trying to unravel his various financial manipulations, and since Mr. Haynsworth's name was recently mentioned as having been connected with Mr. Baker, I have again reviewed my files. I can find no reference which would connect Mr. Haynsworth with Bobby Baker in an improper manner. If there are those who have such evidence, then in fairness they have a responsibility to present it and let it be considered on its merits. It should also be pointed out that the memorandum which Mr. Haynsworth submitted to the Judiciary Committee supports this contention.

But while we may condemn Mr. Baker and his partners who were engaged in these illegal activities, I caution the Senate not to resort to a policy of guilt by association. Such a policy may prove embarrassing to those who would promote this as an argument against the confirmation of the nomination of Mr. Haynsworth.

To emphasize this I remind the Senate of certain points which may have been overlooked:

First. Prior to 1963, when Bobby Baker's activities were first exposed, Mr. Baker held the position of secretary to the majority, and in that capacity was a daily associate of every one of us who was serving in the Senate at that time.

Second. Senator Lyndon Johnson was a close friend of Bobby Baker's and the majority leader of the Senate at the time Bobby Baker was appointed to the position of secretary to the majority. Mr. Johnson was later elected President of the United States.

Third. Mr. Abe Fortas, a friend and the personal attorney for Bobby Baker when the charges against Mr. Baker were first initiated, later severed his relationship as Baker's attorney and subsequently was appointed and his nomination confirmed by the Senate as a Justice of the Supreme Court.

Fourth. Mr. David Bress, a Washington attorney, represented Mr. Baker and and was subsequently appointed and his nomination confirmed by the Senate, to the position of U.S. attorney in Washington, D.C.

Fifth. Mr. Sheldon Cohen was a tax specialist in the Fortas law firm at the time Mr. Fortas was representing Mr. Baker during the Senate investigation. Mr. Cohen was later appointed, and his nomination confirmed by the Senate to the position of Commissioner of Internal Revenue.

Sixth. Prior to the time of Mr. Baker's exposure the then Senator from Florida, Mr. Smathers, and Mr. Baker had been associated in a business venture in Florida.

Seventh. Two former Cabinet officers, Secretary of Commerce Luther Hodges and Secretary of Treasury Henry Fowler, prior to the exposure of Mr. Baker's questionable activities and prior to their appointment, had financial interests in companies with which Mr. Baker was a stockholder. The wife of Secretary Fowler had served as an officer of one of these companies. The nominations of both of these men were confirmed by the Senate.

Eighth. One further point: I remind Senators that the Committee on the Judiciary, which will be voting on this nomination tomorrow, still carries Bobby Baker's wife on the committee payroll at a salary of $17,500 per year.

I outline this record here today not for the purpose of casting any reflection upon the integrity of any of those mentioned as having been friends or associates of Bobby Baker prior to 1963, when his questionable activities were first exposed, but merely as a reminder to the Senate of the danger of discrediting any man on the basis of "guilt by association."

I frankly admit that as one Member of the Senate who daily saw Bobby Baker for several years during the time he was serving as secretary to the majority

I liked the young man, and it was a great disappointment to me when his questionable financial transactions were first called to my attention and the necessity arose for his denunciation.

I am sure that the members of the Judiciary Committee, which committee still retains Mr. Baker's wife on its payroll, the Members of the U.S. Senate who, like me, were associates of Mr. Baker while he served as the secretary to the majority, and the Members of the Senate who voted for the confirmation of the nominations of several nominees referred to above will all agree that "guilt by association" is not a basis for arriving at our decision.

I repeat, I have not made any decision as to how I shall vote on this nomination and will not do so until I have had a chance to study the record and hear the arguments regarding the allegation that some of his financial transactions may have been improper or that they interfered with his court duties. These points do merit our consideration.

Mr. COOPER. Mr. President, will the Senator yield?

Mr. WILLIAMS of Delaware. I yield.

Mr. COOPER. Mr. President, the Senator was kind enough to show me this statement before he made it.

We all recall that it was the Senator from Delaware (Mr. WILLIAMS) who brought to the Senate the information upon which the inquiry into Bobby Baker's case was initiated.

I was a member of the Committee on Rules and Administration which conducted the investigation at that time. Again and again, throughout that very sad period, the Senator from Delaware bore the chief burden of presenting evidence and of insisting upon a full investigation.

I think the Senator has done what is typical of him with respect to his fairness. I point out that it is enough to say that the Senator has done what is typical of him with respect to being absolutely fair.

I find myself in the same position as the Senator from Delaware. I have not determined how I will vote on the matter.

I commend the Senator from Delaware for his statement.

Mr. WILLIAMS of Delaware. Mr. President, I thank the Senator.

Two of the men I mentioned came before our committee for confirmation. I knew about their previous friendship with Bobby Baker. We saw nothing wrong with it. I was the one who moved that their nominations be reported favorably to the Senate.

There have been other nominations that I have opposed, but I think we should make our decision based upon the merits in each case. As I have stated, I am not taking any position as to what my vote on this nomination will be, although I do not doubt that there will be those who will try to read into my statement an indication of what my position will be. I merely want to emphasize that I will try to arrive at the decision on the basis of the merits of the case and not on the basis of any guilt by association.

Since this question as to Mr. Haynsworth's connection with Mr. Baker has arisen in the press several reporters have asked me, "Do you know anything about it?" I thought I had better make one clear statement for all concerned. So far as I can determine I have seen nothing whatever in the files that would indicate any improper connection.

I am merely trying to clarify my position, in fairness, and I do that as one who may or may not vote, in the final analysis, for confirmation. My decision will be based on factors other than this.

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

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

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

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

WATER QUALITY IMPROVEMENT ACT OF 1969

The Senate resumed the consideration of the bill (S. 7) to amend the Federal Water Pollution Control Act, as amended, and for other purposes.

Mr. CURTIS. Mr. President, I have an amendment at the desk, and I ask that it be read.

The PRESIDING OFFICER. The amendment will be stated.

The assistant legislative clerk read as follows:

On page 66, line 6, strike out the word "two" and insert "three"; and in line 7, strike out the word "two" and insert "three".

Mr. CURTIS. Mr. President, under section 16(c)(6) it is provided that for any facility being constructed under a Federal license on the date of enactment of S. 7, no certification under section 16(c)(1) is required for any Federal operating license necessary for such facilities, if such operating license is issued within 2 years following the date of enactment. The subsection further provides that after 2 years, the licensee must provide certification or see its operating license terminate.

This provision is directed principally at facilities licensed under the Atomic Energy Act and is designed to require those facilities to comply with applicable water quality standards particularly as they relate to thermal pollution. This objective is laudible and I support it. However, the 2-year period of time for facilities being constructed to revise their specifications is possibly too short. The installation of facilities necessary to achieve compliance with water quality standards involves millions of dollars and requires considerable time for design and construction. I, therefore, submit, and the basis of my amendment is, that the 2-year time period in order that facilities under the provisions of subsection 16(c)(6) be given added time to achieve necessary compliance.

I think this amendment is necessary to avoid undue hardship while at the same time achieving compliance with water quality standards. The amendment would merely extend the time 1 year.

I urge the adoption of the amendment. It is my hope that the distinguished chairman of the committee, who is in charge of the bill, will see fit to accept it.

Mr. MUSKIE. Mr. President, I have discussed this amendment with the distinguished Senator from Nebraska and the distinguished Senator from Delaware (Mr. BOGGS). It does not in any way change the thrust of this provision of the bill or the principle underlying it. It is a question of allowing more time for plants that began their construction before the date of enactment of this bill to adjust to its requirements. I have no objection to the amendment.

Mr. CURTIS. I thank the distinguished Senator very much.

I ask for a vote.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Nebraska.

The amendment was agreed to.

AMENDMENT NO. 132—ADDITIONAL COSPONSORS

Mr. NELSON. Mr. President, I call up my amendment No. 132, and I ask unanimous consent that the names of the following Senators be added as cosponsors of the amendment: Mr. MUSKIE, Mr. RANDOLPH, Mr. BAYH, Mr. BROOKE, Mr. BURDICK, Mr. CANNON, Mr. CASE, Mr. CHURCH, Mr. CRANSTON, Mr. DODD, Mr. EAGLETON, Mr. GOODELL, Mr. GRAVEL, Mr. HARRIS, Mr. HART, Mr. HARTKE, Mr. HOLLINGS, Mr. INOUYE, Mr. JAVITS, Mr. KENNEDY, Mr. MAGNUSON, Mr. MCGEE, Mr. MCGOVERN, Mr. MCINTYRE, Mr. MONDALE, Mr. MOSS, Mr. PELL, Mr. PROXMIRE, Mr. TYDINGS, Mr. WILLIAMS of New Jersey, and Mr. YOUNG of Ohio.

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

The amendment will be stated.

The assistant legislative clerk read as follows:

AMENDMENT NO. 132

On page 69, line 7, in lieu of "(k)" insert "(l)".

On page 72, between lines 8 and 9, insert the following: "(j)(1) The Secretary shall, after consultation with appropriate local, State, and Federal agencies, public and private organizations, and interested individuals, as soon as practicable but not later than two years after the effective date of this subsection, develop and issue to the States for the purpose of adopting standards pursuant to section 10(c) criteria reflecting the latest scientific knowledge useful in indicating the kind and extent of effects on health and welfare which may be expected from the presence of pesticides in the water in varying quantities. He shall revise and add to such criteria whenever necessary to reflect developing scientific knowledge.

"(2) For the purpose of assuring effective implementation of standards adopted pursuant to paragraph (1) the Secretary shall, in consultation with appropriate local, State, and Federal agencies, public and private organizations, and interested individuals, conduct a study and investigation of methods to control the release of pesticides into the environment, which study shall include examination of the persistency of pesticides in the water environment and alternatives thereto. The Secretary shall submit a report on such investigation to Congress together with his recommendations for any necessary legislation within two years after the effective date of this subsection."

On page 72, line 9, in lieu of "(j)" insert "(k)".

Mr. NELSON. Mr. President, in a recent grim scenario, a noted ecologist, Dr. Paul Ehrlich, projects the end of the

oceans as a significant source of life in 10 years. Mass starvation of mankind follows, then war.

Dr. Ehrlich says if present trends continue, such a disastrous end to life on earth could be perilously near.

Not surprisingly, pesticides were a key part of Dr. Ehrlich's setting for disaster. As the first dramatic danger signal of the threat to life in the sea, the ecologist cites the report in 1968 that DDT slows down photosynthesis in marine plant life.

In his article in Ramparts magazine, Dr. Ehrlich spells out the implications:

It was announced in a short paper in the technical journal, Science, but to ecologists it smacked of doomsday. They knew that all life in the sea depends on photosynthesis, the chemical process by which green plants bind the sun's energy and make it available to living things. And they knew that DDT and similar chlorinated hydrocarbons had polluted the entire surface of the earth, including the sea.

Events moved inexorably from that point on in the Ehrlich scenario, with pesticides continuing to play a major role. Through the present, all events he cites are fact. For the future, he bases his conjecture on current trends.

Implausible to project the end of the oceans and man in 10 years? There have been too many "implausibles" or "impossibles" in this century that have come true: World War I, World War II, the atomic bomb, the hydrogen bomb, the war in Vietnam, the riots in American cities and universities, the assassination of a President, a candidate for President, and an international civil rights leader. One can readily understand the perceptive comment of Nobel Prize Winning Biologist Dr. George Wald that today's youth are the first generation that believes, and with good reason, that there may be no future.

And as we move into the last third of the 20th century, it has become dramatically clear that the danger we face from the destruction of the habitat and life support systems of man by overpopulation and pollution is as great as that from nuclear holocaust.

Only a short time ago, anyone discussing our environmental problems could not have thought to include pesticides as a major threat. Like other technological innovations that have brought shocking byproducts, pesticides have come into being and then into mass use with stunning speed.

DDT DISCOVERED

For instance, DDT was first formulated in 1874. But its properties as an insecticide were not discovered and put into use until World War II. Almost immediately, DDT became known as the miracle insecticide that helped control tropical disease and win the war.

Since then, thousands of millions of pounds of DDT and other synthetic pesticides have been applied to millions of acres to regulate economic plant or animal populations, to protect food and fibre crops, reduce vectors of disease, and abate pest nuisances.

Their fame spread as did their use. Billions upon billions of pests have fallen victim to their dust, spray, or powder.

But new strains of pests developed with increased resistance to DDT and other common pesticides.

Too often, instead of seeking more effective, more selective means of pest control, the reaction of many users has been to apply more, perhaps two, three, 10 times as much, to overcome the pest's newly attained resistance.

Today, nearly 900 million pounds of pesticides, including insecticides, herbicides, fungicides, rodenticides, and fumigants, are sold annually in the United States alone, more than 4 pounds for every American. Last year, the sales of pesticides increased some 10 percent over the previous year, and by 1985, it is estimated that they will increase another sixfold.

Reports indicate that about 1 acre of every 10 in America is treated with an average of nearly 4 pounds of pesticides every year.

And in little over 25 years, DDT and other pesticides have been spread by the soil, wind, the tide, and the chain of life itself to the farthest reaches of the earth. This and other highly persistent, mobile pesticide compounds are now one of the most easily distinguishable marks of the presence of man.

GLOBAL CONTAMINATION

Six years ago, two U.S. scientists hypothesized that the entire globe may already have been contaminated by DDT. To find out, they went to Antarctica. If any area of the world were to be free of pesticide residues, it would be that isolated continent, where there are no pests, few animals or plants, and where the nearest pesticide use is thousands of miles away.

The scientists found pesticide residues in four of 16 Adelie penguin they tested, four of 16 Wedell seals, and 15 of 16 skuas—a sea bird. The evidence was inescapable. Worldwide pesticide contamination was confirmed.

Another scientist, who measured residues in the Antarctic snow melt, estimated that over the last two and a half decades, about 2,600 tons of DDT could have accumulated in the Antarctic snow and ice.

Scientists have yet to discover exactly how DDT and other pesticides have spread so far, so fast. But some things are clear: DDT, with a half life of 10 years, is remarkably hard to break down, especially in the natural environment where nature has not developed the means to decompose this synthetic compound. And pesticides such as DDT and Dieldrin are highly mobile, able to travel through the environment by any number of means.

The pesticide residues tend to concentrate to progressively higher levels when they are picked up around the globe by tiny organisms, then passed up the food chain.

A well-researched example of this characteristic was documented in California. In order to control a troublesome flying insect that was hatching in a lake in that State, the water was treated with the insecticide DDD—similar to DDT—yielding a concentration of 0.02 parts per million. Plankton, which includes microscopic waterborne plants and animals, accumulated the DDD residues at five parts per million. Fish eating the plankton concentrated the pesticide in their fat to levels from several hundred to up to 2,000 parts per million. Grebes, diving birds similar to loons, fed on the fish and died. The highest concentration of DDD found in the tissues of the grebes was 1,600 parts per million.

If it were simply a case of another compound sprawling over the earth like dirt or air, there might be little cause for concern. But the implications of the pervasive pesticide accumulation are far more serious.

ACTIVE AGAINST LIFE

Dr. Charles Wurster, an organic chemist and nationally known pesticide expert assisting the Environmental Defense Fund, likens the pesticide spread to mass use of biocides, agents which are known by scientists as "active against life."

"In general, if an organism has nerves, DDT or Dieldrin can kill it," Wurster believes. He says the action of other hard, chlorinated hydrocarbon pesticides such as Aldrin, Endrin, Heptachlor and Toxaphene is similar. Thus, Wurster says these compounds "are toxic to almost the entire animal world."

During a recent conference on pesticides in Stockholm, evidence was presented that DDT, even in very small quantities, could affect human metabolism. One of the studies cited was Russian research that indicated that workers whose jobs bring them in contact with DDT and other organochlorine pesticides were found to suffer from changes in the liver which slowed down the elimination of wastes from the body.

A major study published this summer by the National Cancer Institute found that at least 11 pesticides out of 123 chemical compounds tested induced a significantly increased incidence of tumors in laboratory animals. The 11 tumorigenic compounds included five insecticides p,p' –DDT, Mirex, bis(2-chlorethyl)-ether, chlorobenzilate and strobane; five fungicides PCNB, Avadex, Ethyl selenac, ethylene thiourea, and bis (2-hydroxyethyl) dithiocarbamic acid potassium salt; and one herbicide N-(hydroexthyl) hydrazine.

While the researchers have reserved judgment on whether these pesticides should be considered as a potential cause of cancer, it appears very certain that growing concern about the threat of pesticides to human health is entirely warranted.

In 25 years, then, we have turned loose on the earth a massive dose of compounds that can cripple or kill, and which are tragically indiscriminate in their attacks. When DDT is applied to do one job, it lingers and accumulates in the environment as a toxic threat to fish, wildlife, and possibly even to man.

Already, the petrel of Bermuda, the bald eagle and peregrine falcon of America and the blue shell crab of the sea are each being pushed to the brink of extinction by the spread of pesticides through our environment.

Like so many other environmental disasters, it is shocking that this has happened. But what is almost beyond belief is that, even from the beginning, the pesticide dangers were known.

The fact that DDT would kill wildlife was determined in 1945, the same year

that the pesticide was released for civilian use. The discovery was made by wildlife biologists working in U.S. Department of Agriculture studies.

From that point on, scientific concern continued to mount worldwide, but, unfortunately, the debate simmered out of the public eye for almost two decades.

"SILENT SPRING"

Then, in 1962, came a dramatic turning point: The New Yorker magazine serialized a book by a lady biologist in the U.S. Department of Interior that brought home to the public for the first time the rapidly building dangers from pesticide misuse. The book was "Silent Spring," by Miss Rachel Carson.

Challenging the myth that pesticides were the panacea that they were being proclaimed, Miss Carson said:

As crude a weapon as the cave man's club has been hurled against the fabric of life.

Translated into 30 languages, the book was read by millions in the United States and around the world. Almost singlehandedly, it bridged the gap between the scientist and the concerned citizen which so often exists in our complex society today.

In 1963, Miss Carson testified before the Senate Government Operations Committee, chaired by our colleague, Senator ABRAHAM RIBICOFF.

Also in 1963, a report by the President's Science Advisory Committee, chaired by Jerome Wiesner, concluded that the goal of our national efforts should be "elimination of the use of persistent toxic insecticides."

In the following Congress, I initially introduced legislation to ban the interstate sale and shipment of DDT. I subsequently introduced the same legislation in the 90th and 91st Congresses, and similar measures have since been introduced in the House. During the past three Congresses, no committee hearings have been held on these proposals.

However, interest around the country in achieving effective pesticide controls continued to build, and there was growing citizen impatience with the failure of State and Federal agencies to act.

Yet, despite the urgent warnings and concern, our government agencies have failed miserably to respond responsibly to this massive problem. Not a single Federal office has taken any significant action that would lead to the goal of "eliminating" the use of persistent toxic pesticides that was established 6 years ago by the Presidential committee.

AGENCIES INEFFECTIVE

The fact is that the Federal Government has been perpetuating this grave environmental and health problem, rather than resolving it.

It was recently revealed that the U.S. Department of Agriculture, which is charged with regulating pesticide use, has been sponsoring a program with the Air Force and other Government agencies under which 250,000 pounds of dieldrin has been applied to 56 military and civilian airports across the country over the past 15 years.

This program, which has raised strenuous objections from scientists, was twice reviewed and approved by the interdepartmental Federal Committee on Pest Control.

The committee, which is billed as the regulator of Federal pesticide use, recently confirmed that the General Services Administration and the Office of the Capitol Architect have not even submitted their pesticide programs to the committee for review.

Clearly, the Federal effort at regulating itself has been as ineffective as has the regulation of pesticide use at large.

Ironically, a number of States, as well as several foreign countries, have shown far greater willingness to act than the U.S. Government. DDT has been banned by the States of Michigan and Arizona, and overseas, by Denmark and Sweden. And countless cities and towns have stopped using DDT in their mosquito control and tree disease eradication programs. In addition, a number of States, including Wisconsin, and California, are considering steps to drastically restrict the use of DDT and other hard pesticides within their borders.

These recent State and local measures are a reflection of the citizen demand for action that has been building at a heartening pace.

For instance, the idea of creating an Environmental Defense Fund grew out of a suit filed in April 1966, against the Suffolk County Mosquito Control Commission, by Victor J. Yannacone, Jr., a young lawyer, on behalf of his wife, Carol, and all other people of Suffolk County, Long Island. The court challenge was based on a report that a DDT dumping by commission employees was the cause of a fish kill in a nearby lake.

The New York suit was successful in leading to a temporary ban on the use of DDT in Suffolk County by public agencies, and gained public recognition as one of the first attempts to argue that the citizen has the right under law to protect his environment.

Then in November of 1967, the Environmental Defense Fund brought its first court action in its own name, seeking to prevent the use of dieldrin in a Japanese-beetle control project in Michigan by the Michigan and U.S. Departments of Agriculture. Several Michigan Conservation Department affidavits, including one holding that the spraying would threaten Lake Michigan's new coho salmon fishery, were disallowed on a technicality when the State attorney general's office refused to let the department officially enter the case. The tragic results of pesticide misuse for the coho were to become evident 3 years later.

In the Michigan suit, Yannacone got a temporary order from the State court of appeals to stop the dieldrin spraying, but this injunction was dissolved after a 6-hour trial.

WISCONSIN DDT HEARINGS

One year later, the battleground shifted to the other side of Lake Michigan, to Madison, Wis., where citizen groups and the Environmental Defense Fund joined forces in a petition asking the State Department of Natural Resources to ban the use of DDT in the State under any circumstances where the pesticide can enter world circulation patterns and further contaminate the biosphere. With EDF, the petitions groups were the Citizens Natural Resources Association of Wisconsin and the Wisconsin division of the Izaak Walton League.

In the State hearing which began last December, the Alliance of Concerned Scientists and Lawyers presented extensive testimony outlining the growing pollution of the environment by persistent pesticides in the chlorinated hydrocarbon family.

Dr. Robert W. Risebrough, an environmental scientist at the University of California at Berkeley, stated that the effect of pesticides on man may be very serious. He said that man accumulates 12 parts per million of DDT in his fatty tissues before the body discharges it. He said that this is enough to stimulate enzyme production, which acts as a catalyst for bodily processes, such as digestion. Risebrough added that the death of some birds has been traced to enzyme induction by DDT, impairing their ability to reproduce.

Dr. Charles F. Wurster, Jr., an organic chemist at the State University of New York, Stonybrook, testified on the range of the pesticide residues through the world.

Other witnesses have testified that DDT goes into the atmosphere along with evaporating water, builds up to extremely high levels in predator birds and animals, and has caused new insect problems by killing predators that once held those insects in check.

Dr. Joseph Hickey, a University of Wisconsin wildlife ecologist, said that DDT has been linked to reproduction failures of certain birds, including the eagle, the osprey, and the peregrine falcon. Dr. Hickey and other researchers have traced the presence of pesticide residues to a decrease in weight and thickness of the shells of eggs produced by these birds.

In related testimony, Lucille Stickel, the pesticide research coordinator of the Interior Department's Patuxent Wildlife Research Center, stated that the presence of small quantities of DDT and its derivative DDE in the diets of mallard ducks decreased eggshell thickness, increased egg breakage, and decreased overall reproductive success.

Although the second half of the hearings, held last spring, was billed as the time for the defense against the arguments of the environmentalists, the pesticide industry, which historically has promoted more pesticide use and fought new controls, made a weak defense.

Industry witnesses who were knowledgeable about the environmental impact of pesticides were few and far between. Instead, defense witnesses relied on shopworn repetitions of the past triumphs of DDT and trotted out research from a decade ago which purported to show that the health of pesticide workers was not impaired by constant exposure to the compounds.

In fact, witnesses for the defense often provided the environmentalists with valuable evidence to support their contentions. For example, a Shell Development Co. scientist confirmed the fact that DDT does not remain in the soil, but has a great deal of mobility and persistence which enables it to infiltrate the at-

mosphere, the waters, and the total environment.

Another witness for the DDT defense, a U.S. Department of Agriculture pesticide official, admitted that his agency relies almost totally on industry claims regarding health and environmental effects.

An initial decision on the environmentalists' petition is expected before the end of this year.

COHO SALMON SEIZED

Midway through the Wisconsin hearings, a new and dramatic confirmation of pesticide dangers was announced to Wisconsin and the Nation: The U.S. Food and Drug Administration was seizing 28,150 pounds of frozen Lake Michigan Coho salmon because it said high DDT and dieldrin residues had made the fish unfit for human consumption.

According to the FDA, the concentration of DDT in the salmon was found to be up to 19 parts per million, while the accumulation of dieldrin was just short of 0.3 of a part per million, both levels considered hazardous by the FDA and the World Health Organization.

The contamination of the Coho challenges a basic foundation of the pesticide argument that has been sounded for a quarter of a century—that pesticide use is invariably an economic benefit, that is to say, an "economic" poison.

One might ask the commercial fisherman who sees the Coho salmon as a great new opportunity in a lamprey-ravaged Great Lakes fishery whether the current pesticide approach is "economic." One might also ask the same question of the resort owner in northern Michigan who saw his business skyrocket with the introduction of the salmon in Lake Michigan in 1965.

One might ask the economic benefit question of the Michigan Department of Natural Resources, which during the 1966 EDF suit attempted to warn of the danger to the Coho, and which has invested millions of dollars to plant Coho salmon fry in Lake Michigan only to see nearly a million of the fry killed by the pesticide contamination. And, finally, one might ask the economic effects if the national recreation resource of the Great Lakes, enhanced by millions of State and Federal tax dollars, is further damaged by the pesticide peril to the salmon and other lake resources, including the very quality of the water itself.

Ironically, the Lake Michigan Water Pollution Conference in 1968 was warned that the pesticide concentration in Lake Michigan was at the crisis point. W. F. Carbine, Great Lakes Regional Director for the Bureau of Commercial Fisheries, stated:

> Lake Michigan has the highest concentration of pesticides of any of the Great Lakes, which now are only slightly below levels that are known to be injurious to man or aquatic life. . . . A continuation at high levels or an upsurge in pesticide application in the Lake Michigan Basin could increase the pesticide concentration prevailing in the open lake from the present non-lethal level to a lethal value.

The evidence is already clear that for the United States, the Lake Michigan tragedy is only the beginning. On June 17 of this year, 52 cases of jack mackerel, caught on the west coast, were confiscated in New York by the Food and Drug Administration because of high DDT levels. The mackerel appeared to be the first ocean fish from American waters to be declared unfit for human food because of DDT.

In several central and northern New York lakes, lake trout have either been eliminated, or their reproduction seriously impaired, because of high pesticide levels. DDT concentrations in the lake trout of up to 3,000 parts per million in the fatty tissues have already been reported.

NATIONAL PESTICIDE SURVEY

A 2-year national pesticide study recently completed by the U.S. Bureau of Sport Fisheries and Wildlife found DDT in 584 of 590 samples of fish taken from 45 rivers and lakes across the United States.

The study results showed DDT ranging up to 45 parts per million in the whole fish, a count more than nine times higher than the current FDA guideline level for DDT residues in fish.

Residues of DDT reached levels higher than the FDA's temporary limit of five parts per million in 12 of the rivers and lakes, including the Hudson in New York; the Delaware; the Cooper in South Carolina; St. Lucie Canal and the Apalachicola in Florida; the Tombigbee in Alabama; the Rio Grande in Texas; Lake Ontario; Lake Michigan; the Arkansas and the White in Arkansas; and the Sacramento in California.

Residues of dieldrin, a pesticide even more toxic to humans than DDT, were found in excess of the 0.3 parts per million FDA limit in 15 rivers and lakes including the Connecticut; the Hudson; the Delaware; the Savannah in Georgia; the Apalachicola; the Tombigbee; the Rio Grande; Lake Ontario; Lake Huron; the Illinois in Illinois; the Arkansas and the White; the Red River in Minnesota; the San Joaquin in California; and the Rogue in Oregon.

In summary, the comprehensive survey found DDT in almost 100 percent of the fish samples, dieldrin in 75 percent, heptachlor and/or heptachlor epoxide in 32 percent, and chlordane in 22 percent.

Related research over the 4-year period, ending in 1968, has determined that more than 1,640,000 fish were killed by pesticide pollution in the Nation's waters, the result of pesticide spills or runoff and concentration in our waters. Millions of more fish no doubt went unborn due to reproductive failures caused by pesticides.

Laboratory research has proven that pesticide levels in water, of even the low parts per billion, can be toxic to adult fish. Levels in low parts per trillion have been found to affect reproduction.

Already, the pesticide levels in Lake Michigan, the most pesticide-polluted of the Great Lakes, are in the low parts per trillion range.

And findings released just this month by the U.S. Public Health Service reported the detection of pesticides in 76 of 79 samples of drinking water supplies around the country. Although the PHS report noted that so far the pesticide levels have not exceeded recommended permissible limits, the health service was concerned. The PHS said:

> The high frequency of occurrence and our lack of knowledge of the long-term health effects of this class of compounds dictate the need for increased surveillance and research as well as for increased recognition of the potential of this problem by state and local health departments.

In summary, the already massive and still accumulating evidence on pesticides makes it clear that these toxic compounds have become one of the most serious problems of our environment, and are threatening even greater worldwide damage. Pesticides have concentrated to the far ends of the earth; they are killing fish and wildlife; they have inhibited fish and wildlife reproduction; high pesticide residues have pushed some fish-feeding birds and other animals to the edge of extinction, and now, there is increasing concern and evidence about the threats posed to man.

The problem of pesticides in the environment is showing up most dramatically and seriously in our rivers and lakes. Although the bulk of pesticide application is on land, the compounds, especially hard pesticides like DDT and dieldrin, are persisting long enough to be carried by agricultural and urban runoff into water bodies. There, as I have pointed out, they enter and are concentrated through the food chain of marine life and fish-feeding birds.

There is little question that pesticides are a grave pollution threat, one which we have barely acknowledged, let alone dealt with. And if we continue to delay action to protect the environment and man from these compounds, I am gravely concerned for the probable consequences.

Fortunately, there is an excellent vehicle already available to us to deal with the pollution aspects of the pesticide problem—the Federal Water Pollution Control Act, and particularly the provisions added by the Water Quality Act of 1965.

PESTICIDE AMENDMENT

It is to this act which my amendment to Senate bill 7 is directed. Most simply stated, the amendment provides congressional direction to the Secretary of the Interior to take certain steps to deal with water pollution problems of pesticides under the authorities granted him by the pollution control statute.

I ask unanimous consent that an analysis of the amendment be printed in the RECORD at this point.

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

ANALYSIS OF NELSON PESTICIDE POLLUTION AMENDMENT

Under this two-part amendment, the Secretary of the Interior would utilize the authorities granted him by the Federal Water Pollution Control Act to deal with water pollution caused by pesticides.

Part One directs the Secretary to develop and issue to the states within two years water quality criteria for all pesticides. The criteria would list safe pesticide levels in water for public water supplies, propagation of fish and wildlife, recreational purposes, and other legitimate uses.

The criteria would be issued for the purpose of setting pesticide standards as part of the interstate water quality standards already adopted by the 50 states for other pollutants under Federal and state laws.

For the purpose of setting the standards,

Section 10C of the Federal Water Pollution Control Act provides that ". . . if the Secretary or the Governor of any State affected by water quality standards . . . desires a revision in such standards, the Secretary may . . . prepare regulations setting forth standards of water quality to be applicable to interstate waters. . . ."

Under this procedure, the Secretary would ask the states to revise their interstate water quality standards to include pesticide limits. If a state does not act, the Secretary is authorized to set the standards. Also, a state may, on its own, request a revision of its standards.

In addition to serving as a basis for these interstate water quality standards, the pesticide criteria would also give the Secretary a useful tool in ongoing and any future federal-state pollution abatement conferences where pesticide pollution might be occurring.

As is the case with present water quality standards, responsibility for enforcing the pesticide standards would rest primarily with the states under an implementation plan adopted by each state as part of the standards.

In the setting and implementing of the standards, Federal law provides that consideration must be given to their practicability and physical and economic feasibility.

Means of implementing the standards could include: state administrative or legislative action to restrict the use of a pesticide pollutant statewide or in the affected watershed; interstate action; integrated pest control; use of less persistent pesticides; development of agents to decompose pesticides; and biodegradability and toxicity standards on the pesticides themselves.

Part Two of the amendment directs the Secretary of the Interior, in consultation with appropriate Federal agencies and other concerned parties, to conduct a study on methods of controlling the release of pesticides into our nation's lakes and rivers and the environment. The study will include examination of the persistence of pesticides in the water and alternatives thereto. Within two years, the Secretary will submit a report on this study to Congress, together with his recommendations for any necessary legislation.

This study will assist the Secretary in perfecting existing means of dealing with pesticide pollution and in determining new ones.

Mr. NELSON. Mr. President, part 1 of the amendment requires the Secretary to develop within 2 years water quality criteria for all pesticides. The criteria would set forth the effects of various pesticide levels in water on fish and wildlife, man and the environment. Because they would outline maximum safe levels, they would represent the essential basis for action to deal with the pesticide pollution problem.

Under his existing authorities, the Secretary has already developed criteria for a wide range of pollutants, from municipal sewage to industrial waste, and these are serving as the basis for the interstate water quality standards which have been set by all 50 States as the key to the national pollution cleanup effort. Criteria have been developed for some pesticides, but they are general and incomplete, and technical personnel have advised that 2 years is a reasonable time to allow development of comprehensive pesticide criteria.

STATE STANDARDS INADEQUATE

After a review of the water quality standards already adopted by the States under the Federal act, it is very clear that pesticides are dealt with only in the most general way in the standards, and it is doubtful that this approach will lead to effective control.

For instance, only three States—Alaska, California, and South Dakota—have set specific numerical limits for pesticides in their water quality standards. Two other States—Idaho and Virginia—specifically mention pesticides in toxicity sections of their standards. Otherwise, the State standards deal with pesticides only as they would be covered in general narrative statements on toxicity or by public water supply or aquatic life criteria.

I requested the Federal Water Pollution Control Administration to do a State-by-State summary of pesticide provisions in the water quality standards, and I ask unanimous consent that it be printed in the RECORD at the end of this statement.

The PRESIDING OFFICER (Mr. CRANSTON in the chair). Without objection, it is so ordered.

(See exhibit 1.)

Mr. NELSON. Mr. President, based on the preliminary criteria already developed by the Interior Department, the comprehensive pesticide guidelines required by this amendment would no doubt indicate what level of a specific pesticide in water is hazardous to a specific species of fish. In addition, safe levels for pesticides would no doubt be determined for other water uses, including those of drinking, swimming, and boating.

The comprehensive pesticide criteria would be issued by the Secretary to the States for the purpose of setting pesticide standards as part of the interstate water quality standards already adopted by the States under Federal and State laws.

For the purpose of setting the standards, section 10(c) of the Federal Water Pollution Control Act provides:

If the Secretary or the Governor of any State affected by water quality standards . . . desires a revision of such standards, the Secretary may . . . prepare regulations setting forth standards of water quality to be applicable to interstate waters. . . .

Under this procedure, the Secretary would ask the States to revise their interstate water quality standards to include pesticide limits. If a State does not act, the Secretary is authorized to set the standards. Also, a State may on its own request a revision of its standards. The Federal law provides that consideration must be given in the standard setting to practicability and physical and economic feasibility.

In addition to serving as a basis for interstate water quality standards, the pesticide criteria would also give the Secretary a useful tool in ongoing and any future Federal-State pollution abatement conferences where pesticide pollution might be occurring.

The step-by-step procedure that would be followed under the Federal Water Pollution Control Act for standard setting and implementation follows:

First. The Secretary, after consultation with interested, concerned parties, would prepare and publish regulations setting forth water quality standards for pesticides, based on the criteria he had developed.

Second. The States would then adopt pesticide standards for their interstate waters, subject to the review and approval by the Secretary as meeting his comprehensive criteria. The States could adopt more stringent standards than provided by the criteria. If the States did not adopt pesticide standards and did not petition the Secretary for a public hearing on the question, the Secretary is authorized to promulgate the standards.

Third. Responsibility for enforcing the standards would rest primarily with the States, under an enforcement plan adopted as part of the standards. Implementation of the present water quality standards for other pollutants generally means the issuance by the States of orders to polluters to take remedial steps. If the orders are not followed, State court action could follow. Issuance of pollution cleanup orders must be preceded by further public hearings.

It is unlikely that action to implement pesticide standards under the water pollution control law would be by court action against pesticide users.

This is true principally because, unlike municipal sewage which is discharged from one point, pesticides usually enter the water in a generalized fashion from a wide range of sources. For instance, DDT may be coming to a river from 100 farms, or 15 towns, in one watershed.

IMPLEMENTATION OF STANDARDS

Fortunately, there are more equitable and efficient means available to implement and enforce pesticide standards, approaches which would be carried out by cooperative efforts between users, pollution control and other pesticide regulatory agencies, and pesticide manufacturers:

First, State administrative or legislative action to restrict or prohibit the use of a pesticide pollutant statewide or in the affected watershed. As pointed out earlier, a number of States, and cities and towns are already taking this approach.

Second, interstate action, through compacts, or the Federal-State pollution control conference provided in Federal law, to restrict or prohibit the use of certain pesticides. For instance, a committee to the Federal-State conference on Lake Michigan made specific recommendations for pesticide limits and other interstate or uniform State actions.

Third, increased use of less persistent pesticides as substitutes for compounds such as dieldrin and DDT which remain in a toxic state for years. This would be coupled with more efficient means of pesticide application. The feasibility of this approach is demonstrated by the fact that for virtually all crops, the U.S. Department of Agriculture lists more than one pesticide as being able to control harmful pests; I ask unanimous consent that a list of readily degradable pesticides prepared by the U.S. Department of Agriculture be printed in the RECORD at this point.

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

READILY DEGRADABLE INSECTICIDES (INCLUDING MITICIDES)

Common name (or trade name*)	Chemical name (or source)	Type of compound
Abate*	*0,0*-dimethyl phosphorothioate *0,0*-diester with 4,4′-thiodiphenol	Organophosphorus.
Aldicarb	2-methyl-2-(methylthio) propionaldehyde *0*-(methylcarbamoyl)oxime	Carbamate.
Allethrin	2-allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one ester of 2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarboxylic acid.	Pyrethroid.
Azinphosethyl	*0,0*-diethyl phosphorodithioate *S*-ester with 3-(mercaptomethyl)-1,2,3-benzotriazin-4(3*H*)-one	Organophosphorus.
Azinphosmethyl	*0,0*-dimethyl phosphorodithioate *S*-ester with 3-(mercaptomethyl)-1,2,3-benzotriazin-4(3*H*)-one	Do.
Azodrin*	3-hydroxy-N-methyl-*cis*-crotonamide dimethyl phosphate	Do.
Barthrin	6-chloropiperonyl 2,2-dimethyl-3-(2-methylpropenyl)cyclopropane-carboxylate	Pyrethroid.
Baygon*	*o*-isopropoxyphenyl methylcarbamate	Carbamate.
Bidrin*	3-dydroxy-*N,N*-dimethylcrotonamide dimethyl phosphate	Organophosphorus.
Binapacryl	2-*sec*-butyl-4,6-dinitrophenyl 3-methyl-2-butenoate	Aromatic ester.
Bux*	*m*-(1-methylbutyl)phenyl methylcarbamate and *m*-(1-ethylpropyl)-phenyl methylcarbamate (3:1 mixture)	Carbamate.
Carbaryl	1-naphthyl methylcarbamate	Do.
Carbofuran	2,3-dihydro-2,2-dimethyl-7-benzofuranyl methylcarbamate	Do.
Carbophenothion	*S*-[[(*p*-chlorophenyl)thio]methyl] *O,O*-diethyl phosphorodithioate	Organophosphorus.
Ciodrin*	*alpha*-methylbenzyl 3-hydroxycrotonate dimethyl phosphate	Do.
Coumaphos	*O,O*-diethyl *O*-(3-chloro-4-methyl-2-oxo-2*H*-1-benzopyran-7-yl) phosphorothioate	Do.
Dasanit*	*O,O*-diethyl *O*-[*p*-(methylsulfinyl)phenyl] phosphorothioate	Do.
Demeton	*O,O*-diethyl *S*(and *O*)-[2-(ethylthio)ethyl] phosphorothioates (mixture)	Do.
Diazinon	*O,O*-diethyl *O*-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate	Do.
Dichlorvos	2,2-dichlorovinyl dimethyl phosphate	Organophosphorus.
Dimethoate	*O,O*-dimethyl phosphorodithioate *S*-ester with 2-mercapto-*N*-methylacetamide	Do.
Dimethrin	2,4-dimethylbenzyl 2,2-dimethyl-3-(2-methylpropenyl)=cyclopropanecarboxylate	Pyrethroid.
Dimetilan	1-(dimethylcarbamoyl)-5-methyl-3-pyrazolyl dimethylcarbamate	Carbamate.
Dioxathion	*S,S′-p*-dioxane-2,3-diyl *O,O,O′,O′*-tetraethyl phosphorodithioate diphenylamine	Organophosphorus.
Diphenylamine	Diphenylamine	Aromatic amine.
Disulfoton	*O,O*-diethyl *S*-[2-(ethylthio)ethyl] phosphorodithioate	Organophosphorus.
Dursban*	*O,O*-diethyl *O*-3,5,6-trichloro-2-pyridyl phosphorothioate	Do.
Dyfonate*	*O*-ethyl S-phenyl ethylphosphonodithioate	Do.
EPN	*O*-ethyl *O*-*p*,nitrophenyl phenylphosphonothioate	Do.
Ethion	*S,S′*-mehtylene *O,O,O′,O′*-tetraethyl phosphoro dithioate	Do.
Formetanate	*m*-[[(dimethylamino)methylene] amino] phenyl methylcarbamate	Carbamate.
Galecron*	*N′*-(4-chloro-*o*-tolyl)-*N,N*-dimethylformamidine	Aromatic amidine.
Gardona*	2-chloro-1-(2,4,5-trichlorophenyl)vinyl dimethnyl phosphate	Organophosphorus.
Imidan*	*O,O*-dimethyl phosphorodithioate *S*-ester with *N*-(mercaptomethyl)-phthalimide	Do.
Landrin*	2,3,5-trimethylphenyl methylcarbamate and 3,4,5-trimethylphenyl methylcarbamate (mixture)	Carbamate.
Malathion	diethyl mercaptosuccinate *S*-ester with *O,O*-dimethyl phosphorodithioate	Organophosphorus.
Matacil*	4-(dimethylamino)-*m*-tolyl methylcarbamate	Carbamate.
Methomyl	*S*-methyl *N*-[(methylcarbamoyl)oxy]thioacetimidate	Do.
Methyl parathion	*O,O*-dimethyl *O*-*p*-nitrophenyl phosphorothioate	Organophosphorus.
Methyl Trithion*	*S*-[[(*p*-chlorophenyl)thio]methyl] *O,O*-dimethyl phosphorodithioate	Do.
Mevinphos	methyl 3-mydroxycrotonate dimethyl phosphate (*alpha*-isomer)	Do.
Mobam*	benzo[*b*]thien-4-yl methylcarbamate	Carbamate.
Mocap*	*O*-ethyl *S,S*-dipropyl phosphorodithioate	Organophosphorus.
Monitor*	*O,S*-dimethyl phosphoramidothioate	Do.
Naled	1,2-dibromo-2,2-dichlorethyl dimethyl phosphate	Do.
Neo-pynamin*	2,2-dimethyl-3-(2-methylpropenyl) cyclopropanecarboxylic acid ester with *N*-(hydroxymethyl)-1-cyclohexene-1,2-dicarboximide.	Pyrethroid.
Nicotine	(principal active ingredient from *Nicotiana tabacum*)	Natural product.
Parathion	*O,O*-diethyl *O*-*p*-nitrophenyl phosphorothioate	Organophosphorus.
Phorate	*O,O*-diethyl *S*-(ethylthio)methyl] phosphorodithioate	Do.
Phosphamidon	dimethyl phosphate ester with 2-chloro-*N,N*-diethyl-3-hydroxycrotonamide	Do.
Pyrethrins	(active insecticidal constituents of *Chrysanthemum cinerariaefolium*)	Natural product.
Rotenone	(principal active ingredient of derris and cube)	Do.
Ruelene*	4-*tert*-butyl-2-chlorophenyl methyl methylphosphoramidate	Organophosphorus.
Ryania	(powdered stemwood of *Ryania speciosa*)	Natural product.
Sabadilla	(alkaloid mixture isolated from seeds of *Schoenocaulon officinale*)	Do.
SBP-1382 (Penick)	(5-benzyl-3-furyl) methyl 2, 2-dimethyl-3-(2-methylpropenyl)=cyclopropanecarboxylate	Pyrethroid.
Schradan	octamethylpyrophosphoramide	Organophosphorus.
Sumithion*	*O, O*-dimethyl *O*-4-nitro-*m*-tolyl phosphorothioate	Do.
Trichlorfon	dimethyl (2, 2, 2-trichloro-1-hydroxyethyl) phosphonate	Do.

READILY DEGRADED, INACTIVATED, AND RELATIVELY NONPERSISTENT HERBICIDES[1]

Common name	Activity code	Chemical name	Type of compound
Acrolein	1	Acrolein	Acrylaldehyde.
Amitrole	1	3-amino-*s*-triazole	Triazole.
AMS	1	Ammonium sulfamate	Ammonium salt.
Atrazine	2	2-chloro-4(ethylamino)-6-(isopropylamino)-*s*-triazine	*s*-triazine.
Benefin	2	*N*-butyl-*N*-ethyl-*alpha,alpha,alpha*,-trifluoro-2,6-dinitro-*p*-toluidine	Aromatic amine.
Bromacil	3	5-bromo-3-*sec*-butyl-6-methyluracil	Uracil.
Ametryne	2	2-(ethylamino)-4-(isopropylamino)-6-(methylthio)-*s*-triazine	*s*-triazine.
Amiben	1	3-amino-2,5-dichlorobenzoic acid	Benzoic acid.
Atratone	2	2-(ethylamino)-4-(isopropylamino)-6-methoxy-*s*-triazine	*s*-triazine.
Barban	1	4-chloro-2-butynyl *m*-chlorocarbanilate	Carbamate.
CDAA	1	*N,N*-diallyl-2-chloroacetamide	Aliphatic amide.
CDEC	1	2-chloroallyl diethyldithiocarbamate	Carbamate.
Chloroxuron	2	3-[*p*-(*p*-chlorophenoxy)phenyl]-1,1-di-ethylurea	Urea.
Chlorpropham	1	isopropyl *m*-chlorocarbanilate	Carbamate.
2,4-D	1	(2,4-dichlorophenoxy) acetic acid	Phenoxy acid.
Dalapon	1	2,2-dichloropropionic acid	Aliphatic acid.
2,4-DB	1	4-(2,4-dichlorophenoxy)butyric acid	Phenoxy acid.
2,4-DEP	1	tris[2-(2,4-dichlorophenoxy)ethyl] phosphite	Phenoxy salt; organophosphorus.
Dicamba	2	3,6-dichloro-*o*-anisic acid	Benzoic acid.
Dichlobenil	3	2,6-dichlorobenzonitrile	Aromatic nitrile.
Dichlorprop	1	2-(2,4-dichlorophenoxy)propionic acid	Phenoxy acid.
Diphenamid	2	*N,N*-dimethyl-2,2-diphenylacetamide	Araikyl amide.
Diquat	1	6,7-dihydrodipyrido[1,2-*a*:2′,1′-*c*]pyrazinedilium salt	Heterocyclic quaternary salt.
EPTC	1	*S*-ethyl dipropylthiocarbamate	Carbamate.
Fenuron	2	1,1-dimethyl-3-phenylurea	Urea.
Fenuron TCA	2	1,1-dimethyl-3-phenylurea monotrichloroacetate	Do.
Ioxynil	1	4-hydroxy-3,5-diiodobenzonitrile	Aromatic nitrile.
Linuron	2	3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea	Urea.
MCPA	1	[(4-chloro-*o*-tolyl)oxy]acetic acid	Phenoxy acid.
Monuron	2	3-(*p*-chlorophenyl)-1,1-dimethylurea	Urea.
Norea	2	3-(hexahydro-4,7-methanoindan-5-yl)-1,1-dimethylurea	Do.
Paraquat	1	1,1′-dimethyl-4,4′-bipyridinium salt	Heterocyclic quaternary salt.
Prometone	2	2,4-bis(isopropylamino)-6-methoxy-*s*-triazine	*s*-triazine.
Prometryne	2	2,4-bis(isopropylamino)-6-(methylthio)-*s*-triazine	Do.
Propham	1	isopropyl carbanilate	Carbamate.
Pyrazon	1	5-amino-4-chloro-2-phenyl-3(2*H*)-pyridazinone	Pyridazine.
Sesone	1	2-(2,4-dichlorophenoxy)ethyl sodium sulfate	Phenoxy salt.

Footnotes at end of table.

READILY DEGRADED, INACTIVATED, AND RELATIVELY NONPERSISTENT HERBICIDES [1]—Continued

Common name	Activity code	Chemical name	Type of compound
Simetone	2	2,4-bis(ethylamino)-6-methoxy-*s*-triazine	*s*-triazine.
Simetryne	2	2,4-bis(ethylamino)-6-(methylthio)-*s*-triazine	Do.
2,4,5-T	1	(2,4,5-trichlorophenoxy)acetic acid	Phenoxy acid.
TCA	1	Trichloroacetic acid	Aliphatic acid.
Trifluralin	2	α,α,α-trifluoro-2,6-dinitro-*N*,*N*-dipropyl-*p*-toluidine	Aromatic amine.
Metobromuron	2	3-(*p*-bromophenyl)-1-methoxy-1-methylurea	Urea.
Molinate	1	*S*-ethyl hexahydro-1*H*-azepine-1-carbothioate	Carbothioate.
MSMA	2	Monosodium methanearsonate	Organoarsenical.
Naptalam	1	*N*-1-naphthylphthalamic acid	Phthalic acid.
Neburon	1	1-butyl-3-(3,4-dichlorophenyl)-1-methylurea	Urea.
Nitralin	2	4-(methylsulfonyl)-2,6-dinitro-*N*,*N*-dipropylaniline	Aromatic amine.
Nitrofen	1	2,4-dichlorophenyl *p*-nitrophenyl ether	Diphenyl ether.
PCP	1	Pentachlorophenol	Phenol.
Pebulate	1	*S*-propyl butylethylthiocarbamate	Carbamate.
Propachlor	1	2-chloro-*N*-isopropylacetanilide	Anilide.
Propanil	1	3′4′-dichloropropionanilide	Do.
Propazine	2	2-chloro-4,6-bis(isopropylamino)-*s*-triazine	*s*-triazine.
Siduron	2	1-(2-methylcyclohexyl)-3-phenylurea	Urea.
Silvex	1	2-(2,4,5-trichlorophenoxy)propionic acid	Phenoxy acid.
Simazine	2	2-chloro-4,6-bis(ethylamino)-*s*-triazine	*s*-triazine.
Swep	1	Methyl 3,4-dichlorocarbanilate	Carbamate.
TCA	1	Trichloroacetic acid	Aliphatic acid.
Terbacil	3	3-*tert*-butyl-5-chloro-6-methyluracil	Uracil.
Triallate	1	*S*-(2,3,3-trichloroallyl) diisopropylthiocarbamate	Caramate.
Trietazine	2	2-chloro-4-(diethylamino)-6-(ethylamino)-*s*-triazine	*s*-triazine.
2,4-D	1	(2,4-dichlorophenoxy)acetic acid	Phenoxy acid.
2,4-DB	1	4-(2,4-dichlorophenoxy)butyric acid	Do.
2,4-DEB	1	2-(2,4-dichlorophenoxy)ethyl benzoate	Do.
2,4,5-TES	1	sodium 2-(2,4,5-trichlorophenoxy)ethyl sulfate	Phenoxy acid, salt.
Vernolate	1	*S*-propyl dipropylthiocarbamate	Carbamate.
Bromoxynil	1	3,5-dibromo-4-hydroxybnezonitrile	Aromatic nitrile.
Butylate	1	S-ethyl diisobutylthiocarbamate	Carbamate.
CDEA	1	2-chloro-*N*,*N*-diethylacetamide	Aliphatic amide.
Chlorazine	2	2-chloro-4,6-bis(diethylamino)-*s*-triazine	*s*-triazine.
Cycloate	1	S-ethyl N-ethylthiocyclohexanecarbamate	Carbamate.
Cycluron	2	3-cyclooctyl-1,1-dimethylurea	Urea.
DCPA	1	Dimethyl tetrachloroterephthalate	Phtholic acid.
Diallate	1	*S*-(2,3-dichloroallyl) diisopropylthiocarbamate	Carbamate.
Dinosam	1	2-(1-methylbutyl)-4,6-dinitrophenol	Nitrophenol.
Dinoseb	1	2-*sec*-butyl-4,6-dinitrophenol	Do.
Diuron	2	3-(3,4-dichlorophenyl)-1,1-dimethylurea	Urea.
DNOC	1	4,6-dinitro-*o*-cresol	Nitrophenol.
DSMA	2	Disodium methanearsonate	Organoarsenical.
Endothall	1	7-oxabicycle (2.2.1) heptane-2, 3-dicarboxylic acid	Phtholic acid.
Erbon	1	2-(2, 4, 5-triclorophenoxy)ethyl 2, 2-dichloropropionate	Phenoxy acid.
Fenac	3	(2, 3, 6-trichlorophenyl) acetic acid	Do.
Fluometuron	2	1, 1-dimethyl-3-(a, a, a, trifluoro-*m*-tolyl) urea	Urea.
HCA	1	1, 1, 1, 3, 3, 3-hexachloro-2-propanome	Hexachloroacetane.
Ipazine	2	2-chloro-4-(diethylamino)-6-(isopropylamino)-*s*-trazine	*s*-triazine.
Isocil	3	5-bromo-3-isopropyl-6-methyluracil	Uracil.
KOGN	1	Potassium cyanate	Cyanate.
MCPB	1	4-[(4-chloro-*o*-tolyl)oxy]butyric acid	Phenoxy acid.
MCPES	1	2-[(4-chloro-*o*-tolyl)oxy]ethyl sodium sulfate	Do.
Metham	1	Sodium methyldithiocarbamate	Carbamate.

[1] Herbicides whose degradation, inactivation, and persistent characteristics are such that their use, in accordance with treatments registered for selective control of weeds on cropland, pose no significant problem with respect to registered tolerances for herbicide residues or crop production in following seasons. This list is not all inclusive, particularly with respect to new materials. The herbicides listed are coded as to their degradability, persistence, and inactivation in soil. The legend for the code numbers is as follows:

1. Compounds normally degraded or inactivated, and usually do not persist more than 12 months.
2. Compounds that may persist for more than 12 months, but are normally degraded or inactivated in less than 24 months.
3. Compounds that may persist for more than 24 months, but are normally degraded or inactivated, and usually do not persist for more than 48 months.

READILY DEGRADED, RELATIVELY NONPERSISTENT FUNGICIDES

Common name (or trade name*)	Chemical name	Type of compound
Captan	*N*-[(trichloromethyl)thio]-4-cyclohexene-1,2-dicarboximide	Chlorothiocarboximide.
Chloranil	2,3,5,6-tetrachloro-*p*-benzoquinone	Chlorinated quinone.
Chloroneb	1,4-dichloro-2,5-dimethoxybenzene	Chlorinated aromatic ether.
Daconil 2787*	2,4,5,6-tetrachloroisophthalonitrile	Chlorinated aromatic nitrile.
DCNA	2,6-dichloro-4-nitroaniline	Chlorinated aniline.
Dichlone	2,3-dichloro-1,4-napthoquinone	Chlorinated quinone.
Difolatan*	*cis*-*N*-[(1,1,2,2-tetrachloroethyl)thio]-4-cyclohexene-1,2-dicarboximide	Chlorothiocarboximide.
dinocap	2-(1-methylheptyl)-4,6-dinitrophenyl crotonate	Dinitrophenyl ester.
dodine	Dodecylguanidine acetate	Alkyl guanidine salt.
Dyrene*	2,4-dichloro-6-(*o*-chloroanilino)-*s*-triazine	Chlorinated triazine.
ethoxyquin	6-ethoxy-1,2-dihydro-2,2,4-trimethylquinoline	Ethoxyquinoline.
ferbam	Ferric dimethyldithiocarbamate	Ferric thiocarbamate.
folpet	*N*-[(trichloromethyl)thio]phthalimide	Chlorothiocarboximide.
Glyodin	2-heptadecyl-2-imidazoline acetate	Alkyl imidazoline salt.
Lanstan*	1-chloro-2-nitropropane	Chloronitroalkane.
Lime sulfur	30% calcium polysulfide and various small amounts of calcium thiosulfate plus water and free sulfur	Calcium polysulfides.
Maneb	Manganese ethylenebis [dithiocarbamate]	Manganese thiocarbamate.
Morestan*	6-methyl-2,3-quinoxalinedithiol cyclic *S*,*S*-dithiocarbonate	Thioquinoxaline.
Nabam	Disodium ethylenebis [dithiocarbamate]	Sodium thiocarbamate.
Niacide*	Mixture of manganese dimethyldithiocarbamate and 2-benzothiazolethiol	Manganese thiocarbamate.
Pipron*	3-(2-methylpiperidino) propyl 3,4-dichlorobenzoate	Chlorinated piperidyl benzoate.
8-quinolinol	8-quinolinol	Hydroxyquinoline.
Sulfur	Sulfur	Elemental sulfur.
Thioquinox	2,3-quinoxalinedithiol cyclic trithiocarbonate	Thioquinoxaline.
Thiram	Bis (dimethylthiocarbamoyl) disulfide	Thiocarbamate.
Tricamba	3, 5, 6-trichloro-*o*-anisic acid	Chlorinated benzoic acid.
Zineb	Zinc ethylenebis [dithiocarbamate]	Zinc thiocarbamate.
Ziram	Zinc dimethyldithiocarbamate	Do.
Mertect*	2-(4-thiazolyl) benzimidazole	Thiabendazole.
Polyram*	Mixture of 5.2 parts by weight of ammoniate of [ethylenebis (dithiocarbamato)] zinc with 1 part by weight ethylenebis [dithiocarbamic acid] bimolecular and trimolecular cyclic anhydrosulfides and disulfides.	Dithiocarbamate.
Streptomycin	2, 4-diguanidino-3, 5, 6-trihydroxycyclohexyl 5-deoxy-2-*O*-(2-deoxy-2-methylamino-a-glucopyranosyl)-3-formyl pentofuranoside.	Antibiotic (produced by *Streptomyces griseus*).
Vitavax*	2, 3-dihydro-5-carboxanilido-6-methyl-1, 4-oxathiin	1, 4-oxathiin derivative.

READILY DEGRADABLE, RELATIVELY NONPERSISTENT NEMATICIDES

Common name (or trade name*)	Chemical name (or source)	Type of compound
EDB	1,2-dibromoethane	Hydrocarbon.
DBCP	1,2-dibromo-3-chloropropane	Do.
DD	1,3-dichloropropene and 1,2 dichloropropane	Do.
Methyl bromide	Monobromomethane	Do.
Chloropicrin	Trichloronitromethane	Do.
Penphene*	2,3,4,5-tetrachlorothiophene	Do.
Dazomet	3,5-dimethyltetrahydro-1,3,5,2H-	Carbamate.
Aldicarb	2-methyl-2-(methylthio) propionaldehyde O-(methylcarbamoyl) oxime	Do.
Methomyl	S-methyl N-(methylcarbamoyl)oxy)thioacetimidate	Do.
Metham-sodium	Sodium *N*-methyldithiocarbamate	Do.
Parathion	*O,O*-diethyl O-p-nitrophenyl phosphorothioate	Organophorus.
MENCS	methyl isothiocyanate	Do.
Mocap*	*O*-ethyl *S,S*-dipropyl phosphorodithioate	Do.
Dasanit*	*O,O*-diethyl *O*-*p*-(methylsulfinyl)phenyl phosphorothioate	Do.
Bay 68138	Ethyl 4-(methylthio)-m-toyl isopropylphoramidate	Do.
Thionazin	*O,O*-diethyl *O*-2-pyrazinyl phosphorothioate	Do.
Diazinon	*O,O*-diethyl *O*-(2-isopropyl-4-methyl-6-pyrimidinyl) phosphorothioate	Do.
Carbofuran	2,3-dihydro-2,2-dimethyl-7-benzofuranyl methyl-carbamate	Do.
V-C 13 Nemacide*	*O*-(2,4-dichlorophenyl) *O,O*-diethyl phosphorothioate	Do.

Mr. NELSON. Mr. President, fourth, is the increased use of systems of integrated pest control, combining biological and chemical controls, and additionally, developing pest-resistant crop strains. This approach is showing increased success as an effective economic means of pest control:

Fifth, further development of agents which cause the persistent pesticides to decompose more rapidly in the soil and water after they have been applied to a crop and accomplished their task; and,

Sixth, the development of standards on the biodegradability and toxicity of pesticide components.

COMPREHENSIVE STUDY

Part 2 of the amendment directs the Secretary of the Interior, in consultation with appropriate Federal agencies, and other concerned parties, to conduct a study on methods of controlling the release of pesticides in our Nation's lakes and rivers and the environment. The study will include examination of the persistency of pesticides in the water and alternatives thereto. Within the 2 years, the Secretary will submit a report on this study to Congress together with his recommendations for any necessary legislation.

This study should assist the Secretary in perfecting existing means of dealing with pesticide pollution and in determining new ones, to assure equitable and enforceable standards.

There is abundant evidence to show that the six approaches—State action, interstate action, integrated pest control, use of less persistent pesticides, development of agents to decompose pesticides, and biodegradability and toxicity standards—will prove effective in the nationwide program of pesticide water quality criteria and standards which this amendment would establish.

For instance, a report published this month by the American Chemical Society described in detail a number of means by which the massive pesticide contamination can be minimized. I believe it would be helpful to outline some of the information provided by this and other reports which we have studied.

First, since pesticides have been billed as a panacea for controlling all pests, heavy application has become a national habit, whether it is needed or not. For example, cotton is often sprayed with toxic, persistent pesticides every 5, 7, or 10 days.

BETTER PESTICIDE USE

Yet, with effective use of our improved knowledge of the life cycle and behavior of both the crop and the pest, pesticide application could be cut down to only that period of the time when a pest is in fact endangering a crop.

In addition, acceptance of the valid idea that 100-percent pest control need not be achieved would further cut pesticide use. Often, damage to crop production could be prevented with just a 75-percent control of the pests.

Another valid application method which would further cut pesticide use, expense, and pollution, is treating only the areas that are heavily infested with pests. As an example, mountain water in North Carolina was found to contain more than 0.3 part per billion of DDT when an entire oak-hickory forest was treated for a tree disease. Later, when only the region of the forest affected by the disease was treated, it was impossible to find any trace of DDT in the waters. And the disease was still controlled.

If improved application equipment were used, there would be another significant reduction in pesticide use.

A Mississippi study on the aerial application of the persistent pesticide heptachlor showed that only 17 percent of the compound was applied at the proper rate on the crop. The remainder either missed the crop, was applied at a rate much lower than necessary, or was applied at a rate much higher than necessary. In another study, only 10 to 20 percent of a pesticide dust reached the plant, with the remainder missing its target entirely.

Concentrated efforts to eradicate whole pests populations also offer great promise. For example, if just three pests, the boll weevil, the boll worm, and the codling moth, were eradicated, it would be possible to reduce the amount of insecticides applied each year in the United States by some 40 percent.

BIOLOGICAL CONTROL

Insect sterilization has become one of the most effective ways to eliminate a total insect population. This was the technique that was used to eradicate the screw-worm fly from the Southeast United States. The U.S. Department of Agriculture raised millions of screw-worm flies weekly, with radioactive cobalt used to make the flies reproductively sterile.

Massive numbers of sterilized flies were air dropped regularly over thousands of square miles infested by native screw-worm flies. The sterile flies mated with the native females, and the resulting eggs failed to hatch. Repeated releases of sterile flies reduced screw-worm numbers, until the pests finally disappeared.

Presently, the Agriculture Department is maintaining a barrier zone along the United States-Mexico border to keep out new screwworms through continuously releasing sterile flies along that area.

The American Chemical Society says that the ideal pesticide should be as effective as possible against one or several pests and as safe as possible to all other forms of life, including beneficial insects and predators, fish and other wildlife, domestic animals, and man. As one of its main recommendations in its recent report, the Society urged:

> Persistent pesticides should only be used in minimal amounts and under conditions where they have been shown not to cause widespread contamination of the environment. Where possible, highly persistent materials should be replaced by rapidly degradable materials.

The feasibility of this approach is demonstrated by the fact that, as pointed out earlier, for virtually all crops, there are several pesticides, some very persistent and some not, which can effectively control harmful pests.

In several parts of the country, the cost of pesticide use has increased so drastically, that other systems of pest control with little or no reliance on chemical formulations have been adopted with great success.

INTEGRATED PEST CONTROL

Among these approaches is integrated pest control, which can be best defined as an insect population management system that depends primarily on the use of beneficial predator insects with limited reliance on the use of selective chemicals.

Presently there are successful integrated pest control programs in operation on the following crops: cotton, citrus fruits, apples and pears, tomatoes, potatoes, avocados, olives, grapes, corn, eggplant, lettuce, strawberries and others.

This means of pest control is based on the principles of applied ecology. In order for success to be achieved, the fields must be placed under periodic surveillance to determine when and where specific pest infestations occur. When a

problem is discovered, predators, parasites, or disease organisms specifically related to that pest are released to bring the pests back into a favorable balance. Very limited amounts of pesticide may be used, but only when absolutely necessary, and only on the infested area of the crop.

While many farmers and other pesticide users resist giving up chemical means of pest control because they feel that other alternatives may be more costly, the opposite has been proven true with regard to integrated pest control.

LOWER COST

Prof. Robert VandenBosch of the College of Agricultural Sciences, University of California at Berkeley, cites this example: The cost of pest control using chemical pesticides for 4,000 acres of cotton in California was $185,000. When integrated pest control replaced the use of chemical pesticides, the cost dropped to $20,000 a year. The statistics for spotted alfalfa in California are very similar, where in 1957, the cost of pest control with chemical pesticides was at least $12 million. Today, after the introduction of integrated pest control, the cost has been reduced to only $3 million, with little or no pest problems remaining.

A recent edition of the Western Fruit Grower cites additional cases of the successful and economical application of integrated pest control in place of the use of chemical pesticides. One expert in biological control has enabled a producer of Valencia oranges to reduce the cost of pest control from $200 per acre, using chemical control, to only $60 an acre with integrated pest control. Another orange grower has been able to reduce his cost per acre for pest control to just $35 per acre, using integrated pest control, and has had higher yields than ever in the history of the grove.

Another pest control approach showing major promise is the use of hormones. The principle is to give an insect its own hormone at the wrong stage of its life, so that it upsets the bug's growth processes and causes it to destroy itself.

Finally, the search is now underway for a catalyst which would cause DDT to self-destruct after it had accomplished its insect control tasks. If successful, this would be a major breakthrough in dealing with the tendency of hard pesticides to persist in the environment long after they are needed. Secretary of the Interior Walter Hickel recently announced the award of a contract to test this approach.

America and the world cannot afford to wait much longer to decide that hurling the crude weapon of hard pesticides against the fabric of life, the apt description by Rachel Carson, is not the answer to our pest control problems.

Our approach must be much more sophisticated than that, and as I have outlined above, there is an abundance of alternatives. And there is no reason why the job cannot be done more effectively and far more economically than the present massive, indiscriminate pesticide use. The savings would accrue to the farmer and all other pesticides users, to our environment, and most importantly, to future generations of life on earth.

I believe the pesticide amendment to S. 7 is a major step in the right direction. Criteria would be developed, standards would be set and implemented, and the means to meet these standards brought into use.

I urge the Senate's adoption of the amendment, and I am heartened and deeply appreciative of the cosponsorship of this proposal by 31 Senators, including the chairman of the Senate Public Works Committee, Senator RANDOLPH, and the chairman of the Subcommittee on Air and Water Pollution, Senator MUSKIE, who is the author of S. 7.

This board support is without question a confirmation of the growing insistence of Congress that the quality of the American environment and the quality of life for all Americans be given the protection that is so urgently needed.

EXHIBIT 1

U.S. DEPARTMENT OF THE INTERIOR,
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION,
Washington, D.C., August 25, 1969.

Hon. GAYLORD NELSON,
U.S. Senate,
Washington, D.C.

DEAR SENATOR NELSON: In accordance with Mr. John Heritage's recent request by telephone to Mr. Bern Wright of our Water Quality Standards Branch, a review has been made of the States' water quality standards requirements on pesticides and the following information and enclosed summaries are being provided for your use.

Most of the State standards contain one or more requirements by which limits on specific toxic substances may be imposed on a case-by-case basis. These controls are found in the standards in the form of a general narrative statement on toxicity, or they may be included in the public water supply or aquatic life use criteria. Three of the States have specific numerical limits for pesticides and at least two others specifically mention pesticides in their toxicity standards.

SPECIFIC NUMERICAL STANDARDS ON PESTICIDES

Alaska

Standards of the State of Alaska contain a pesticide limit of 0.001 of the 96-hour LC_{50}. (96-hour LC_{50} means the lethal concentration of a substance that will result in a 50% kill of the test organism in a 96-hour period.)

California

Tidal Waters Inland from the Golden Gate within the San Francisco Bay Region—No individual pesticide or combination of pesticides shall reach concentrations found to be deleterious to fish or wildlife at any place.

Goose Lake—The total chlorinated hydrocarbon pesticide content shall not exceed 0.10 micrograms per liter as determined by the summation of the individual concentrations, and the individual pesticide content shall not reach those levels found to be detrimental to aquatic life and wildlife.

Idaho

Toxic or Other Deleterious Substances (pesticides, phenolics and related organic and inorganic materials)—Toxic chemicals of other than natural origin in concentrations found to be of public health significance or adversely affect the uses indicated. Guides such as the Water Quality Criteria published by the State of California Water Quality Control Board, Second Edition, 1963, will be used in evaluating the tolerances of the various toxic chemicals for the use indicated.

South Dakota

Pesticides, herbicides and related compounds shall be treated as toxic materials and taste and odor producing chemicals and controlled under the provisions of Chapter II, Section II, Subsection 2 and 4.

Chapter II, Section II, Subsection 2—*Toxic Materials.* No materials shall be discharged to any surface water or watercourse in the State which produce concentrations of chemicals toxic to humans, animals or the most sensitive stage or form of aquatic life greater than 0.1 times the acute (96-hour) median lethal dose for short residual compounds or 0.01 times the acute median lethal dose for accumulative substances or substances exhibiting a residual life exceeding 30 days in the receiving waters.

Chapter II, Section II, Subsection 4—*Taste and Odor Producing Chemicals.* No materials shall be discharged which will result in concentrations in the receiving water sufficient to impart objectionable tastes and odors to edible aquatic life.

Virginia

Salt water (shellfish)—Area is not to be so contaminated with radionuclides, pesticides, herbicides or fecal material, that consumption of the shellfish might be hazardous.

PUBLIC WATER SUPPLY CRITERIA

Several States have included the Public Health Service (PHS) Drinking Water Standards as requirements for establishing the quality of water to be maintained as an acceptable source of public water supply. These standards establish a limit of 0.2 mg/1 for Carbon Chloroform Extract (CCE). This is intended to be a general safety control for the detection of "ill defined" chemicals which could include pesticides. The CCE control is not intended for replacement of specific limits on pesticides and other toxic substances.

Those States which expressly include the PHS requirements for waters designated for public water supply use are as follows: Alabama, Alaska, California, Connecticut, Georgia, Maine, Michigan, Minnesota, Montana, Nebraska, North Carolina, Rhode Island, Vermont, West Virginia, Wyoming.

AQUATIC LIFE-TOXICITY STANDARDS

All of the States standards provide for the protection of aquatic life from toxic substances. Appendix A is a summary of these requirements as they relate to aquatic life.

A copy of the "Report of the Committee on Water Quality Criteria-Federal Water Pollution Control Administration" is also enclosed for your reference use. Pages 56, 58, 59 of this report provide discussions on "Toxic Substances" and "Bioassay" which may be helpful to you in interpreting the standards on toxic substances. You will also find on pages 62–65, 82–83, 116, 118, 131, 137, 156 of this report information on pesticides. Each of the State water pollution control agencies have been provided a copy of this report and it is being widely used by the States as a guide in the updating of their water quality standards.

If you have any further questions concerning specific requirements in the standards, please let me know.

Sincerely yours,

DAVID D. DOMINICK,
Commissioner.

APPENDIX A—*TOXICITY STANDARDS For Surface Waters Used For FISH PROPAGATION AND WILDLIFE*

(Toxic substances—Maximum allowable (mg/1))

Alabama: Only amounts not injurious to fish and aquatic life, including shrimp and crabs, or the propagation thereof. 1/10 of 48-hour TL_m or other approved limits.

Alaska: Less than acute or chronic problem levels as revealed by bioassay. None which causes tainting of flesh of edible species.[b] Pesticides: 0.001 of 96-hour LC_{50}[b].

Arizona: Biocide concentrations shall be

Footnotes at end of article.

kept below levels which are deleterious to human, animal, plant, or aquatic life, or in amounts which interfere with this use.

Arkansas: Shall not be present in quantities toxic to human, animal, plant, or aquatic life or which interfere with the normal propagation of aquatic life. 1/10 of 48-hour TL_m.

California: At all times less than the concentrations toxic or harmful to wild or domestic animals or to aquatic life.

Colorado: Free from biocides, toxic, or other deleterious wastes in concentrations or combinations sufficient to be harmful to aquatic life.

Connecticut: Free from chemical constituents in concentrations or combinations which would be harmful to human, animal, or aquatic life. Bioassays shall be performed as needed.

Delaware: None in concentrations harmful (synergistically or otherwise) to humans, fish, wildlife, and aquatic life.

District of Columbia: None from waste sources in concentrations or combinations which are harmful to human, animal, plant, or aquatic life or which interfere with this use.

Florida: Free from waste substances toxic or harmful to human, animal, or aquatic life. F: 10.0 Cu–0.5, Zn–1.0, Cr^6–0.05, Pb–0.05, Fe–0.3, As–0.05. Cn: none detectable.

Georgia: None in concentrations that would harm man, fish and game, or other beneficial aquatic life.

Territory of Guam: Free from waste materials that will be toxic or irritating to humans, animals, plants, or aquatic life.

Hawaii: Free from biocides, toxic, or other deleterious substances in concentrations harmful to human, animal, or marine life, or which cause unpleasant taste in seafood.

Idaho: No toxic chemicals of other than natural origin, in concentrations of public health significance or which adversely affect this use.

Illinois: 1/10 of 48-hour TL_m. As–1.0, Ba–5.0, Cd–0.05, Cr^6–0.05, Cr^3–1.00, Cu–0.04, Cn–0.025, Pb–0.1, Ag–0.05, An–1.00.

Indiana: 1/10 of 96-hour TL_m from continuous-flow bioassays where the dilution water and toxicant are continuously renewed, or other factors when justified and approved.

Iowa: NH_3–N–2.0, As–1.0, Ba–5.0, Cd–0.05, Cr^6–0.05, Cr^3–1.00, Cu–0.02, Cn–0.025, Pb–0.10, Zn–1.0. Maximum of 5.0 for entire heavy metal group.

Kansas: Pollutional substances will be maintained below maximum permissible concentrations which would be detrimental for recreational requirements.

Kentucky: 1/10 of 48–hour TL_m. Free from waste substances in concentrations or combinations which are toxic or harmful to human, animal, plant, or aquatic life.

Louisiana: 1/10 of 48-hour TL_m. None present in quantities that alone or in combination will be toxic to animal or plant life.

Maine: No chemical constituents from waste sources, which are harmful to humans, animal, or aquatic life, or which adversely affect this use.

Maryland: Free from toxic wastes which interfere with this use or which are harmful to human, animal, plant, or aquatic life.

Massachusetts: None at levels harmful to human, animal, or aquatic life, or which make the waters unsuitable for fish or their propagation, or impair their palatability.

Michigan: 1/10 of 96-hour TL_m. from continuous flow bioassays.

Minnesota: Cr-tr, Cu-tr, Cn-tr, $NH_3(N)$-tr[b1], Cr-1.0, Cu-0.2, Cn-0.02, $NH_3(N)$-1.0[c], Cr-1.0, Cu-0.2, Cn-0.02, $NH_3(N)$-2.0[d]. None directly or indirectly harmful.[e]

Mississippi: 1/10 of 48-hour TL_m.

Missouri: None which have harmful effect on human or animal life.

Montana: 1/10 of 96-hour TL_m for short residual materials and 1/100 of 96-hour TL_m for pesticides.

Nebraska: None in combinations or concentrations which render the water unsafe or unsuitable for this use.

Nevada: None present in concentrations, from other than natural origin, which are deleterious to animal, plant, or aquatic life, or which exceed the 1962 PHS "Drinking Water Standards."

New Hampshire: None in toxic concentrations or combinations. Free from chemicals and conditions inimical to fish life or the maintenance thereof.

New Jersey: None which would affect humans or be detrimental to the natural aquatic biota.

New Mexico: 1/10 of 48-hour TL_m. Shall not change the ecology to an extent detrimental to existing forms of life nor be toxic to humans, plants, fish, or animals.

New York: None alone or in combination with other substances or wastes in sufficient amounts to be injurious to fish life or impair the waters for this use.

North Carolina: 1/10 of 48-hour TL_m. Shall not change the ecology to an extent detrimental to existing forms of life nor be toxic to humans, plants, fish, animals.

North Dakota: No waste materials, either in concentrations or combinations, which result in the waters being toxic or harmful to human, animal, or aquatic life.

Ohio: 1/10 of 48-hour TL_m. Free from waste substances in concentrations or combinations which are toxic or harmful to human, animal, or aquatic life.

Oklahoma: 1/10 of 48-hour TL_m. Shall not be present in such quantities as to cause the waters to be toxic to human, animal, plant, or aquatic life.

Oregon: No conditions deleterious to fish or other aquatic life or which affect the palatability of fish.

Pennsylvania: None in amounts sufficient to be inimical or harmful to this use.

Commonwealth of Puerto Rico: None alone or in combination with other substances or wastes in amounts injurious to edible fish or their culture, taste, or propagation.

Rhode Island: Bioassays shall be performed as required by the appropriate agencies. None which would be harmful to human, animal, or aquatic life.

South Carolina: Free from waste materials which are toxic or harmful to human, animal, plant, or aquatic life, or which interfere directly or indirectly with this use.

South Dakota: 1/10 of 96-hour TL_m for short residual compounds. 1/100 of 96-hour TL_m for substances of residual life exceeding 30 days. Cn–02[d1e1f] 0.05[h]

Tennessee: There shall be no substances added that will produce toxic conditions that affect fish or aquatic life.

Texas: Shall not exhibit acute or chronic toxicity to human, animal, or aquatic life to such an extent as to interfere with this use.

Utah: No waste materials in concentrations or combinations which are toxic or which produce undesirable physiological responses in humans, fish, and other animal life, and plants.

Vermont: Bioassays shall be performed, including assessment of taste and odor. Free from chemical constituents harmful to human, animal, or aquatic life.

Virginia: Free from toxic substances attributable to waste, in concentrations or combinations which interfere directly or indirectly with this use.

Virgin Islands of the United States: Free from waste substances in concentrations or combinations which are toxic or harmful to human, animal, or aquatic life.

Washington: Below concentrations which may cause acute or chronic toxic conditions to the aquatic biota.

West Virginia: No concentrations of materials poisonous to man, animal, or fish life.

Wisconsin: None present in amounts which by bioassay or other tests indicate acute or chronic levels harmful to animal, plant, or aquatic life.

Wyoming: Free from toxic substances of other than natural origin in concentrations or combinations which are toxic to human, animal, or aquatic life.

FOOTNOTES

[b] Standard reserved from approval by FWPCA.

[b1] Applies to propagation and maintenance of warm and coldwater sport or commercial fishes.

[b2] Standards apply only to coastal waters.

[c] Applies to propagation and maintenance of sport or commercial fishes.

[d] Applies to propagation and maintenance of fish species common to the area waters.

[d1] Fish life propagation—coldwater permanent.

[e] Applies to use by wildlife.

[e1] Fish life propagation—coldwater marginal.

[f] Fish life propagation—warmwater permanent.

[g] Fish life propagation—warmwater semipermanent.

[h] Fish life propagation—warmwater marginal.

Mr. RANDOLPH. Mr. President, will the Senator yield?

Mr. NELSON. I yield to the Senator from West Virginia.

Mr. RANDOLPH. Mr. President, the Senator from Wisconsin has often appeared before the Committee on Public Works and its subcommittees in reference to the matters of cleansing the air and purifying the water. I will not mention the long list of affirmative actions he has initiated in the Senate. I am not sure how many cosponsors on the amendment, but I do know there is a considerable list. I am delighted I could join him in the amendment.

In joining with him we recognize his leadership in this field. I think his explanation this afternoon of the presence of pesticides and the danger that can be wrought by this type pollution is a real one. I express my thanks for his constructive efforts.

Mr. NELSON. I thank the distinguished chairman of the Committee on Public Works for his gracious remarks. I might add, however, the reason I appeared before the Committee on Public Works, of which the Senator from West Virginia is chairman, is that that committee has been doing such extensive work in the field of enhancing the quality of air and water in this country. They have made it possible for conservationists and Members of Congress to appear in connection with legislation of this nature to which his committee has devoted so much time.

Mr. MONDALE. Mr. President, I rise in support of the amendment (No. 132) introduced by the Senator from Wisconsin (Mr. NELSON) to S. 7.

I have already stated the many reasons that I support the Water Quality Improvement Act of 1969, and I appreciate this opportunity to direct specific remarks to the amendment now proposed by my distinguished colleague from Wisconsin.

Under the proposed amendment, the Secretary of the Interior is directed to take certain steps that would guarantee water quality criteria for all pesticides. The criteria would be based on the effects of various pesticide levels on fish and wildlife, as well as man and his environment. The criteria would outline maximum safe levels for the presence of pesticides in water, and these would represent

the essential basis for State or Federal action to deal with the pesticide pollution problem.

It is clear that persistent pesticides are so polluting our rivers, lakes, streams, and oceans that fish can and have been killed; that fish reproduction can and has been inhibited; that high pesticide residues in water have affected birds and other animals; and, that now, even man is threatened.

Specifically, the amendment would permit the Secretary of the Interior, after consultation with all interested and concerned parties, to prepare and publish regulations setting forth water quality standards for pesticides that will clearly not have a deleterious effect on fish or man. Responsibility for enforcing the standards would rest primarily with the States. Standards could be implemented by issuing orders to polluters to take remedial measures.

A particularly significant aspect of this amendment is that it permits the establishment of a system for tabulating, monitoring, and recording precisely what pesticide residues should be permitted.

As chairman of the Senate Subcommittee on Migratory Labor, I have become particularly aware of the need to establish similar procedures insofar as farmworkers may be affected by pesticide use.

There is mounting evidence concerning the harmful effects of pesticides on our Nation's migrant and seasonal farmworkers. Experts from the Department of Health, Education, and Welfare concede that perhaps as many as 800 farmworkers are killed and 80,000 injured by pesticides each year. We know that the agricultural industry experiences one of the highest occupational disease rates in the United States. Just last week we learned that a substantial proportion of farmworkers experience symptoms of chemical poisoning which include dermatitis, rashes, eye irritation, nausea, vomiting, fatigue, excess sweating, headaches, double vision, dizziness, skin irritations, difficulty in breathing, loss of fingernails, nervousness, insomnia, bleeding noses, and diarrhea.

It is clear from our hearings that proper safeguards and protections for farmworkers do not exist in the use of pesticides. In fact, under present State and Federal regulations, information about how, when, and where chemicals are used is seldom available to the farmworker or to the public.

The hearing record is painfully lacking in any firm evidence that the pesticides to which farmworkers are daily exposed in fact have no deleterious short- or long-range effects on their health and well-being. Further, it was shocking to learn of the pitifully inadequate funding of programs devoted to research on occupational hazards to farmworkers; and to discover that programs aimed at protecting the farmworkers are neither adequately funded nor enforced.

We do know, however, from recent accounts in medical and scientific journals, that the wrong kinds of chemicals, in the wrong amounts, and in the wrong places are sometimes used with inadequate regard of the health and safety of their workers. Furthermore, we know that recent scientific investigations have produced evidence that DDT causes cancer in animals and provides very strong indications that DDT may produce cancer in man.

Mr. President, I support this amendment, because it establishes a mechanism for the Secretary of the Interior to determine maximum safe levels of pesticides in water that would represent the essential basis for action to deal with the pesticide pollution problem in water. Additionally, enactment of this amendment may serve as a workable model for necessary legislation to protect farmworkers through establishment of a meaningful system for monitoring pesticide effects on man.

Mr. MUSKIE. Mr. President, the amendment offered by the Senator from Wisconsin (Mr. NELSON) is a constructive addition to the legislation which is pending before the Senate. I have discussed this proposal with the Senator from Wisconsin and agree with the need to provide the Secretary of the Interior with a specific directive to formulate criteria which indicate the effects of pesticides on the water environment.

There is a growing national concern regarding the use of pesticides. Conservationists, scientists, medical experts, and ecologists are speaking out against indiscriminate use of pesticides while other scientists, health officials, and agricultural experts oppose actions to limit their availability and use.

Existing information is sufficient to suggest that we have not exercised due care in either the amount or type of pesticides we use. Inadequate attention has been paid to developing less toxic more degradable pesticides and thus, today, we are confronted with the potential of banning entirely the use of some materials which have been extremely helpful in expanding the Nation's productivity and protecting the Nation's health.

I am not prepared, at this time, to suggest that all pesticides, herbicides, fungicides, and insecticides should be banned or even that some of them should be banned. I support Senator NELSON's amendment because we need to know a great deal more about the health and welfare effects of these pollutants and because existing scientific information needs to be assembled and evaluated.

The criteria to be published by the Secretary should provide useful assistance to the States in determining the extent to which the use of pesticides and water quality requirements are in conflict.

In some States it may be necessary to establish limitations on the availability of certain types of pesticides and, in other cases, it may be necessary to limit use of specific pesticides in certain watersheds. Whatever course is taken in controlling use of persistent pesticides, care should be taken to assure that public health responsibilities such as malaria control are not hindered.

Enforcement procedures must consider the differences between point source control available to municipal and industrial wastes as opposed to the general diffusion of the pollutant in this case. The inability to effectively control this type of pollutant after application suggests the need to consider legislation which will establish uniform standards on the biogradability and toxicity of pesticides to assure environmental protection prior to the indiscriminate introduction of pesticides into the environment.

The Senator from Wisconsin (Mr. NELSON) has indicated an intent to introduce such legislation in the near future. I will cosponsor his proposal and the Subcommittee on Air and Water Pollution will hold hearings early next year.

I would like to ask the distinguished Senator this question. First of all I share the Senator's concern about the growing dilemma of pesticide pollution. In many ways I think it is perhaps the most serious in its potential impact upon the environment, upon wildlife, and upon human life itself. It is the most persistent and most difficult to come to grips with once pesticides are released in the environment. In that sense, it is like air pollution. Once discharged, it cannot be controlled; so, as in the case of pesticides at the dispersal point.

Since the problem of control is, for that reason, somewhat different from that of other air pollutants, the enforcement problem is different in the same way. So we have to come to grips with that problem.

The amendment offered by the distinguished Senator from Wisconsin is a major advance, I think, toward restoring and preserving the quality of our waters that are now threatened by pesticides.

In addition to leading to specific standards for safe concentrations of pesticides in interstate rivers and lakes, I believe that the amendment serves an equally important purpose of establishing a comprehensive program for research in the Department of the Interior, to study the problems of persistent pesticides and alternatives that can eliminate this contamination of our environment.

That is the point which, I think, is at the heart of resistance to the control of pesticides.

I ask the Senator from Wisconsin whether he believes that the standards that would be developed as a result of his amendment can be met without hindering efforts to control insects, weeds, fungus, and other pests that can cause damage to farmers and can pose a potential hazard to human health.

Mr. NELSON. I do not think there is any question about that. No Member of Congress is more familiar with the Water Pollution Control Act than the Senator from Maine (Mr. MUSKIE) who conducted the hearings, drafted the bill, and engineered its passage in the Senate.

As the Senator knows, under section 10(c) the Secretary can establish criteria, but he must consider the practicability and the economic feasibility of any standards that are proposed to be used. He must take these factors into consideration.

I make one other point. The Department of Agriculture prescribes an alternative pesticide for every chlorinated hydrocarbon, so far as I can ascertain, that is listed for use on virtually every crop in this country. In other words, there is another, more readily degrading pesticide that is readily available. As I review the application rates recom-

mended by the Department and the current prices of pesticides, the cost of hard pesticides compared with readily degradable pesticides is roughly the same.

I believe that the Senator knows Michigan and Arizona have already banned the use of DDT. My own State of Wisconsin is moving to drastically improve the controls on it and has created a board to determine if it is necessary to use certain pesticides. There is integrated pest control which has been initiated successfully in California in which they do not indiscriminately spray the crop. They use whatever biological methods they can, including certain organisms which prey on insects. But whatever method they use, biological or chemical, it is limited to the area where the pest is.

In my earlier remarks, I outlined those programs and the cost per acre, which is dramatically less for a program of integrated pest control. Unfortunately, so many people just hire an airplane and go out and spray indiscriminately all over the place.

So in answer to the Senator, I believe that many practical, alternative means are available right now. But again I say, the Secretary must consider the practicability and the economic feasibility for any standards. So that is the protection against arbitrariness on anything he may propose.

Mr. MUSKIE. That is the value of the Senator's amendment. It increases the pressure to recognize the availability of other means of controlling pests than with hard pesticides. If we do not concentrate on that and enlarge the possibilities in this respect, we will be wasting, perhaps, the last chance we will have to avoid the massive dispersal of hard pesticides into the environment.

I am delighted to cosponsor the amendment. I compliment the Senator on becoming, in my judgment, the most knowledgeable expert in the Senate on this problem.

Mr. NELSON. Mr. President, incidentally, I might say to the Senate, that my staff and the staff of the Senator from Maine will get together and develop a legislative proposal establishing standards for the components of pesticides, taking into consideration their persistence, degradability, and toxicity. This is the next step that must follow so that we can determine if pesticides, like detergents, should be subject to certain standards in order to protect the environment.

Mr. MUSKIE. I thank the Senator.

Mr. TYDINGS. Mr. President, as a cosponsor of amendment No. 132, I congratulate the junior Senator from Wisconsin (Mr. NELSON) for his tireless efforts to call attention to the environmental danger stemming from the widespread and often indiscriminate use of persistent pesticides.

Toxic residues of these chemical compounds are showing up in our air and water, and, through the multiplying effect of the food chain, in human beings as well.

The effect of these poisons on fish and wildlife are well known. Our animal resources can be killed outright, as the Coho salmon were, or face gradual destruction, if not extinction, as are the brown pelican and the bald eagle.

The effect of pesticide residues on man are not yet fully known. Presently there is no evidence that the increasing amounts of pesticides in fact harm human beings. Yet common sense tells us that absorbing poisonous chemicals is not healthy.

The long-term health impact on man of persistent pesticides may well be most damaging.

Mr. President, in late July I introduced wide ranging pesticide protection legislation. The bill, S. 2747, directs the Secretary of Health, Education, and Welfare to make a complete study of the use and effects of pesticides. It transfers the pesticide regulatory functions from the Department of Agriculture to the Department of Health, Education, and Welfare. It removes the exemption from registration and labeling of those pesticides intended solely for export. Finally, the bill places a 4-year moratorium on four of the more persistent and powerful pesticides.

It is perhaps the most comprehensive legislation on pesticides yet introduced in the Senate. But it is unlikely to go anywhere and now will serve only as a point of discussion.

Yet what is required now is not just talk but action as well. Senator NELSON'S amendment is the first step toward protecting our environment from toxic pesticides. I fully support his amendment and again congratulate the Senator for alerting us to the threat.

Mr. HART. Mr. President, I am very pleased to cosponsor Senator NELSON'S amendment to S. 7 which would require the Secretary of the Interior to develop water quality criteria for pesticides. These criteria would then be used by the States as a basis for the adoption of standards to effectively control pesticide pollution of our lakes and rivers.

As with most of our clean water efforts, the need to develop standards which will help to reduce the quantity of persistent pesticides entering our water is long overdue. For many years scientists have been warning that the large-scale and indiscriminate introduction of these chemicals into our environment may be doing serious harm. But only today are people generally beginning to realize that although agricultural production has increased and disease control has been improved through the use of persistent pesticides, these short-term gains may have been purchased at the price of irreversible disruption of many ecological systems.

The so-called magnification effect of pesticides on fish and wildlife has now been well documented. Fish, feeding on miscroscopic organisms which contain persistent pesticides, assimilate these chemicals into their own systems. In addition, through normal gill action, a fish appears to effectively filter pesticides directly from the water. In both cases, the pesticide is stored up in the body fat of the fish where it becomes increasingly more concentrated. Then, moving upward in the food chain, each successive predator assimilates greater and greater concentrations of these pesticides from the smaller fish on which it feeds. Fish at the end of the food chain, such as the Lake Michigan coho salmon, now contain DDT concentrations ranging up to 19 parts per million, and fish-eating birds, such as the osprey and eagle, contain even higher levels of this pesticide.

The effects of such concentrations of persistent pesticides on fish and wildlife are daily becoming better understood. For example, Prof. Howard Johnson of Michigan State University has reported upon the reproductive problems DDT has created for the Lake Michigan coho salmon. Apparently the female salmon passes some of the DDT on to her eggs in concentrations ranging between five and seven parts per million. After the fry hatches from these eggs, they begin to absorb the yolk sac, but as they do, the DDT remaining in the yolk becomes more and more highly concentrated. At the last stages of absorption, DDT concentrations become six to 12 times higher than those in the actual body tissue of the fry and this high level of DDT has proven fatal to a high percentage of the fry.

Slightly different problems have occurred with fish-eating birds. Here the high concentrations of DDT apparently upset the bird's liver enzyme balance and as a result affect its calcium metabolism. The result has been that these birds have produced eggs which have exceptionally brittle shells. In most cases the mother is unable to hatch these eggs, because she accidentally breaks the shell. In one case reported by the Audubon Society, an embryo was born without a shell altogether; it was encased only in a membrane.

Last week the Commerce Committee's Subcommittee on Energy, Natural Resources, and the Environment, which I chair, held field hearings in Michigan to consider the effects of pesticides on sports and commercial fisheries. At these hearings Prof. Joseph Hickey of the University of Wisconsin commented on the serious disruption which DDT has caused to fish-eating bird populations. Branding DDT as the "compound of extinction," Professor Hickey stated:

> In a series of closely integrated studies, British, Canadian, and American scientists have proven that similar reproductive failures (1) occurred in 1947 in peregrine falcons; (2) involve fish-eating birds like bald eagles, ospreys, brown pelicans, double-crested cormorants, and herring gulls; (3) are producing regional extinction in some species and continentally wide extinction in others; and (4) are due to DDT. There is simply no scientific doubt about these statements.

He then went on to state:

> We have lost at least 95 per cent of our nesting peregrine falcons—perhaps the supreme example of avian evolution—in the United States south of Canada, and we may very well lose its entire subspecies in North America. We are going to lose our national bird, the bald eagle, as a nesting species on the shores of the Great Lakes, not necessarily on inland lakes. We have lost the brown pelican on the west side of the Gulf of Mexico. And we will lose it on the coast of California. These are pollution effects due to DDT. The facts are solid and the result of careful, painstaking research.

Much more speculative at the present time are questions about whether consumption of DDT or other persistent pesticides by man could seriously harm his health or well-being. Nevertheless, the evidence of its harm to birds and fish is sufficient to cause grave concern. And recent research efforts are beginning to produce additional disturbing results. For example, earlier this year I released a report of a study which had been conducted for the National Cancer Institute. This study revealed that when a group of mice was fed a mixture containing 140 parts per million of DDT over a period of 81 weeks, 63 percent developed tumors. With a control group of mice, only 16 percent developed tumors, indicating that the mice exposed to DDT were approximately four times more likely to develop tumors than mice not so exposed. In describing the DDT-induced tumors, the report states:

It seems more reasonable to conclude that the great majority had malignant potentiality.

In addition, at the Environmental Subcommittee hearings on pesticides which were held last May, we asked the Food and Drug Administration whether they could summarize some of their work on the mutagenic effects of pesticides. One of the investigations which they described involves a study of 40 volunteers who are heavy pesticide users and 20 control subjects who are examined monthly to determine what leukocyte chromosome damage can be associated with the exposure to pesticides. According to the FDA:

Preliminary results indicate that during mid-summer the exposed group had something on the order of five times as many chromosome abberations as the control group. So far this study has not been able to make comparisons between the groups at other times of the year.

The Food and Drug Administration, concerned with the results of the expanding volume of research on pesticides, has moved to set pesticide tolerances on many food products. In the case of fish, an interim tolerance level of five parts per mission has been established. Although there is little question that the FDA is taking proper precautions in setting these tolerances, there is also little doubt that this action will seriously disrupt, if not destroy, the fishing industry on Lake Michigan. The coho salmon can no longer be marketed in interstate commerce because of its high DDT concentrations, and other commercially important fish which are lower down in the lake's food chain, such as the chub, now appear to be building up DDT concentrations in excess of the minimum FDA tolerances. Analyses by the Michigan field office of the Bureau of Commercial Fisheries indicate that the DDT concentration in some chubs now exceeds nine parts per million. Lake Michigan lake trout, too, also frequently contain concentrations in excess of the FDA's minimum tolerances.

To preserve many of our country's unique forms of life from extinction, to reverse the grave ecological damage which we are presently causing, and to restore the vitality of our freshwater fisheries, it is imperative that we begin now to upgrade the quality of our water. Establishing water tolerance levels for pesticides—and then rigidly enforcing these standards—is an essential step toward this goal. We should emphasize, however, that because very minute quantities of persistent pesticides within water—measured in terms of parts per trillion—cause severe harm to aquatic organisms which concentrate these pesticides within their systems, water quality standards should be based on the pesticide levels found in fish taken from the water, and not on the water itself. Only in this manner can we readily determine when the amount of pesticides in our waters is reaching dangerous levels.

Mr. President, I reiterate my great pleasure in supporting this amendment, and I earnestly hope that not only is it adopted, but that meaningful standards are forthcoming in the very near future.

The PRESIDING OFFICER. The question is on agreeing to the amendment, No. 132, of the Senator from Wisconsin.

The amendment was agreed to.

Mr. MUSKIE. Mr. President, I move that the vote by which the amendment was agreed to be reconsidered.

Mr. BYRD of West Virginia. Mr. President, I move that the motion to reconsider be laid on the table.

The motion to lay on the table was agreed to.

Mr. NELSON. Mr. President, I ask unanimous consent to have printed in the RECORD a series of technical studies taken from various scientific and conservation magazines.

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

[From Scientific American, March 1967]

TOXIC SUBSTANCES AND ECOLOGICAL CYCLES

(By George M. Woodwell)

The vastness of the earth has fostered a tradition of unconcern about the release of toxic wastes into the environment. Billowing clouds of smoke are diluted to apparent nothingness; discarded chemicals are flushed away in rivers; insecticides "disappear" after they have done their job; even the massive quantities of radioactive debris of nuclear explosives are diluted in the apparently infinite volume of the environment. Such pollutants are indeed diluted to traces—to levels infinitesimal by ordinary standards, measured as parts per billion or less in air, soil and water. Some pollutants do disappear; they are immobilized or decay to harmless substances. Others last, sometimes in toxic form, for long periods. We have learned in recent years that dilution of persistent pollutants even to trace levels detectable only by refined techniques is no guarantee of safety. Nature has ways of concentrating substances that are frequently surprising and occasionally disastrous.

We have had dramatic examples of one of the hazards in the dense smogs that blanket our cities with increasing frequency. What is less widely realized is that there are global, long-term ecological processes that concentrate toxic substances, sometimes hundreds of thousands of times above levels in the environment. These processes include not only patterns of air and water circulation but also a complex series of biological mechanisms. Over the past decade detailed studies of the distribution of both radioactive debris and pesticides have revealed patterns that have surprised even biologists long familiar with the unpredictability of nature.

Major contributions to knowledge of these patterns have come from studies of radioactive fallout. The incident that triggered worldwide interest in large-scale radioactive pollution was the hydrogen-bomb test at Bikini in 1954 known as "Project Bravo." This was the test that inadvertently dropped radioactive fallout on several Pacific islands and on the Japanese fishing vessel *Lucky Dragon*. Several thousand square miles of the Pacific were contaminated with fallout radiation that would have been lethal to man. Japanese and U.S. oceanographic vessels surveying the region found that the radioactive debris had been spread by wind and water, and, more disturbing, it was being passed rapidly along food chains from small plants to small marine organisms that ate them to large animals (including the tuna, a staple of the Japanese diet).

The U.S. Atomic Energy Commission and agencies of other nations, particularly Britain and the U.S.S.R., mounted a large international research program, costing many millions of dollars, to learn the details of the movement of such debris over the earth and to explore its hazards. Although these studies have been focused primarily on radioactive materials, they have produced a great deal of basic information about pollutants in general. The radioactive substances serve as tracers to show the transport and concentration of materials by wind and water and the biological mechanisms that are characteristic of natural communities.

One series of investigations traced the worldwide movement of particles in the air. The tracer in this case was strontium 90, a fission product released into the earth's atmosphere in large quantities by nuclear-bomb tests. Two reports in 1962—one by S. Laurence Kulp and Arthur R. Schulert of Columbia University and the other by a United Nations committee—furnished a detailed picture of the travels of strontium 90. The isotope was concentrated on the ground between the latitudes of 30 and 60 degrees in both hemispheres, but concentrations were five to 10 times greater in the Northern Hemisphere, where most of the bomb tests were conducted.

It is apparently in the middle latitudes that exchanges occur between the air of upper elevations (the stratosphere) and that of lower elevations (the troposphere). The larger tests have injected debris into the stratosphere; there it remains for relatively long periods, being carried back into the troposphere and to the ground in the middle latitudes in late winter or spring. The mean "half-time" of the particles' residence in the stratosphere (that is, the time for half of a given injection to fall out) is from three months to five years, depending on many factors, including the height of the injection, the size of the particles, the latitude of injection and the time of year. Debris injected into the troposphere has a mean half-time of residence ranging from a few days to about a month. Once airborne, the particles may travel rapidly and far. The time for one circuit around the earth in the middle latitudes varies from 25 days to less than 15. (Following two recent bomb tests in China fallout was detected at the Brookhaven National Laboratory on Long Island respectively nine and 14 days after the tests.)

Numerous studies have shown further that precipitation (rain and snowfall) plays an important role in determining where fallout will be deposited. Lyle T. Alexander of the Soil Conservation Service and Edward P. Hardy, Jr., of the AEC found in an extensive study in Clallam County, Washington, that the amount of fallout was directly proportional to the total annual rainfall.

It is reasonable to assume that the findings about the movement and fallout of radioactive debris also apply to other particles of similar size in the air. This conclusion is supported by a recent report by Donald F. Gatz and A. Nelson Dingle of the Uni-

versity of Michigan, who showed that the concentration of pollen in precipitation follows the same pattern as that of radioactive fallout. This observation is particularly meaningful because pollen is not injected into the troposphere by a nuclear explosion; it is picked up in air currents from plants close to the ground. There is little question that dust and other particles, including small crystals of pesticides, also follow these patterns.

From these and other studies it is clear that various substances released into the air are carried widely around the world and may be deposited in concentrated form far from the original source. Similarly, most bodies of water—especially the oceans—have surface currents that may move materials five to 10 miles a day. Much higher rates, of course, are found in such major oceanic currents as the Gulf Stream. These currents are one more physical mechanism that can distribute pollutants widely over the earth.

The research programs of the AEC and other organizations have explored not only the pathways of air and water transport but also the pathways along which pollutants are distributed in plant and animal communities. In this connection we must examine what we mean by a "community."

Biologists define communities broadly to include all species, not just man. A natural community is an aggregation of a great many different kinds of organisms, all mutually interdependent. The basic conditions for the integration of a community are determined by physical characteristics of the environment such as climate and soil. Thus a sand dune supports one kind of community, a freshwater lake another, a high mountain still another. Within each type of environment there develops a complex of organisms that in the course of evolution becomes a balanced, self-sustaining biological system.

Such a system has a structure of interrelations that endows the entire community with a predictable developmental pattern, called "succession," that leads toward stability and enables the community to make the best use of its physical environment. This entails the development of cycles through which the community as a whole shares certain resources, such as mineral nutrients and energy. For example, there are a number of different inputs of nutrient elements into such a system. The principal input is from the decay of primary minerals in the soil. There are also certain losses, mainly through the leaching of substances into the underlying water table. Ecologists view the cycles in the system as mechanisms that have evolved to conserve the elements essential for the survival of the organisms making up the community.

One of the most important of these cycles is the movement of nutrients and energy from one organism to another along the pathways that are sometimes called food chains. Such chains start with plants, which use the sun's energy to synthesize organic matter; animals eat the plants; other animals eat these herbivores, and carnivores in turn may constitute additional levels feeding on the herbivores and on one another. If the lower orders in the chain are to survive and endure, there must be a feedback of nutrients. This is provided by decay organisms (mainly microorganisms) that break down organic debris into the substances used by plants. It is also obvious that the community will not survive if essential links in the chain are eliminated; therefore the preying of one level on another must be limited.

Ecologists estimate that such a food chain allows the transmission of roughly 10 percent of the energy entering one level to the next level above it, that is, each level can pass on 10 percent of the energy it receives from below without suffering a loss of population that would imperil its survival. The simplest version of a system of this kind takes the form of a pyramid, each successively higher population receiving about a tenth of the energy received at the level below it.

Actually nature seldom builds communities with so simple a structure. Almost invariably the energy is not passed along in a neatly ordered chain but is spread about to a great variety of organisms through a sprawling, complex web of pathways. The more mature the community, the more diverse its makeup and the more complicated its web. In a natural ecosystem the network may consist of thousands of pathways.

This complexity is one of the principal factors we must consider in investigating how toxic substances may be distributed and concentrated in living communities. Other important basic factors lie in the nature of the metabolic process. For example, of the energy a population of organisms receives as food, usually less than 50 percent goes into the construction of new tissue, the rest being spent for respiration. This circumstance acts as a concentrating mechanism: a substance not involved in respiration and not excreted efficiently may be concentrated in the tissues twofold or more when passed from one population to another.

Let us consider three types of pathway for toxic substances that involve man as the ultimate consumer. The three examples, based on studies of radioactive substances, illustrate the complexity and variety of pollution problems.

The first and simplest case is that of strontium 90. Similar to calcium in chemical behavior, this element is concentrated in bone. It is a long-lived radioactive isotope and is a hazard because its energetic beta radiation can damage the mechanisms involved in the manufacture of blood cells in the bone marrow. In the long run the irradiation may produce certain types of cancer. The route of strontium 90 from air to man is rather direct: we ingest it in leafy vegetables, which absorbed it from the soil or received it as fallout from the air, or in milk and other dairy products from cows that have fed on contaminated vegetation. Fortunately strontium is not usually concentrated in man's food by an extensive food chain. Since it lodges chiefly in bone, it is not concentrated in passing from animal to animal in the same ways other radioactive substances may be (unless the predator eats bones!).

Quite different is the case of the radioactive isotope cesium 137. This isotope, also a fission product, has a longlived radioactivity (its half-life is about 30 years) and emits penetrating gamma rays. Because it behaves chemically like potassium, an essential constituent of all cells, it becomes widely distributed once it enters the body. Consequently it is passed along to meat-eating animals, and under certain circumstances it can accumulate in a chain of carnivores.

A study in Alaska by Wayne C. Hanson, H. E. Palmer and B. I. Griffin of the AEC's Pacific-Northwest Laboratory showed that the concentration factor for cesium 137 may be two or three for one step in a food chain. The first link of the chain in this case was lichens growing in the Alaskan forest and tundra. The lichens collected cesium 137 from fallout in rain. Certain caribou in Alaska live mainly on lichens during the winter, and caribou meat in turn is the principal diet of Eskimos in the same areas. The investigators found that caribou had accumulated about 15 micromicrocuries of cesium radioactivity per gram of tissue in their bodies. The Eskimos who fed on these caribou had a concentration twice as high (about 30 micromicrocuries per gram of tissue) after eating many pounds of caribou meat in the course of a season. Wolves and foxes that ate caribou sometimes contained three times the concentration in the flesh of the caribou. It is easy to see that in a longer chain, involving not just two animals but several, the concentration of a substance that was not excreted or metabolized could be increased to high levels.

A third case is that of iodine 131, another gamma ray emitter. Again the chain to man is short and simple: The contaminant (from fallout) comes to man mainly through cows' milk, and thus the chain involves only grass, cattle, milk and man. The danger of iodine 131 lies in the fact that iodine is concentrated in the thyroid gland. Although iodine 131 is short-lived (its half-life is only about eight days), its quick and localized concentration in the thyroid can cause damage. For instance, a research team from the Brookhaven National Laboratory headed by Robert Conard has discovered that children on Rongelap Atoll who were exposed to fallout from the 1954 bomb test later developed thyroid nodules.

The investigations of the iodine 131 hazard yielded two lessons that have an important bearing on the problem of pesticides and other toxic substances released in the environment. In the first place we have had a demonstration that the hazard of the toxic substance itself often tends to be underestimated. This was shown to be true of the exposure of the thyroid to radiation. Thyroid tumors were found in children who had been treated years before for enlarged thymus glands with doses of X-rays that had been considered safe. As a result of this discovery and studies of the effects of iodine 131, the Federal Radiation Council in 1961 issued a new guide reducing the permissible limit of exposure to ionizing radiation to less than a tenth of what had previously been accepted. Not the least significant aspect of this lesson is the fact that the toxic effects of such a hazard may not appear until long after the exposure; on Rongelap Atoll 10 years passed before the thyroid abnormalities showed up in the children who had been exposed.

The second lesson is that, even when the pathways are well understood, it is almost impossible to predict just where toxic substances released into the environment will reach dangerous levels. Even in the case of the simple pathway followed by iodine 131 the eventual destination of the substance and its effects on people are complicated by a great many variables: the area of the cow's pasture (the smaller the area, the less fallout the cow will pick up); the amount and timing of rains on the pasture (which on the one hand may bring down fallout but on the other may wash it off the forage); the extent to which the cow is given stored, uncontaminated feed; the amount of iodine the cow secretes in its milk; the amount of milk in the diet of the individual consumer, and so on.

It it is difficult to estimate the nature and extent of the hazards from radioactive fallout, which have been investigated in great detail for more than a decade by an international research program, it must be said that we are in a poor position indeed to estimate the hazards from pesticides. So far the amount of research effort given to the ecological effects of these poisons has been comparatively small, although it is increasing rapidly. Much has been learned, however, about the movement and distribution of pesticides in the environment, thanks in part to the clues supplied by the studies of radioactive fallout.

Our chief tool in the pesticide inquiry is DDT. There are many reasons for focusing on DDT: it is long-lasting, it is now comparatively easy to detect, it is by far the most widely used pesticide and it is toxic to a broad spectrum of animals, including man. Introduced only a quarter-century ago

and spectacularly successful during World War II in controlling body lice and therefore typhus, DDT quickly became a universal weapon in agriculture and in public health campaigns against disease-carriers. Not surprisingly, by this time DDT has thoroughly permeated our environment. It is found in the air of cities, in wildlife all over North America and in remote corners of the earth, even in Adélie penguins and skua gulls (both carnivores) in the Antarctic. It is also found the world over in the fatty tissue of man. It is fair to say that there are probably few populations in the world that are not contaminated to some extent with DDT.

We now have a considerable amount of evidence that DDT is spread over the earth by wind and water in much the same patterns as radioactive fallout. This seems to be true in spite of the fact that DDT is not injected high into the atmosphere by an explosion. When DDT is sprayed in the air, some fraction of it is picked up by air currents as pollen is, circulated through the lower troposphere and deposited on the ground by rainfall. I found in tests in Maine and New Brunswick, where DDT has been sprayed from airplanes to control the spruce budworm in forests, that even in the open, away from trees, about 50 percent of the DDT does not fall to the ground. Instead it is probably dispersed as small crystals in the air. This is true even on days when the air is still and when the low-flying planes release the spray only 50 to 100 feet above treetop level. Other mechanisms besides air movement can carry DDT for great distances around the world. Migrating fish and birds can transport it thousands of miles. So also do oceanic currents. DDT has only a low solubility in water (the upper limit is about one part per billion), but as algae and other organisms in the water absorb the substance in fats, where it is highly soluble, they make room for more DDT to be dissolved into the water. Accordingly water that never contains more than a trace of DDT can continuously transfer it from deposits on the bottom to organisms.

DDT is an extremely stable compound that breaks down very slowly in the environment. Hence with repeated spraying the residues in the soil or water basins accumulate. Working with Frederic T. Martin of the University of Maine, I found that in a New Brunswick forest where spraying had been discontinued in 1958 the DDT content of the soil increased from half a pound per acre to 1.8 pounds per acre in the three years between 1958 and 1961. Apparently the DDT residues were carried to the ground very slowly on foliage and decayed very little. The conclusion is that DDT has a long half-life in the trees and soil of a forest, certainly in the range of tens of years.

Doubtless there are many places in the world where reservoirs of DDT are accumulating. With my colleagues Charles F. Wurster, Jr., and Peter A. Isaacson of the State University of New York at Stony Brook, I recently sampled a marsh along the south shore of Long Island that had been sprayed with DDT for 20 years to control mosquitoes. We found that the DDT residues in the upper layer of mud in this marsh ranged up to 32 pounds per acre!

We learned further that plant and animal life in the area constituted a chain that concentrated the DDT in spectacular fashion. At the lowest level the plankton in the water contained .04 part per million of DDT; minnows contained one part per million, and a carnivorous scavenging bird (a ring-billed gull) contained about 75 parts per million in its tissues (on a whole-body, wetweight basis). Some of the carnivorous animals in this community had concentrated DDT by a factor of more than 1,000 over the organisms at the base of the ladder.

A further tenfold increase in the concentrations along this food web would in all likelihood result in the death of many of the organisms in it. It would then be impossible to discover why they had disappeared. The damage from DDT concentration is particularly serious in the higher carnivores. The mere fact that conspicuous mortality is not observed is no assurance of safety. Comparatively low concentrations may inhibit reproduction and thus cause the species to fade away.

That DDT is a serious ecological hazard was recognized from the beginning of its use. In 1946 Clarence Cottam and Elmer Higgins of the U.S. Fish and Wildlife Service warned in the *Journal of Economic Entomology* that the pesticide was a potential menace to mammals, birds, fishes and other wildlife and that special care should be taken to avoid its application to streams, lakes and coastal bays because of the sensitivity of fishes and crabs. Because of the wide distribution of DDT the effects of the substance on a species of animal can be more damaging than hunting or the elimination of a habitat (through an operation such as dredging marshes). DDT affects the entire species rather than a single population and may well wipe out the species by eliminating reproduction.

Within the past five years, with the development of improved techniques for detecting the presence of pesticide residues in animals and the environment, ecologists have been able to measure the extent of the hazards presented by DDT and other persistent general poisons. The picture that is emerging is not a comforting one. Pesticide residues have now accumulated to levels that are catastrophic for certain animal populations, particularly carnivorous birds. Furthermore, it has been clear for many years that because of their shotgun effect these weapons not only attack the pests but also destroy predators and competitors that normally tend to limit proliferation of the pests. Under exposure to pesticides the pests tend to develop new strains that are resistant to the chemicals. The result is an escalating chemical warfare that is self-defeating and has secondary effects whose costs are only beginning to be measured. One of the costs is wildlife notably carnivorous and scavenging birds such as hawks and eagles. There are others: destruction of food webs aggravates pollution problems, particularly in bodies of water that receive mineral nutrients in sewage or in water draining from heavily fertilized agricultural lands. The plant populations, no longer consumed by animals, fall to the bottom to decay anaerobically, producing hydrogen sulfide and other noxious gases, further degrading the environment.

Location	Organism	Tissue	Concentration (parts per million)
United States (Average).	Man	Fat	11.0.
Alaska (Eskimo)			2.8.
England			2.2.
West Germany			2.3.
France			5.2.
Canada			5.3.
Hungary			12.4.
Israel			19.2.
India			12.8–31.0.
United States:			
California	Plankton		5.3.
Do	Bass	Edible Flesh	4–138.
Do	Grebes	Visceral Fat	Up to 1,600.
Montana	Robin	Whole Body	6.8–13.9.
Wisconsin	Crustacea		0.41.
Do	Chub	Whole Body	4.52.
Do	Gull	Brain	20.8.
Missouri	Bald Eagle	Eggs	1.1–5.6.
Connecticut	Osprey	do	6.5.
Florida	Dolphin	Blubber	About 220.
Canada	Woodcock	Whole Body	1.7.
Antarctica	Penguin	Fat	0.015–0.18.
Antarctica	Seal	Fat	0.042–0.12.
Scotland	Eagle	Eggs	1.18.
New Zealand	Trout	Whole Body	0.6–0.8.

Note: DDT residues, which include the derivatives DDO and DDE as well as DDT itself, have apparently entered most food webs. These data were selected from hundreds of reports that show DDT has a worldwide distribution, with the highest concentrations in carnivorous birds.

The accumulation of persistent toxic substances in the ecological cycles of the earth is a problem to which mankind will have to pay increasing attention. It affects many elements of society, not only in the necessity for concern about the disposal of wastes but also in the need for a revolution in pest control. We must learn to use pesticides that have a short half-life in the environment—better yet, to use pest-control techniques that do not require applications of general poisons. What has been learned about the dangers in polluting ecological cycles is ample proof that there is no longer safety in the vastness of the earth.

DDT Residues and Declining Reproduction in Bermuda Petrel

(Abstract. Residues of DDT [1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane] averaging 6.44 parts per million in eggs and chicks of the carnivorous Bermuda petrel indicate widespread contamination of an oceanic food chain that is remote from applications of DDT. Reproduction by the petrel has declined during the last 10 years at the annual rate of 3.25 percent; if the decline continues, reproduction will fail completely by 1978. Concentrations of residues are similar to those in certain terrestrial carnivorous birds whose productivity is also declining. Various considerations implicate contamination by insecticides as a probable major cause of the decline.)

Many oceanic birds nested on Bermuda in 1609 when the first settlers arrived, the most abundant apparently being the Bermuda petrel, *Pterodroma cahow*. Within 20 years man and his imported mammals virtually exterminated those species; for nearly 300 years it was considered extinct. Several records of specimens since 1900 were followed in 1951 by discovery of a small breeding colony (1), and in 1967 22 pairs nested on a few rocky islets off Bermuda. With a total population of about 100 the petrel is among the world's rarest birds.

A wholly pelagic species, *P. cahow* visits land only to breed, breeds only on Bermuda, and arrives and departs only at night. The single egg is laid underground at the end of a long burrow. When not in the burrow the bird feeds far at sea, mainly on cephalopods; when not breeding it probably ranges over much of the North Atlantic (1).

Reproduction by *P. cahow* has declined recently. The data since 1958 (Table 1) show an annual rate of decline of 3.25 ± 1.05 percent; the negative slope of a weighted regression is significant (P, .015; F test). If this linear decline continues, reproduction will fail completely by 1978, with extinction of the species. Many recent reports have correlated diminished reproduction by certain carnivorous birds with contamination by chlorinated hydrocarbon insecticides (2–7). As the terminal member of a pelagic food chain, presumably feeding over much of the North Atlantic, the petrel may be expected to concentrate by many orders of magnitude any stable, lipid soluble chemicals, such as chlorinated hydrocarbon insecticides, present in lower trophic levels (2, 3, 8). In fact it should serve as an ideal environmental monitor for detection of insecticide contamination as a general oceanic pollutant, rather than contamination resulting directly from treatment of a specific land area (9). When we analyzed several specimens of *P. cahow* for chlorinated hydrocarbon insecticides, all samples contained DDT residues (10).

During March 1967 five unhatched eggs and dead chicks were collected from unsuccessful petrel burrows and stored frozen. The small size of the population precluded the sampling of living birds. Samples were analyzed for DDT, *o,p*-DDT, DDE, DDD, dieldrin, and endrin by electron-capture gas chromatography; the results are summarized in Table 2. No *o,p*-DDT, dieldrin, or

endrin was detected, but an independent laboratory detected a trace of dieldrin.

Certain identifications were confirmed by thin-layer chromatography (*11*) as follows: After Florisil cleanup (*12*), the unknown sample was spotted on a thin-layer plate with 1-μg authentic standard samples on both sides. After development, the unknown was masked by a strip of paper, and the standards were sprayed with chromogenic reagent (*11*). When spots were visible following exposure to ultraviolet light, the masking was removed, horizontal lines were drawn between the standard spots in order to locate corresponding compounds in the unknown, and these areas were scraped from the plate and extracted with a few drops of a mixture of hexane and acetone (9:1 by volume). Injection into the gas chromatograph confirmed the presence of DDT, DDE, and DDD by showing the appropriate single peaks for these compounds. This confirmation procedure was employed because the electron-capture detector is more sensitive than the chromogenic spray reagent in detecting minute amounts of these materials.

Coincidental with diminishing reproduction by the Bermuda petrel is the presence of DDT residues averaging 6.44 parts per million (ppm) in its eggs and chicks. In itself this coincidence does not establish a causal relation, but these findings must be evaluated in the light of other studies. Whereas a healthy osprey (*Pandion haliaetus*) population produces 2.2 to 2.5 young per nest, a Maryland colony containing DDT residues of 3.0 ppm in its eggs yielded 1.1 young per nest, and a Connecticut colony containing 5.1 ppm produced only 0.5 young per nest; the Connecticut population has declined 30 percent annually for the last 9 years (*4*). In New Brunswick, breeding success of American woodcocks (*Philohela minor*) showed a statistically significant inverse correlation with the quantity of DDT applied to its habitat in a given year. Furthermore, during 1962 and 1963, birds from unsprayed Nova Scotia showed breeding success nearly twice as great as did those from sprayed New Brunswick, where woodcock eggs averaged 1.3 ppm of DDT residues during those years (*5*).

TABLE 1.—REPRODUCTIVE SUCCESS OF THE BERMUDA PETREL BETWEEN 1958 AND 1967 [1]

Year	Pairs	Chicks	Success (percent)
1958	6 (1)	4	66.7
1959	5 (2)	2	40.0
1960	13 (3)	6	46.2
1961	18 (1)	12	66.7
1962	19	9	47.4
1963	17 (1)	9	52.9
1964	17 (1)	8	47.1
1965	20	8	40.0
1966	21	6	28.6
1967	22	8	36.4

[1] Percentages of established adult pairs under observation whose chicks survived 2 weeks after hatching. Numbers of pairs of unknown success (not included in calculations) appear in parentheses. Data from 1961 to 1967 are believed to represent the total breeding population; earlier, not all burrows had been discovered. The decline in reproductive success follows the linear relation $y=a+bx$ (y, reproductive success; a, a constant; b, annual percentage decline in success; x, year). The regression weighted by numbers of pairs: $y=251.9-3.25x$.

In Britain five species of raptors, including the peregrine falcon (*Falco peregrinus*) and golden eagle (*Aquila chrysaetos*), carried residues of chlorinated hydrocarbon insecticides in their eggs, averaging 5.2 ppm; each of these species has shown a decline in reproduction and total population during recent years. By comparison, residues in the eggs of five species of corvids averaged 0.9 ppm, and breeding success and numbers have been maintained (*6*). It is noteworthy that during the last decade the peregrine has become extinct as a breeding bird in the eastern United States (*13*). Residues in bald eagle (*Haliaetus leucocephalus*) eggs averaged 10.6 ppm, and this species also shows declining reproduction and population (*7*). Lake Michigan herring gulls (*Larus argentatus*), exhibiting very low reproductive success, averaged 120 to 227 ppm of DDT residues in the eggs (*3*), the suggestion being that susceptibility varies widely between species.

In most of the above instances, including *P. cahow*, reduced success in breeding resulted primarily from mortality of chicks before and shortly after hatching. Bobwhites (*Colinus virginianus*) and pheasants (*Phasianus colchicus*), fed sublethal diets of DDT or dieldrin, gave similar results (*14*); a mechanism explaining chick mortality from dieldrin poisoning during the several days after hatching has been presented (*15*).

From studies of these birds and other avian carnivores a very widespread, perhaps worldwide, decline among many species of carnivorous birds is apparent. The pattern of decline is characterized by reduced success in reproduction correlated with the presence of residues of chlorinated hydrocarbon insecticides—primarily DDT. Our data for the Bermuda petrel are entirely consistent with this pattern.

Observations of aggressive behavior, increased nervousness, chipped eggshells, increased egg-breakage, and egg-eating by parent birds of several of the above species (*3, 6, 13*) suggest symptoms of a hormonal disturbance or a calcium deficiency, or both. Moreover, DDT has been shown to delay ovulation and inhibit gonadal development in birds, probably by means of a hormonal mechanism, and low dosages of DDT or dieldrin in the diet of pigeons increased metabolism of steroid sex hormones by hepatic enzymes (*16*). A direct relation between DDT and calcium function has also been demonstrated, and these endocrine and calcium mechanisms could well be interrelated; DDT interferes with normal calcification of the arthropod nerve axon, causing hyperactivity of the nerve and producing symptoms similar to those resulting from calcium deficiency (*17*). Dogs treated with calcium gluconate are very resistant to DDT poisoning (*18*); female birds are more resistant than males (*19*), perhaps because of calcium-mobilizing action of estrogenic hormones.

TABLE 2. RESIDUES OF DDT (10) IN PARTS PER MILLION (WET WEIGHT) IN EGGS AND CHICKS OF THE BERMUDA PETREL, COLLECTED IN BERMUDA IN MARCH 1967; PROPORTIONS OF DDT, DDE, AND DDD ARE EXPRESSED AS PERCENTAGES OF THE TOTAL

Sample	Residues parts per (million)	Percentages		
		DDT	DDE	DDD
A, egg [1]	11.02	[2] 37	[2] 58	[2] 5
A, egg [1 3 4]	10.71	[2] 34	[2] 62	[2] 4
B, addled egg [1]	3.61	15	65	20
C, chick in egg [5]	4.52	33	64	3
D, chick in egg [5]	6.08	33	62	5
D, chick brain [4 5]	.57	30	54	16
E, chick, 1 to 2 days old	6.97	[2] 29	[2] 66	[2] 5
Average	6.44	31	62	7

[1] Egg showed no sign of development.
[2] Identity confirmed by thin-layer chromatography (11).
[3] Analysis 5 months later by Wisconsin Alumni Research Foundation, which also detected dieldrin at 0.02 p.p.m.
[4] Not included in averages.
[5] Fully developed chick died while hatching.

Of major importance, then, was the discovery that a significant ($P<.001$) and widespread decrease in calcium content of eggshells occurred between 1946 and 1950 in the peregrine falcon, golden eagle, and sparrowhawk, *Accipiter nisus* (*20*). This decrease correlates with the widespread introduction of DDT into the environment during those years, and further correlates with the onset of reduced reproduction and of the described symptoms of calcium deficiency. These multiple correlations indicate a high probability that the decline in reproduction of most or all of these birds, including *P. cahow*, is causally related to their contamination by DDT residues.

Other potential causes of the observed decline for the Bermuda petrel appear unlikely. The bird has been strictly protected and isolated since 1957, and it seems that human disturbance can be discounted. In such a small population, inbreeding could become important, but hatching failure is now consistent in pairs having earlier records of successful breeding, and deformed chicks are never observed. Furthermore, the effects of inbreeding would not be expected to increase at a time when the total population, and probably the gene pool, is still increasing. The population increase results from artificial protection since 1957 from other limiting factors, especially competition for nest sites with tropic birds (*21*).

It is very unlikely that the observed DDT residues in *P. cahow* were accumulated from Bermuda: the breeding grounds are confined to a few tiny, isolated, and uninhabited islets never treated with DDT, and the bird's feeding habits are wholly pelagic. Thus the presence of DDT residues in all samples can lead only to the conclusion that this oceanic food chain, presumably including the plankton, is contaminated. This conclusion is supported by reported analyses showing residues in related seabirds including two species of shearwaters from the Pacific (*22*); seabird eggs (*9, 22*); freshwater, estuarine, and coastal plankton (*2, 8, 23*); plankton-feeding organisms (*2, 8, 9, 22, 23*); and other marine animals from various parts of the world (*8, 22*). These toxic chemicals are apparently very widespread within oceanic organisms (*8, 22*), and the evidence suggests that their ecological effects are important.

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The Peregrine Situation in Great Britain 1965–66

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INTRODUCTION

In order to follow latest trends in the breeding population of the British Peregrine (*Falco peregrinus*), a sample census was continued in 1965 and 1966 on a scale similar to that of 1963–64. This paper summarises the results, and gives data on chemical analysis of the small samples of eggs taken during these two years.

CENSUS DATA

Observations on 200 territories in 1965 and 213 territories in 1966 (representing 240 different territories of the two-year period) are given in Table I, according to the six different regions of Great Britain recognised previously (Ratcliffe 1963). This sample is approximately one-third of the mean annual total of 650 territories estimated to be occupied regularly in Great Britain during the standard period 1930–39, or just under one-third of the total of 718 territories occupied at least once since 1930. Census data for 1961–64 are given for comparison. However, because of a bias against visiting previously deserted territories and reporting negative observations during the period 1963–66, the figures for these years are not directly comparable with those for 1961–62, and a correction has to be made (see Table I).

It is evident that there has been no appreciable change in level of breeding population since 1964, for although only 41 successful eyries were known in 1966, against 45 in 1965, this is not a significant difference. The data certainly give no hint of overall improvement in the Peregrine situation during the last two years. Few records for the mainland of the North and West Highlands are available for 1965–66, and most of the data referring to this region are for Orkney and Shetland. It is clear that parts of the South and East Highlands are still the stronghold of the Peregrine in Britain, and breeding success has remained good in this region; but even here, a quarter of the inspected territories held apparently nonbreeding birds in 1966. In England and Wales together, successful breeding was limited to ten pairs in 1965 and seven pairs in 1966, and at least four-fifths of the territories visited were unoccupied in both years.

When the figures for 1965–66 are compared with those for 1963–64, the proportion of deserted territories is seen to have been fairly constant throughout, i.e. about 60 percent of the number of known territories visited, when correction for observation/recording bias has been made. Regarding breeding success, it should be noted that in 1965 and 1966 there were, respectively, 17 and 12 eyries where eggs were probably or certainly laid, but which were not re-visited to determine the final outcome; whereas in 1963 and 1964 there were only 4 and 3 such eyries. As the other data suggest that at least half the 'outcome unknown' eyries would be successful, the figures for successful nesting in the 1965–66 census samples would almost certainly be higher than those given in Table I. Even so, it is doubtful if there is valid evidence for a significant change in breeding success during the whole four-year period 1963–66; this has fluctuated from about 13 to 16 per cent of the number of known territories visited. There may have been a slight recovery in 1964 after the low ebb of 1963, but the figures may indicate merely the normal fluctuation of a population which has become relatively stabilised at a much reduced level; while, in any case, there is likely to be a degree of sampling and observational error.

TABLE 1.—OCCUPATION OF PEREGRINE TERRITORIES, 1963-66

Year and region	Number of territories examined	Birds apparently absent	1 or both of the pair present but not proved to nest	Nesting, outcome unknown	Nested, but unsuccessfully (eggs or young lost)	Successful nesting (young reared)
1961: Total for Great Britain	431	173	118	17	41	91 (9)
1962: Total for Great Britain	488	247	119	22	35	77 (9)
1963: Total for Great Britain	200	110	34	4	13	39 (0)
1964: Total for Great Britain	203	109	28	3	15	48 (0)
1965:						
Southern England	42	40		1		1
Wales	34	26	6			2
Northern England	30	17	2		4	7
Southern Scotland	31	12	3	3	5	8
South and East Highlands	47	4	8	7	4	24
North and West Highlands	36	18	6	6	3	3
Total for Great Britain	220	117	25	17	16	45 (1)
1966:						
Southern England	42	40				2
Wales	40	34	3	1		2
Northern England	24	13	4	1	3	3
Southern Scotland	32	11	6	2	4	9
South and East Highlands	44	7	11	1	2	23
North and West Highlands	31	12	5	7	5	2
Total for Great Britain	213	117	29	12	14	41 (3)

Notes: To make approximate correction for comparison with 1961–62, the figures for 1963–66 regarding "birds apparently absent" should be increased by ¼, and those for "successful nesting" should be reduced by ⅓. These factors are derived as follows: The sample of eyries visited in each of the years 1963–66 is similarly biased (toward territories likely to give positive rather than negative records) by comparison with the much larger sample for 1961–62, and many eyries visited with negative results have evidently not been reported to me. If the 1962 data are subsampled to give a list of those eyries which were acutally visited during 1963–66, simple calculation gives values of 44 percent for territory desertion and 24 percent for successful breeding pairs. The figures calculated from the full 1962 data are, however, 50 and 16 percent respectively, i.e. approximately ⅛ more for territory desertion and ⅓ less for successful pairs. As the samples for 1961 and 1962 were closely comparable, the above correction factors apply also to 1961.

Actual breeding success for 1961 and 1962 is 19 and 13 percent, respectively, when broods taken by falconers are regarded as failures (as in Ratcliffe 1963), but to show more accurately the proportion of healthy broods potentially able to fledge, those taken by falconers have been included and give breeding success as a theoretical 21 and 16 percent. Broods taken by falconers (illegally after 1961) are bracketed alongside the totals.

By comparison with the fuller data for 1961–62, it would seem that the rapid decline of those years continued into 1963, but that the population then leveled off, and, at most, has since shown marginal improvement in breeding success alone. On the other hand, when data for each region are examined separately, the population of Southern Scotland has shown evident improvement in breeding success since 1963; in 1963, only 3 out of 19 inland territories visited had successful pairs, whereas in 1966, 8 out of 24 reared young. M. Gilbertson (pers. comm.) also reports an apparent improvement in Northern Ireland, where a total of only 5 young was reared in 14 territories examined in 1964, compared with a total of 11 young in 16 territories in 1966. These are the regions closest to the Scottish Highlands, and therefore the ones in which any recovery of the Peregrine population might be expected to show first.

PESTICIDE RESIDUES

Although only 12 Peregrine eggs have been analysed (by gas-liquid chromatography) for organo-chlorine pesticide residues in 1965–66, the results (Table II) are revealing. Despite the higher levels, compared with 1963–64, the sample is too small for the data to be regarded as valid evidence of an increase in contamination. However, the figures suggest that the voluntary restrictions on use of aldrin, dieldrin and heptachlor, in 1964, have (up to the spring of 1966) had no effect in reducing the contamination of the British Peregrine by residues of these pesticides. The figures for heptachlor in particular indicate that, despite statements to the contrary,

there was still a considerable local use of this chemical during 1965–66.

Whilst only 5 egg analyses are available yet for the central part of the South and East Highlands, they show an appreciably lower mean level of contamination than the 22 eggs from Northern England and Southern Scotland, though the difference lies largely in the DDE component of the residues. This matches the differences between the first region and the second two in regard to both state of the population and breeding success; and it supports the earlier contention (Ratcliffe 1963, 1965) that contamination risk to the Peregrine is lower in the South and East Highlands than in most other parts of the British Isles. Even within the 5 Highland eggs there are suggestive differences; the two from Angus (within Peregine reach of rich arable farm land) contain appreciably higher residues of DDE, dieldrin and heptachlor expoxide than those from the three Inverness-shire eyries, which were all remote from agricultural land.

The egg analyses for 1963–64 showed no difference between those from eyries which failed and those which produced flying young from the remaining eggs (Ratcliffe 1965). Now that more data are available, a slight difference shows when all egg analyses are thus separated; the figures are (total organochlorine residues) 17.4 p.p.m. for eggs from failed eyries and 12.7 p.p.m. for eggs from successful eyries. The difference is not statistically significant but it is suggestive.

In 1966, two eggs were examined for residues of mercury; one was blank (Table IIB, 1966/1) but the other (Table IIB, 1966/3) contained 0.3 p.p.m.

BREEDING SUCCESS, BROOD SIZE AND REPLACEMENT OF LOSSES

Of the 30 eyries which failed in 1965–66, egg breakage or disappearance of eggs (usually one by one and apparently due to parental destruction) was the cause of failure in 26. Mean brood size in successful eyries has continued to be low in regions south of the Highlands (average of 1.8 young for 24 known broods) and normal in the South and East Highlands (average of 2.5 young for 28 known broods).

I have recently been provided with data collected by the late W. C. Lawrie at a regular Lakeland eyrie between 1910 and 1939. The history is incomplete, but the following records are available of all successful nestings in which the brood-size was definitely known:

1913, 3 young	1924, 4 young
1914, 3 young	1925, 2 young
1920, 3 young	1926, 4 young
1922, 3 young	1927, 4 young
1928, 1 young	1936, 4 young
1930, 4 young	1939, 4 young
1931, 3 young	

The mean of these 13 broods was 3.2 young, an appreciably higher figuer than the national pre-war average of 2.5 young. Unspecified broods were also reared in several other years and there are in existence several clutches of eggs taken from this locality during the same period. The haunt was never known to be deserted between 1910 and 1939, and the only cause of breeding failure was egg collecting, apart from one year in which the birds deserted after being kept off the nest for many hours. At least two different females were involved during this period.

The recent history of occupation at this same haunt is as follows:—

1961 3 eggs; two were later broken, the third hatched but the chick died.

1962 3 eggs; all disappeared later, evidently through parental destruction.

1963 3 eggs; one taken fresh for chemical analysis (Table IIB, 1963, No. 3), the other two hatched; one chick died and the other fledged.

1964 3 eggs; only one chick hatched and it later died.

1965 3 eggs; one broken later, one bad (Table IIB, 1965, No. 4) and the third hatched; the single chick fledged.

1966 No trace of the birds.

TABLE II.—ORGANO-CHLORINE RESIDUES IN PEREGRINE EGGS

A. CENTRAL SCOTTISH HIGHLANDS

Year	No.	County	pp DDE	pp TDE	pp DDT	Dieldrin	Heptachlor epoxide	BHC isomers	Total o/c residues
1963	[1] 1	Inverness	6.9	----	----	0.5	0.2	[2]	7.6
	[1] 2	Angus	5.4	0.6	0.8	.6	1.9	0.2	9.5
1966	[1] 1	Inverness	3.6	----	[2]	.1	[2]	----	3.7
	[1] 1	----do	2.8	----	.1	.3	[2]	----	3.2
	[1] 3	Angus	7.8	.1	[2]	1.6	1.2	----	10.7
Mean			5.3	.1	.2	.6	.7	[3].1	6.9

B. NORTHERN ENGLAND AND SOUTHERN SCOTLAND

1963	[4] 1	Westmorland	15.8	----	0.4	0.7	2.9	0.2	20.0
	[4] 2	Cumberland	10.0	----	----	.4	.7	.1	11.2
	[3] ----	do[5]	30.8	----	----	1.1	4.1	.1	36.1
	[4] 4	Dumfries[5]	2.6	----	.1	.1	.1	[2]	2.9
	[5]	Peebles	4.4	----	.1	.4	.6	[2]	5.5
	[4] 6	----do[5]	21.2	----	.1	.5	.6	.2	22.6
	[4] 7	----do[5]	23.2	----	----	.3	.5	.1	24.1
	[4] 8	Kirkcudbright	14.1	----	----	.7	.4	.1	15.3
	[4] 9	----do	9.0	----	.1	.1	.4	.2	9.8
Mean for 1963			14.6	----	.1	.5	1.1	.1	16.4
1964	[4] 1	Dumfries[5]	4.7	[2]	[2]	1.3	.2	.6	6.8
	[4] 2	----do	7.3	----	----	1.8	.7	.8	10.6
	[4] 3	Kirkcudbright[5]	10.8	0.5	.5	.1	.1	.5	12.5
	[4] 4	Peebles	12.0	----	----	.8	.4	.1	13.3
Mean for 1964			8.7	.1	.1	1.0	.4	.5	10.8
1965	[4] 1	Kirkcudbright[5]	22.3	.2	.3	.5	4.3	.4	28.0
	[1] 2	Dumfries[5]	10.2	.2	.2	.5	.2	.2	11.5
	[4] 3	Peebles	18.1	.1	.7	.5	.2	.2	19.8
	[1] 4	Cumberland[5]	25.0	----	----	.6	.8	.1	26.5
	[4] 5	Westmorland	24.0	----	----	.8	1.0	----	25.8
Mean for 1965			19.9	.1	.2	.6	1.3	.2	22.3
1966	[4] 1	Kirkcudbright[5]	22.0	.2	.2	.3	1.0	----	23.7
	[4] 2	----do	22.0	----	----	.6	1.0	----	23.6
	[4] 3	----do	13.0	----	.1	.2	.1	----	13.4
	[4] 4	Westmorland	23.0	[2]	----	.6	.5	2.8	28.9
Mean for 1966			20.0	.1	.1	.9	.7	.7	22.5
Overall mean			15.7	.1	.1	.7	.9	.3	17.8

[1] Successful eyrie; at least 1 young reared from remaining eggs.
[2] Trace.
[3] Less than figure shown.
[4] Unsuccessful eyrie; remaining eggs broken or failed to hatch.
[5] Same female for the same locality.

While the two eggs containing total organo-chlorine residues of 36 and 27 p.p.m. (dieldrin+heptachlor epoxide 5.2 and 1.4 p.p.m.) were from clutches from which single young were fledged, this level of contamination was associated with a marked reduction in brood size, compared with pre-war years. This haunt was one of only five (out of 30) once regularly occupied territories in Northern England which were continuously occupied throughout the period 1960–65; and 1966 was the first year since 1910 when Peregrines were absent. Probably the same female occupied the haunt from 1961 to 1965, but it was a different bird from that present in 1939.

The summarised figures in Table I conceal the details of change occurring within a population which as a whole remains stable. For instance, in Southern Scotland, 27 territories were visited in both 1965 and 1966, and 16 were found occupied in each year, but only 13 were occupied in *both* years. Since 1960, it is usual for this region and Northern England to show small gains and losses in any year, by comparison with the preceding and succeding years, so that fresh gaps are still appearing as old ones are filled.

The output of young Peregrines annually from the whole of the Scottish Highlands would seem adequate to allow a slow recovery, at least in occupation of territories, and it is perhaps surprising that even in this region, about 47 per cent of territories visited remained deserted or held by non-breeders in 1966. However, the annual surplus has also to fill gaps caused by mortality amongst the established breeding population, and when birds move away from their birthplace to depleted areas, they are themselves increasingly exposed to pesticidal contamination, with the implication of increased risks of mortality and breeding failure. As not all Peregrines are likely to reach sexual maturity at one year old, many probably pass their juvenile stage in country away from breeding haunts and may then be more at risk, as regards pesticides, than if they were able to occupy a nesting place in their first year.

Walpole-Bond (1914) noted that a barren female Peregrine refused to mate or to allow a prospecting pair to settle on her breeding cliffs, but after she was shot, a new pair soon appeared and nested. It could be that many of the non-breeding Peregrines recently holding territories also defend them against potential breeders which arrive from other areas. Cade (1960) has suggested that the tenacity with which Peregrine eyries are

usually held over a long period depends on the survival at all times of one bird of the occupying pair, and that when both of the pair die simultaneously, continuity is lost and the haunt may then be left deserted for a period. Many Peregrine breeding haunts south of the Highlands seem to have been totally deserted for several years, and this loss of continuity may be an additional factor working against their re-occupation. Even so, rate of re-occupation of totally deserted haunts in Southern England was fairly rapid after intensive human 'control' ceased in 1945. The continued failure of the Peregrine to restore its previous breeding numbers is most likely to be explained by lack of improvement in the adverse factor which originally depleted the areas concerned.

CONCLUSIONS

The continued investigations of 1965–66 reinforce earlier conclusions (Ratcliffe 1963, 1965) that the persistent organo-chlorine pesticide residues have been a causal factor in the post-1955 decline of the Peregrine in Britain. In view of the evident maintenance of contamination levels in the environment, it is not surprising that the breeding population has shown no clear tendency towards recovery. Moreover, there would seem to be no sign of general resistance to these chemicals developing in this species.

SUMMARY

A sample census of about one-third of the Peregrine breeding population of Great Britain in 1965 and 1966 indicates that there has been no significant change in proportion of occupied territories or breeding success of remaining birds during this period.

Comparison with earlier data suggests that the Peregrine decline ceased after 1963, and that the population has since remained relatively stable, with occupied territories at about 40 per cent of the pre-war level and breeding success (pairs rearing young) varying between about 13 and 16 per cent of the maximum possible level (former mean annual number of pairs). Breeding success may have improved marginally after 1963 on the national scale, and more significantly in Southern Scotland and Northern Ireland.

The geographical pattern is unchanged, with population level, breeding success and brood size lowest in England and Wales, and highest in the South and East Highlands of Scotland.

Analysis of Peregrine eggs gives no evidence of a decrease in contamination by any organo-chlorine residue since 1964. Eggs from Northern England and Southern Scotland were more heavily contaminated than those from the South and East Highlands during the period 1963–66, though the difference lies mainly in the DDE component.

Failure of young Peregrines from successful eyries to build up the breeding population of depleted areas is probably a reflection primarily on the lack of improvement in the adverse factor which initiated decline.

ADDENDUM

Since this account was written, preliminary data for 1967 have become available. They indicate a slight recovery of population, in both occupation of territories and breeding success, in the east and central Scottish Highlands, Northern England and Northern Ireland. In the southwest Highlands and Southern Scotland, breeding success was lower than in 1966, but there was no decrease in number of occupied territories. Analysis of ten eggs in 1967 shows a decrease in organo-chlorine residue levels, especially of dieldrin and heptachlor epoxide, compared with 1956–66, and also confirms that residue levels are significantly lower in the Central Highlands than in other regions of the south. Slight recovery of the population in more northerly regions is thus consistent with a decrease in environmental contamination, at least in these more marginal arable farming districts, which were least affected by the original population decline.

It has recently been shown (Ratcliffe 1967) that the post-war prevalence of egg breaking in the British Peregrine correlates closely with a widespread decrease in eggshell weight/size ratio (i.e. probably thickness) which appeared in 1947 and has persisted ever since, except in some parts of the Central Highlands. The connections between these phenomena, and their possible relationships to contamination of the species by organo-chlorine residue, are being examined.

Problems With DDT in Fish Cultural Operations

(J. P. Cuerrier, J. A. Keith, and E. Stone)

ABSTRACT

Various concentrations of DDT and residues have been detected in eggs and fry of speckled, rainbow, and cutthroat trout obtained from local sources and from commercial suppliers and handled at the Maligne River Trout Hatchery, Jasper National Park, Alberta. Concentrations of DDT and metabolites exceeding 400 ppb in eggs resulted in a 30 to 90 per cent mortality among the fry 60 fingerlings during the days following the swim-up stage. All commercial dry feeds analysed contained DDT. Among ingredients used in the manufacturing of trout feeds, only brewer yeast was found almost free of contamination.

INTRODUCTION

Because of the very wide distribution of DDT, it would seem that all forms of life are being exposed, directly or indirectly, to this chemical insecticide. Extensive research has been done on the toxicity of DDT to insects, the primary target, but comparatively little is known of the effects of secondary contamination of animals, particularly during the very early stages of development. The purpose of this paper is to present data on DDT contamination of trout in fish hatcheries.

Mack and co-workers (1964) found DDT concentrations in whole fish ranging from 0.2 to 7 ppm; certain tissues or organs contained up to 40 ppm. Burdick and co-workers (1964) found as much as 500 ppm of DDT by weight in ether-extracted oils from lake trout eggs taken from Lake George, New York State. They found that 90 per cent of lake trout eggs containing 2.95 ppm of DDT and above died at the fry stage. With landlocked salmon at Sebago Lake, Maine, Anderson and Everhart (1966) found that ovaries of three-year-old salmon contained 0.87 ppm of DDT, while ovaries of older salmon showed 6.0 ppm of DDT.

Mortality at the yolk-sac stage of lake trout in George Lake and other waters in the State of New York, and of the landlocked salmon in Sebago Lake, has been ascribed to DDT contamination.

For many years, gill diseases were thought to cause mortality at different stages of development of the various trout species raised at the Maligne River Trout Hatchery, Jasper National Park, Alberta. Recent investigations by the Pathology Section of the Canadian Wildlife Service, with the co-operation of the U.S. Bureau of Sport Fisheries and Wildlife, have revealed the occurrence of such diseases as "cold-water disease", infectious pancreatic necrosis, and "kidney disease", in addition to gill diseases. Mortality has also been caused by dissolved copper and zinc from pipes and valves in the hatchery. In spite of these hazards and the Damocles' sword ever present in fish culture operations, in 1966 the Maligne River Hatchery produced more than one and one-half million trout of various species and sizes for plantings in the Mountain Park waters.

However, some mortality could not be explained by viral or bacterial infections and DDT contamination was suspected. Samples of eggs, alevins, and commercial dry feeds were analysed. All analyses were performed under contract by Dr. D. J. Ecobichon, Pharmacology Division, University of Guelph, using electron capture gas chromatography and the extraction procedure of Saschenbrecker and Ecobichon (1967).

TROUT EGGS AND ALEVINS

Trout eggs handled at the Maligne River Trout Hatchery come from various sources: (a) local collections from wild stocks originating from annual hatchery plantings; (b) local collections from domestic stocks held at the hatchery; (c) commercial suppliers located in the United States; and (d) provincial and federal fisheries agencies. Table 1 presents data on DDT and metabolite levels found in eggs and alevins of various species of trout.

In view of the preliminary and exploratory nature of this report, no attempt is being made to establish a relationship between the levels of each type of residue found in the various samples. However, in samples with levels of total DDT and residues below 200 ppb, residues of DDT and metabolites appear in the following order: the lowest levels are of *o,p'*-DDT, followed by DDD, *p,p,'*-DDT, and DDE. DDE was the major component, with about twice as much of it as of the other residues combined.

TABLE 1—DDT AND METABOLITES IN PARTS PER 10^9 (PPB) WET WEIGHT IN EGGS AND FRY OF VARIOUS SPECIES OF TROUT

Sample catalog	Description [1]	Concentration in parts per 10^9, ppb, wet weight					Losses [2] (percent)
		DDE	o,p'-DDT	DDD	p,p'-DDT	Total	
B-477	RT eggs, wild, Jasper	65	8	23	25	123	−15
B-479	RT eggs, commercial	57	19	28	44	148	
B-480	RT eggs, commercial	63	29	33	53	178	
B-726	RT eggs, commercial	79	(3)	(3)	(3)	79	
B-727	RT eggs, commercial	129	(3)	26	21	176	−15
B-728	RT eggs, commercial	46	(3)	11	7	64	
B-729	RT eggs, commercial	62	(3)	6	(4)	68	
B-730	Cutth. T. eggs, domestic	166	(4)	378	23	567	30
B-420	EBT domestic, fry	333	44	(3)	87	464	70
B-417	RT f.sp., yolk fry	1,022	54	294	52	1,422	90
B-418	RT f.sp., yolk fry	971	(4)	178	(4)	1,149	90
B-478	EBT fry, domestic	217	16	51	201	485	90

[1] Abbreviations: RT equals rainbow trout; f.sp. equals fall spawning; EBT equals eastern brook or speckled trout; Cutth T. equal cutthroat trout.
[2] Losses during the 2-month period following the swim-up stage.
[3] Indicates undetected, the limit of detection being 1 ppb.
[4] Indicates traces in the range of 1 to 5 ppb.

Eggs collected from wild rainbow trout in Lake Edith, Jasper National Park, where annual plantings are carried out, showed a total level of 123 ppb of DDT and metabolites. Losses during the 60 days following the swim-up stage were less than 15 per cent. Spring-spawning rainbow trout eggs from commercial sources contained levels ranging from 64 ppb to 178 ppb. Losses in alevins from these eggs were less than 15 per cent during the 60 days following the swim-up stage. Losses of this magnitude are considered normal for that stage. However, cutthroat trout fry resulting from eggs purchased from a commercial supplier showed a total concentration of 567 ppb of DDT and metabolites; losses were about 30 percent.

Eastern brook trout fry resulting from eggs

extracted from a domestic brood stock held at the Jasper Hatchery had a mortality of 70 per cent. The total level of DDT and metabolites was 464 ppb.

Rainbow trout yolk-sac fry from an autumn-spawning strain obtained from a commercial supplier contained 996 ppb of DDT and 236 ppd of DDD for a total of 1,285 ppb of DDT and metabolites. Losses amounted to close to 90 per cent in the two-month period which followed the swim-up stage. Similar heavy losses were experienced with brook trout fry resulting from eggs obtained from a domestic brood stock held by a government agency. The concentration of total DDT and metabolites was 485 ppb, mostly DDE and *p,p'*-DDT.

The fish with high levels of mortality were not exposed to disease more than the others, but during the period of this study, mortality above 25 per cent seemed to be associated with comparatively high levels of DDT and its metabolites. Therefore, we conclude that insecticide residues were responsible for this high mortality. In their paper on chronic effects of DDT on cutthroat trout, Allison and coworkers (1964) stated that "there was a critical period shortly after hatching when mortality was noticeably higher in offspring of the high-dosage lots".

The relationship between mortality, level of DDT contamination of the eggs, and temperature of the water during yolk-sac absorption is under experimental study. Incubation and hatching during the winter and spring seasons at the Maligne River Trout Hatchery take place at a water temperature of 40° F. Brook trout fry and alevins which experienced a 90 per cent mortality at our Maligne River Trout Hatchey had less than 15 per cent mortality at the hatchery where the eggs came from. At that establishment, incubation of trout eggs is carried out at a water temperature ranging from 32° F. to 36° F.

COMMERCIAL TROUT DRY FEEDS

Fry are fed with commercial dry feeds after reaching the advanced swimup stage. Samples of dry feeds were analyzed. Results are presented in Table 2 but for obvious reasons, brand names and sources are not given. Analyses revealed the presence of DDT in all samples, with levels ranging from 2 ppb to 234 ppb. One sample also contained 17 ppb of dieldrin.

TABLE 2.—DDT AND METABOLITES IN PARTS PER 10^9 (ppb) WET WEIGHT IN MANUFACTURED DRY FEEDS FOR TROUT

Sample catalog number	Concentrations in parts per 10^9, ppb				
	DDE	o,p'-DDT	DDD	p,p'-DDT	Total
473-476	104	27	38	65	234
483-476	45	19	42	54	160
491-493	45	35	38	78	196
B-1348	71	[1]	33	46	150
B-1349 [2]	59	[1]	20	28	107
B-1351	75	[1]	67	54	196
B-1352	56	[1]	47	39	132
B-1456	44	[1]	96	74	214
B-407	2	[1]	[1]	2	4
B-408	2	[1]	[1]	2	4
B-490	16	[3]	[3]	[3]	16
B-723	19	[3]	26	9	54
B-724	33	50	67	238	388
B-1166	125	126	249	157	657
B-1456	44	[1]	96	74	214
B-146	60	[1]	67	24	151

[1] Indicates undetected, the limit of detection being 1 ppb.
[2] This feed also contained 17 ppb dieldrin.
[3] Indicates traces in the range of 1 to 5 ppb.

Presence of metabolites, from low to high levels, is as follows: *o,p'*-DDT, DDD, *p,p'*-DDT, and DDE. This same order was observed with the samples of rainbow trout eggs with low levels of DDT and metabolites. Some ingredients utilized in the manufacturing of dry feeds were analysed for DDT residues. Data obtained indicated that of all the ingredients examined, only brewers' yeast contained residues no higher than 5 ppb; soybean meal and fish meal contained less than 100 ppb.

CONCLUSION

Various levels of DDT and residues have been found in brook, rainbow, and cutthroat trout handled at the Maligne River Trout Hatchery in Jasper National Park. When levels of DDT and metabolites exceeded 400 ppb in eggs, mortality in the resulting fry ranged from 30 per cent to 90 per cent in the 60-day period following the swim-up stage. All commercial dry trout feeds analysed were found to contain chlorinated hydrocarbons. Of several ingredients used, only brewer's yeast was found to be almost free of contamination.

From operational observations, it would seem that DDT in manufactured trout food is detrimental to the growth of trout raised under hatchery conditions, when DDT and metabolites in the eggs and fry exceed certain levels.

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CHLORINATED HYDROCARBONS AND EGGSHELL CHANGES IN RAPTORIAL AND FISH-EATING BIRDS

(Abstract. Catastrophic declines of three raptorial species in the United States have been accompanied by decreases in eggshell thickness that began in 1947, have amounted to 19 percent or more, and were identical to phenomena reported in Britain. In 1967, shell thickness in herring gull eggs from five states decreased with increases in chlorinated hydrocarbon residues.)

New perspectives on the role of chlorinated hydrocarbon insecticides in our environment have come into focus in recent years. Successive discoveries have demonstrated that these compounds are systematically concentrated in the upper trophic layers of animal pyramids (1). Raptorial bird populations have simultaneously suffered severe population crashes in the United States and Western Europe (2, 3, 4). These involve reproductive failures which, at least in Britain, are characterized by changes in calcium metabolism and by a decrease in eggshell thickness resulting in the parent birds' breaking and eating their own eggs (4, 5, 6). Such a derangement of calcium metabolism or mobilization perhaps could result from breakdown of steroids by hepatic microsomal enzymes induced by exposure to low dietary levels of chlorinated hydrocarbons (7).

We have examined the possibility that the eggshell changes reported in Britain (6) have also occurred in the United States and that the raptor population crashes in Europe and North America may have had a common physiological mechanism. The population changes are without parallel in the recent history of bird populations (8). They include the pending extirpation of the peregrine falcon (*Falco peregrinus*) in northwestern Europe, the complete extirpation of the nesting population of this species in the eastern half of the United States, and simultaneous declines among other bird- and fish-eating raptors on both sides of the Atlantic.

We examined 1729 blown eggs in 39 museum and private collections. Shells were weighed to the nearest hundredth of a gram. In 29 percent of these, we were able to insert a micrometer through the hole drilled by the collector at the girth of the shell and to take four measurements of thickness 7 mm from the edge of the blow hole; these were then averaged to the nearest 0.01 mm for each shell. Thickness in each case then represented the shell itself plus the dried egg membranes. Peregrine falcons, bald eagles (*Haliaeetus leucocephalus*), and ospreys (*Pandion haliaetus*) were selected as having one or more regionally declining populations; golden eagles (*Aquila chrysaeetos*), red-tailed hawks (*Buteo jamaicensis*), and great horned owls (*Bubo virginianus*) were selected as representative of reasonably stationary populations that may be slowly declining as their habitats are gradually destroyed by man, but for which widespread reproductive failures are currently unknown. In addition, 57 eggs of the herring gull (*Larus argentatus*) were collected from five colonies in 1967. The shells of these were dried at room temperature for 4 months before being measured, and residues of the entire egg contents were analyzed by the Wisconsin Alumni Research Foundation for chlorinated hydrocarbons but not for polychlorinated biphenyls. Analytical procedure followed that outlined by the U.S. Food and Drug Administration (*9*). Analyses were conducted on a gas chromatograph (Barber Coleman, model GC 5000, and Jarrell-Ash, model 28–700) with electron-capture detectors. The glass column (0.6 cm by 1.2 m) was packed with 5 percent DC 200 (12,500) on Cromport XXX. The column temperature was 210°C, and the nitrogen flow rate was 75 cm^3/min. Each portion of the ground and dried samples was extracted for 8 hours or more in a Soxhlet apparatus with a mixture of ether and petroleum ether (70:170). Portions of the extracts were further purified by putting them through a Florisil column.

In California, where the peregrine falcon population is in "a serious condition" (*10*), a change of 18.8 percent in shell weight occurred from 1947 to 1952. Ratcliffe (*6*) found a corresponding decrease of 18.9 percent in Britain. The change in California involved a decrease in shell thickness and had no precedent in the previous 57-year recorded history of the peregrine in that state (Fig. 1). In the eastern United States, where the nesting population of peregrines has now been wiped out (*3*), fragmentary data indicate that the same change took place (Table 1). Broken eggshells in a North American peregrine eyrie were observed for the first time in 1947 by J. A. Hagar 60 miles (6.9 km) from the Massachusetts eyrie cited in this table (*11*). They were next inferred in Quebec in 1948 when egg-eating was observed at the same site in 1949 (*12*), and were observed in Pennsylvania in 1949 and 1950 (*13*). Chlorinated hydrocarbon data for this now-extinct regional population are completely absent. For nine surviving adult peregrines in Canada's Northwest Territories in 1966, the data are reported to have averaged 369 parts per million (ppm) (fresh weight) in fat (*14*). For four adults in another migratory population in northern Alaska, values were even higher (*15*).

For the five other raptorial species we have studied, the data do not permit a precise delineation of the onset of the change in calcium metabolism or mobilization, but the decrease (Table 1) in shell weight (and hence thickness) has involved only declining populations and not stationary ones. Change in shell thickness occurs in poultry as a result of dietary deficiencies and age (*16, 17*). This phenomenon would probably

not occur simultaneously on two continents 1 year after the chlorinated hydrocarbon insecticides came into general usage. Other chemicals affect shell thickness in poultry (*17*), but the finding of high concentrations of chlorinated hydrocarbons in the eggs of wild populations of raptors and the time correlation of shell changes with the introduction of DDT [1,1,1-trichloro-2,2-bis (*p*-chlorophenyl) ethane] tend strongly to suggest that chlorinated hydrocarbons are the major contributing cause, although it is not unlikely that other chemicals could be contributory.

TABLE 1.—WEIGHTS OF RAPTOR EGGSHELLS IN MUSEUM AND PRIVATE COLLECTIONS

Region	Period	Number	Weight (g) Mean±S.E.[2]	Change (percent)	Population trend (or reproduction)
Red-tailed hawk: California (23)[1]	1885–1937	386	6.32±0.032		
	1943–44	6	6.09±0.237	−3.6	Stationary.
	1953–67	8	6.49±0.214	+2.7	Do.
Golden eagle: California (23)	1889–1939	278	13.03±0.083		
	1940–46	28	12.70±0.161	−2.5	Do.
	1947–65	33	13.41±0.232	+2.9	Do.
Bald eagle (24a):					
Brevard County, Fla	1886–1939	56	12.15±0.127		
	1947–62	12	9.96±0.280	−18.0	Declining.
Osceola County, Fla	1901–44	25	12.32±0.240		
	1959–62	8	9.88±0.140	−19.8	Do.
Osprey (24b):					
Maryland-Virginia	1890–1938	152	7.05±0.054		
	1940–46	21	6.91±0.164	−2.0	Stationary.
	1955	3	6.85	−2.8	Do.
New Jersey	1880–1938	117	7.08±0.069		Do.
	1957	6	5.30±0.446	−25.1	Declining.
Peregrine (25):					
British Columbia	1915–37	29	4.24±0.061		
	1947–53	15	4.18±0.081	−1.4	Stationary.
California (23)	1895–1939	235	4.20±0.031		
	1940–46	49	4.07±0.038	−3.1	No data.
	1947–52	31	3.41±0.084	−18.8	Declining.
New Hampshire to New Jersey[3]	1888–1932	56	4.38±0.034		
Vermont	1946	3	4.30	−1.8	Stationary.
Massachusetts	1947	3	3.47	−20.8	Extirpated.
New Jersey	1950	3	3.24	−26.0	Do.
Great horned owl:					
California (23)	1886–1936	154	4.50±0.033		
	1948–50	12	4.62±0.119	+2.4	Stationary.

[1] Citations (23–25) refer to the data for the population trend.
[2] S.E., standard error of the mean.
[3] Including Vermont and Massachusetts.

In order to test the hypothesis that these recent changes of thickness in raptor eggshells were the result of differences in exposure to chlorinated hydrocarbons we analyzed 10 to 14 eggs taken in 1967 from each of five colonies of the herring gull (*Larus argentatus*). Mean shell weight and thickness in 55 eggs collected in the same five states prior to 1947 disclosed no geographic gradients or significant differences. The 1967 mean thicknesses for each colony were therefore compared to mean levels of residual DDE [1,1-dichloro-2,2-bis (*p*-chlorophenyl) ethylene] on a fresh-weight basis, with the result shown in Fig. 2, the r value being significant, with $P = .001$. The residues of polychlorinated biphenyls (*18*) have not been studied in these ecosystems, but DDE has been consistently high in the Lake Michigan birds, averaging (fresh weight) 1925 ppm (S.E. 274) in the fat of 12 healthy adults collected in 1963–64 (*19*).

Reproduction in these gull colonies was generally normal in 1967 except perhaps in Wisconsin. At the latter colony where an 11 percent mean decrease in shell thickness occurred, some egg breakage and shell flaking was evident in 1967, although not at the frequency seen in previous years. Excessive reproductive failure occurred at this site in 1964 when about 18 percent of eggs lost about one-third of the shell due to flaking, when clutch size decreased and embryonic mortality was high, and when DDE residues averaged 202 ppm (S.E. 34) in nine eggs (*20*). (If linear extrapolation of the 1967 values is carried out to 202 ppm, the shell thickness in 1964 could be estimated as having decreased by about 32 percent.) The effectiveness of DDE in the enzymatic metabolism of aminopyrine has been reported by Hart and Fouts (*21*), and our data suggest that this compound, because of its prevalence, has played a major role in inducing the hepatic microsomal metabolism of steroids that in turn resulted in the eggshell changes we have encountered in museum collections. Without doubt DDE is the commonest insecticide or insecticide analog now being found in avian tissues (*22*). In 1966, it was found to average 284 ppm (S.E. 62) in the fat of nine arctic-breeding peregrine falcons (*14*) and about 414 ppm in four others on a wet-weight basis (*15*). Concentrations of this compound and other chlorinated hydrocarbons in the peregrine populations that crashed farther south can be assumed to have been as high—and they may have been much higher.

From the above evidence and that accumulated by others (*2, 4, 6, 8*), we have reached these conclusions: (i) many of the recent and spectacular raptor population crashes in both the United States and Western Europe have had a common physiological basis; (ii) eggshell breakage has been widespread but largely overlooked in North America; (iii) significant decreases in shell thickness and weight are characteristic of the unprecedented reproductive failures of raptor populations in certain parts of the United States; (iv) the onset of the calcium change 1 year after the introduction of chlorinated hydrocarbons into general usage was not a random circumstance; and (v) these persisting compounds are having a serious insidious effect on certain species of birds at the tops of contaminated ecosystems.

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22. E. H. Dustman and L. F. Stickel, *Amer. Soc. Agron, Spec. Publ.* 8, 109 (1966).

23. J. B. Dixon, B. Glading, W. C. Hanna, E. N. Harrison, S. B. Peyton, personal communication.

24a. A. Sprunt, IV, personal communication.

24b. W. A. Stickel in Hickey (*8*), p. 337.

25. Except for the California data (23) the data on population trends are given in (8) by F. L. Beebe for British Columbia; by W. R. Spofford for Vermont; by J. A. Hagar for Massachusetts; and by D. D. Berger *et al.* for New Jersey.

26. Research carried out under contract with the Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, U.S. Dept. of Interior. W. H. Drury, J. T. Emlen and M. E. Slate provided gull eggs for analysis. E. N. Harrison, W. C. Hanna, and many other oologists greatly facilitated our measurements of eggshells. We thank D. A. Ratcliffe for advice throughout the entire study.

16 July 1968

Mr. PROXMIRE. Mr. President, I have an amendment at the desk and I ask that it be stated.

The PRESIDING OFFICER. The amendment will be stated.

The ASSISTANT LEGISLATIVE CLERK. The Senator from Wisconsin proposes an amendment, on page 73, line 24, insert the following new section:

SEC. 109. Section 1705(h) of Public Law 90–448 is amended by striking the word "or" where it appears before the word "domitory" and by inserting after the word "domitory" the following: ", water, or sewer".

Mr. PROXMIRE. Mr. President, the Water Quality Improvement Act of 1969 which the Senate is considering today is mainly concerned with the control of pollution whether by oil, sewage flow, acid mine drainage, or related pollutants into our rivers and harbors. This bill would authorize appropriations to alleviate pol-

luted conditions and to provide for better coordination between Federal, State, and local water pollution control programs. I congratulate the distinguished Senator from Maine for the excellent leadership he has shown on environmental policy. His work on the Water Quality Improvement Act is but one example of his continuing efforts over the years to combat air and water pollution.

I understand that the Public Works Committee will later consider legislation on the very important subject of providing additional financing to State and local governments for the construction of needed water and sewer facilities. In 1968, State and local governments borrowed nearly $3 billion to provide capital for financing water, sewer, and conservation programs. The Water Quality Improvement Act of 1968 was passed by the Senate, but was not enacted into law because time ran out in the 90th Congress before differences in the House and Senate versions could be resolved. This 1968 act would have enabled State and local government units to raise between $6 and $7 billion in capital by means of municipal bond issues in order to pay for needed construction.

The amendment I offer today would afford to the State and local government units access to the capital market now enjoyed by State and local governments when they issue bonds for housing, university, and dormitory purposes. Having access to a competitive capital market will enable the State and local governments throughout the country to borrow money for water and sewer construction at the lowest possible cost. It is my belief that in view of the astronomically high interest rates which are now being paid, it is more imperative that new water and sewer construction be paid for by raising capital under the most advantageous conditions. Furthermore, as I mentioned earlier, the fact that the Public Works Committee has not yet considered legislation relating to financial assistance by the Federal Government for the raising of such capital is an additional reason why it is important at this time that every advantage of a competitive market be given for State and local borrowing for water and sewer needs.

Mr. President, the Committee on Banking and Currency has considered this amendment in some detail and hearings have been held on it. The Senator from Maine (Mr. MUSKIE) is familiar with the action taken, as he serves as a member on that committee. It has also been discussed on the floor before, and I would hope, as it is discussed now with the distinguished Senator from Maine, that he will be able to accept the amendment.

Mr. MUSKIE. Mr. President, I support the adoption of the amendment offered by my distinguished colleague from Wisconsin. The Subcommittee on Air and Water Pollution has given considerable thought and study as to how capital is to be available to our hard-pressed States and cities for the construction of waste treatment facilities. I believe that every Member of Congress is aware of the acute need in every State and community for such facilities. Many different financing proposals have been considered by the subcommittee and by the full Public Works Committee. The Clean Water Restoration Act of 1966 authorized $3.5 billion for substantial Federal grants for this purpose. However, appropriations have fallen far short of the authorized amounts. This situation will be partially rectified this year if the Congress appropriates the amounts included by the House Appropriations Committee in the Public Works appropriations bill.

In the meantime, State and local government units have continued to raise the capital for both their share and the Federal share of a project cost by the issuance of bonds. They will continue to raise needed State and local capital by this method in the future. The amendment now under consideration would enable the public issuers to have access to the same capital markets now available for Federal financing thereby insuring that they may borrow in a competitive market at the lowest cost.

Mr. President, for many reasons the amendment is thoroughly consistent with the objectives of the committee, struggling against budgetary restrictions over the past 3 or 4 years, to find alternative ways to make it possible for States and communities to find the capital to build these facilities.

I compliment the Senator for offering his proposal. It has been heard by committees. It is demonstrably sound on the basis of the hearings held, and I am delighted to take the amendment into the bill.

The PRESIDING OFFICER. The question is on agreeing to the amendment offered by the Senator from Wisconsin.

The amendment was agreed to.

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

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

RECESS TO 10 A.M. TOMORROW

Mr. BYRD of West Virginia. Mr. President, if there be no further business to come before the Senate, I move, in accordance with the previous order, that the Senate stand in recess until 10 o'clock tomorrow morning.

The motion was agreed to; and (at 5 o'clock and 33 minutes p.m.), the Senate took a recess until tomorrow, Wednesday, October 8, 1969, at 10 a.m.

NOMINATIONS

Executive nominations received by the Senate October 7, 1969:

U.S. CIRCUIT JUDGE

Charles Clark, of Mississippi, to be U.S. circuit judge, fifth circuit vice Claude F. Clayton, deceased.

U.S. ATTORNEY

Paul C. Camilletti, of West Virginia, to be U.S. attorney for the northern district of West Virginia for the term of 4 years vice John H. Kamlowsky, resigned.

U.S. MARSHAL

Robert D. Olson, Sr., of Alaska, to be U.S. marshal for the district of Alaska for the term of 4 years vice George A. Bayer.

Leon T. Campbell, of Tennessee, to be U.S. marshal for the middle district of Tennessee for the term of 4 years vice Elmer W. Disspayne, retired.

Benjamin F. Westervelt, of New York, to be U.S. marshal for the eastern district of New York for the term of 4 years vice George J. Ward.

ASSISTANT COMMISSIONER OF PATENTS

John Henry Schneider, of Virginia, to be an Assistant Commissioner of Patents, vice Gerald D. O'Brien, resigned.

EXTENSIONS OF REMARKS

YOU CANNOT VOTE

HON. WILLIAM LLOYD SCOTT

OF VIRGINIA

IN THE HOUSE OF REPRESENTATIVES

Tuesday, October 7, 1969

Mr. SCOTT. Mr. Speaker, Virginia is one of two States holding statewide elections this year, and I do not think enough could be said about the importance of the individual vote. Not only is Virginia reaching a crucial period in its political history, but the entire Nation needs for all of its citizens to exercise their right to vote. A very fine editorial appeared on October 2, 1969, in the Globe newspapers which circulate in my district which I would like to share with my colleagues:

YOU CAN'T VOTE!

Those are fighting—and frightening—words. Or they should be, especially in Virginia and especially this year of 1969.

Yet, sometime within the next few weeks, those same words will be told to thousands of men and women who live here in Northern Virginia. They won't be able to vote because they didn't bother to qualify, didn't take the time to register.

No matter how strongly you may feel about the forthcoming elections, no matter what your opinion is about the various candidates at the state and local level, it won't make any difference at all unless you are registered and thereby a qualified voter.

But the opportunity to do something about your government, about the leadership of that government, still exists for all Virginians. It's not too late. There is still time to qualify, still time to take an active interest in the affairs of this state of your community.

Which is just another way of saying, if you are realistic and honest, there's still time to take an active part in your own life. The very existence of each citizen is continually and consistently affected by government at every level. Taxes are merely the most obvious, the most familiar and perhaps the most annoying. The highways upon which you drive, the schools your children attend, the house in which you live, the very food you eat—all are touched in some way by the process of government in Richmond.

You can affect that government by the votes you cast in November. When you choose the next Governor, when you cast