

By Mr. RAILSBACK (for himself, Mr. ANDERSON of Illinois, Mr. HANSEN of Idaho, Mr. MESKILL, Mr. WHALEN, Mr. HALPERN, Mr. DON H. CLAUSEN, Mr. TAFT, and Mr. COWGER):

H.J. Res. 907. Joint resolution proposing an amendment to the Constitution of the United States to provide that the right to vote in Federal elections shall not be denied on account of age to persons who are 18 years of age or older; to the Committee on the Judiciary.

By Mr. WHITEHURST:

H.J. Res. 908. Joint resolution to provide for the issuance of a special postage stamp in commemoration of Senator Everett McKinley Dirksen; to the Committee on Post Office and Civil Service.

By Mr. BINGHAM:

H. Con. Res. 366. Concurrent resolution for humane treatment and early release of American prisoners of war held by North Vietnam; to the Committee on Foreign Affairs.

By Mr. BROWN of California:

H. Con. Res. 367. Concurrent resolution expressing the sense of the Congress with respect to the establishment of United Nations Day as a permanent international holiday; to the Committee on Foreign Affairs.

By Mr. REES:

H. Res. 552. Resolution expressing the sense of the House of Representatives with respect to U.S. ratification of the Conventions on Genocide, Abolition of Forced Labor, Political Rights of Women, and Freedom of Association; to the Committee on Foreign Affairs.

PRIVATE BILLS AND RESOLUTIONS

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

By Mr. ADDABBO:

H.R. 13892. A bill for the relief of Aurora Matia Moranta; to the Committee on the Judiciary.

By Mr. BURKE of Massachusetts:

H.R. 13893. A bill for the relief of Nicholas Francis Canny; to the Committee on the Judiciary.

By Mr. DON H. CLAUSEN:

H.R. 13894. A bill for the relief of Mrs. Rosenda Herminia Nieto and her minor son, Fernand Javier Nieto Rodriguez; to the Committee on the Judiciary.

By Mr. MAILLIARD:

H.R. 13895. A bill for the relief of Mrs. Maria Eloisa Pardo Hall; to the Committee on the Judiciary.

H.R. 13896. A bill for the relief of Mauro Pereyra and his wife, Fausta; to the Committee on the Judiciary.

By Mr. PELLY:

H.R. 13897. A bill for the relief of Maria Soledad dela Cruz; to the Committee on the Judiciary.

By Mr. TIERNAN:

H.R. 13898. A bill for the relief of Dimitrios Covosdis; to the Committee on the Judiciary.

H.R. 13899. A bill for the relief of Radha Majumdar; to the Committee on the Judiciary.

By Mr. MILLER of California:

H. Res. 553. Resolution to refer the bill, H.R. 13830, entitled "A bill for the relief of Genisco Technology Corp." to the Chief Commissioner of the Court of Claims in accordance with sections 1492 and 2509 of title 28, United States Code; to the Committee on the Judiciary.

PETITIONS, ETC.

Under clause 1 of rule XXII,

254. By the SPEAKER: Petition of the City Council, Stanton, Calif., relative to the proposed expansion of the Los Alamitos Naval Air Station, Los Alamitos, Calif.; to the Committee on Armed Services.

SENATE—Thursday, September 18, 1969

The Senate met at 12 o'clock noon and was called to order by Hon. GEORGE D. AIKEN, a Senator from the State of Vermont.

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

Eternal Father, with each new day we thank Thee for the call to serve Thee in all of life's vocations, but especially for the stewardship of office in this Chamber. Give understanding, humility, and charity to those who in Thy name, and for the Nation's sake, are entrusted with power to act for the Republic in this place. Keep ever before them the high vision of Thy kingdom and the abiding truth that while the pressing problems require economic and political solutions, all deeper human needs are moral and spiritual. Give them open ears, quick to hear the whisper of Thy word, and hearts tuned to the unseen presence which enfolds us, supports us, and lights the pathway of life's changing scenes. In the name of Him who is the light of the world. Amen.

DESIGNATION OF ACTING PRESIDENT PRO TEMPORE

The PRESIDING OFFICER. The clerk will read a communication to the Senate.

The legislative clerk read the following letter:

U.S. SENATE,
PRESIDENT PRO TEMPORE,
Washington, D.C., September 18, 1969.

To the Senate:

Being temporarily absent from the Senate, I appoint Hon. GEORGE D. AIKEN, a Senator from the State of Vermont, to perform the duties of the Chair during my absence.

RICHARD B. RUSSELL,
President pro tempore.

Mr. AIKEN thereupon took the chair as Acting President pro tempore.

THE JOURNAL

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the reading of the Journal of the proceedings of Wednesday, September 17, 1969, be dispensed with.

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

TRANSACTION OF ROUTINE MORNING BUSINESS

Mr. MANSFIELD. Mr. President, I ask unanimous consent that, after the swearing in of our new Member, the distinguished Senator-designate from Illinois, there be a period for the transaction of routine morning business, with a time limitation of 3 minutes on statements therein.

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

VISIT TO THE SENATE BY THE GOVERNOR OF ILLINOIS

Mr. SCOTT. Mr. President, I should like to note the presence in the Chamber, in the minority leader's seat, of the very distinguished Governor of Illinois, Richard B. Ogilvie.

SENATOR FROM ILLINOIS

Mr. PERCY. Mr. President, I present the certificate of appointment of the Honorable RALPH T. SMITH as a Senator from the State of Illinois.

The ACTING PRESIDENT pro tempore. The certificate of appointment will be read.

The legislative clerk read as follows:

STATE OF ILLINOIS,
EXECUTIVE DEPARTMENT,
Springfield, Ill.

To the President of the Senate of the United States:

This is to certify that, pursuant to the power vested in me by the Constitution of the United States and the laws of the State of Illinois, I, Richard B. Ogilvie, the Governor of said State, do hereby appoint Ralph Tyler Smith a Senator from said State to represent said State in the Senate of the United States until the vacancy therein caused by the death of the Honorable Everett McKinley Dirksen is filled by election as provided by law.

Witness: His Excellency, our Governor, Richard B. Ogilvie, and our Seal hereto affixed at Springfield, Illinois, this seventeenth day of September, in the year of our Lord, nineteen hundred and sixty-nine.

RICHARD B. OGILVIE,
Governor.

[SEAL]
By the Governor

PAUL POWELL,
Secretary of State.

The ACTING PRESIDENT pro tempore. If the Senator-designate will present himself at the desk, the oath of office will be administered to him.

Mr. SMITH of Illinois, escorted by Mr. PERCY, advanced to the desk of the Vice President; the oath prescribed by law was administered to him by the Acting President pro tempore; and he subscribed to the oath in the official oath book.

[Applause, Senators rising.]

COMMITTEE ASSIGNMENT

Mr. SCOTT. Mr. President, I send to the desk a resolution and ask unanimous consent for its immediate consideration.

The ACTING PRESIDENT pro tempore. The resolution will be read.

The legislative clerk read the resolution (S. Res. 260), as follows:

Resolved, That the Senator from Illinois (Mr. Smith) be and he is hereby assigned to service on the Committee on Aeronautical and Space Sciences and he is hereby also assigned to service on the Committee on Labor and Public Welfare.

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

There being no objection, the resolution was considered and agreed to.

RECESS

Mr. MANSFIELD. Mr. President, I ask unanimous consent that there be a brief recess, subject to the call of the Chair, for the purpose of greeting our new colleague from Illinois.

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

Thereupon (at 12 o'clock and 6 minutes p.m.), the Senate took a recess subject to the call of the Chair.

At 12 o'clock and 12 minutes p.m., the Senate reassembled, and was called to order by the Presiding Officer (Mr. ALLEN in the chair).

COMMITTEE MEETINGS 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 PRESIDING OFFICER. Without objection, it is so ordered.

EXECUTIVE SESSION

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Senate go into executive session to consider nominations on the Executive Calendar.

There being no objection, the Senate proceeded to the consideration of executive business.

The PRESIDING OFFICER. The nominations on the Executive Calendar will be stated.

AGENCY FOR INTERNATIONAL DEVELOPMENT

The bill clerk read the nomination of Joel Bernstein, of Illinois, to be an Assistant Administrator of the Agency for International Development, and the nomination of Ernest Stern, of the District of Columbia, to be an Assistant Administrator of the Agency for International Development.

The PRESIDING OFFICER. Without objection, the nominations are considered and confirmed.

COMMODITY CREDIT CORPORATION

The bill clerk read the nomination of Thomas K. Cowden, of Michigan, to be a member of the Board of Directors of the Commodity Credit Corporation.

The PRESIDING OFFICER. Without objection, the nomination is considered and confirmed.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the President be immediately notified of the confirmation of these nominations.

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

LEGISLATIVE SESSION

Mr. MANSFIELD. Mr. President, I move that the Senate resume the consideration of legislative business.

There being no objection, the Senate proceeded to the consideration of legislative business.

NATIONAL SCIENCE FOUNDATION ACT AMENDMENTS OF 1969

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of Calendar No. 276, S. 1857.

The PRESIDING OFFICER. The bill will be stated by title.

The LEGISLATIVE CLERK. A bill (S. 1857) to authorize appropriations for activities of the National Science Foundation pursuant to Public Law 87-507, as amended.

The PRESIDING OFFICER. Is there objection to the present consideration of the bill?

There being no objection, the Senate proceeded to consider the bill, which had been reported from the Committee on Labor and Public Welfare, with an amendment, to strike out all after the enacting clause and insert:

That there is hereby authorized to be appropriated to the National Science Foundation for the fiscal year ending June 30, 1970, to enable it to carry out its powers and duties under the National Science Foundation Act of 1950, as amended, and under title IX of the National Defense Education Act of 1958, out of any money in the Treasury not otherwise appropriated, \$487,150,000.

SEC. 2. Appropriations made pursuant to authority provided in section 1 shall remain available for obligation, for expenditures, or for obligation and expenditure, for such period or periods as may be specified in Acts making such appropriations.

SEC. 3. Section 14 of the National Science Foundation Act of 1950, as amended by Public Law 90-407 (82 Stat. 360), is amended by adding to the end thereof the following new subsection:

"(1) Notwithstanding any other provision of law, the authorization of any appropriation to the Foundation shall expire (unless an earlier expiration is specifically provided) at the close of the third fiscal year following the fiscal year for which the authorization was enacted, to the extent that such appropriation has not theretofore actually been made."

SEC. 4. Appropriations made pursuant to this Act may be used, but not to exceed \$2,500, for official reception and representation expenses upon the approval or authority of the Director, and his determination shall be final and conclusive upon the accounting officers of the Government.

SEC. 5. In addition to such sums as are authorized by section 1 hereof, not to exceed \$3,000,000 is authorized to be appropriated for expenses of the National Science Foundation incurred outside the United States to be paid for in foreign currencies which the Treasury Department determines to be excess to the normal requirements of the United States.

SEC. 6. Notwithstanding any provision of the National Science Foundation Act of 1950, or any other provisions of law, the Director of the National Science Foundation shall keep the Committee on Science and Astronauts of the House of Representatives and the Committee on Labor and Public Welfare of the Senate fully and currently informed with respect to all of the activities of the National Science Foundation.

SEC. 7. This Act may be cited as the "National Science Foundation Act Amendments of 1969."

Mr. ALLOTT. Mr. President, I wish to ask a question before the bill is passed.

The PRESIDING OFFICER. The Senator from Colorado is recognized.

Mr. ALLOTT. Mr. President, I wish to inquire what changes were made from last year in the bill, if any, for the information of the Senate.

Mr. KENNEDY. The only real change is represented by an increase of \$150,000 over the administration's request. There were some overall reductions in the House of Representatives because of incomplete testimony on the Arecibo project, which was restored in the Committee on Labor and Public Welfare. Funds were also cut out for certain language translations for the National Science Foundation in the House, which were restored upon the receipt of additional information. The total funding was increased by some \$150,000 over the authorization as requested, as I mentioned. Basically, there is no other fundamental change.

There have been some alterations and changes in the language of the act in order to give it new direction, but in terms of the basic authorization there was no substantial change.

Mr. ALLOTT. I wish to inquire what the "new direction" is.

Mr. KENNEDY. I have the language here. It is the language that was incorporated a year ago, and I will go through it if the Senator from Colorado wishes.

Mr. ALLOTT. It is the same as last year?

Mr. KENNEDY. The Senator is correct.

Mr. ALLOTT. I wish to ask the Senator one final question. What is the determination of the committee with respect to the Arecibo project and the money to be spent in refurbishing in connection therewith?

Mr. KENNEDY. I think if there was any project heavily questioned it was the Arecibo project. The House found in their hearings, that the improvements requested were not justified, and they struck them out. We restored it. I think the record is better now than before, and we hope that in conference we will prevail. However, this was one area in which there was a close question.

Mr. ALLOTT. This would be in conference if the bill passes in its present form?

Mr. KENNEDY. The Senator is correct.

Mr. ALLOTT. I thank the Senator.

Mr. KENNEDY. Mr. President, the Committee on Labor and Public Welfare, on July 1, 1969, unanimously voted to report S. 1857, which would authorize appropriations to the National Science Foundation for fiscal year 1970 in the

amount of \$487,150,000. The bill would also authorize NSF to spend overseas an additional \$3 million in excess foreign currencies, largely for the translation of important foreign scientific documents into English. Thus, the total amount which would be provided by the bill for NSF's activities in fiscal year 1970 is \$490,150,000. There is, in addition, \$10 million already authorized by Public Law 89-688 for the national sea grant program, bringing NSF's total authorization for fiscal year 1970 to \$500,150,000.

The job of the National Science Foundation is to maintain the Nation's strength and leadership in science and engineering, through the support of research and of education. To accomplish this broad mission, the Foundation each year awards thousands of grants, contracts, and fellowships to colleges and universities, nonprofit scientific organizations, and individual scientists, teachers, and students throughout all of the 50 States and the District of Columbia. In fiscal year 1968, for example, NSF awarded 8,795 grants and contracts for a total of \$487,352,000. The report accompanying this bill, Report 91-285, lists these grants and contracts by State and by institution on pages 17 to 26.

These grant and contract funds provide support for a wide diversity of research projects and programs in all of the scientific disciplines, and for educational improvement at every level of learning, from elementary school science through advanced, postdoctoral study.

The Foundation plans to use the proposed fiscal year 1970 authorization of \$490,150,000—excluding sea grant funds—as follows: \$248,600,000 for scientific research; \$112,500,000 for science education; \$69,000,000 for institutional support of colleges and universities; \$22,000,000 for extending the use of computers in research and education; \$18,000,000 for science information and international science activities; \$17,000,000 for program development and management; and \$3,050,000 for planning and policy studies.

The Committee on Labor and Public Welfare reached its unanimous recommendation on this bill after careful consideration of the public record developed by its Special Subcommittee on the National Science Foundation, of which I have the honor to be chairman. Appearing as witnesses before our subcommittee at a hearing on May 7, 1969, were Dr. Leland J. Haworth, Director of the National Science Foundation, and Dr. Philip Handler, Chairman of the National Science Board and then president-elect of the National Academy of Sciences. Subsequent to the hearing, the subcommittee prepared 49 detailed questions on NSF's 1970 budget, to which the Foundation provided extensive and responsive replies. The record also includes prepared statements from various interested parties within the scientific community, and a number of background documents which serve to illuminate important related issues. In addition, full use was made of the comprehensive record developed in 9 days of hearings before the Subcommittee on Science, Research, and Development of the House Committee on Science and Astronautics.

BACKGROUND

The authorization hearings our subcommittee held on the NSF budget were the first held in the Senate since 1950, when the NSF was established. In a sense they marked a historic moment in the course of Federal support of scientific affairs. They signal a new maturity for American science—one of new challenges and new responsibilities.

By American science, I do not mean the vast accumulation of scientific knowledge we have available to us. This accumulation, drawn from basic research, is absolutely indispensable to our future. But I do mean the scientific enterprise—the creation and application of our scientific knowledge to the common concerns and felt needs of the Nation and the world.

Where we as a Nation have focused our scientific and technical attentions, we have made awesome steps: Computers, satellites, men on the moon, electron microscopes, jet airplanes, artificial organs—these and other achievements would astonish our grandfathers.

But there are many areas where we have not focused our scientific and technical resources. Let me just cite a few examples turned up during our hearings:

Millions of people go hungry each day. Yet in recorded history we have introduced no new major foodstuff. Mankind all across the world relies basically upon corn, rice and wheat. We should, over the long term, look for new opportunities for foodstuff cultivation, to help feed the hungry peoples both in this country and abroad.

Air and water pollution plague both our country and the other technologically advanced nations of the world. Yet the chemistry and physics of air pollution are not well understood; nor are the biological processes of water pollution. Until they are, we can only wonder whether our antipollution efforts will be as successful as they might otherwise be.

Solutions to high-speed ground transportation and increased air congestion problems seem to elude us. But would they elude us still if we focussed our energies on them?

Dr. Philip Handler told our subcommittee:

Population control is surely the largest single issue facing mankind.

Yet, as he pointed out, our knowledge of reproductive physiology is scanty.

These are but a few of the areas to which we should turn our scientific and technical resources. They are areas in which the NSF has for nearly 20 years been funding basic research and assisting to train skilled personnel. Without the basic knowledge, we would face an enormous task. As it is, we must focus our attention on the problem and apply the basic knowledge.

But this will be difficult so long as the scientific enterprise is, in Dr. Jerome Wiesner's words, "in a state of disarray."

This disarray is the result of both existing or planned budget cuts, as well as uncertainty over future funding levels. Research into scientific and technological matters must have some funding continuity if it is to succeed.

COMMITTEE ACTION

This is the genesis of our subcommittee's actions on the authorization request. While our recommended authorization of \$490,150,000 is \$150,000,000 more than the administration's request to the Congress—to provide for expansion of the promising State science policy planning program—the authorization is still almost \$118 million less than the original NSF request to the Bureau of the Budget. The amount originally requested, \$608 million, was reduced by the Johnson administration down to the \$490 million level.

On April 18, 1969, after completing its own review, the Nixon administration recommended to the Congress that the NSF budget remain at the \$490 million level, despite widespread cuts in most other Government programs. This decision to keep the NSF budget intact at a time of extreme fiscal stringency reflects the importance attached by President Nixon to adequate funding for NSF.

In effect, the \$490,150,000 authorization recommended by the Committee on Labor and Public Welfare will merely restore the Foundation's funding to its level of 2 years ago, when its appropriation was \$495 million. Even with this amount, however, NSF will actually have less money in fiscal year 1970 to support scientific research and engineering than it had in fiscal year 1968. This results from first, the trend toward more complex research, requiring more sophisticated and expensive instrumentation; second, overall inflation; third, recently assumed responsibility by NSF for specific research activities formerly supported by other agencies (primarily the Department of Defense) totaling \$19 million in 1970; and fourth, increasing growth in research and education. For example, the total number of doctorate degrees awarded by U.S. universities in 1970 will be 25 percent higher than the number awarded in 1968.

Thus, with the authorization recommended in this bill, the Foundation will be barely able to keep pace with the mounting pressures of urgent national demands for research and education in science and engineering. And it is clearly in the national interest that NSF does manage, at the very minimum, to keep pace with those demands.

The various programs of the National Science Foundation are, for the most part, undramatic and not generally understood by the layman. But their importance to the national security and welfare must not be underestimated. While the specific value of particular scientific projects cannot be measured accurately, the general value of overall scientific advance can be predicted with some confidence—continued prosperity and progress for our society. The reservoir of scientific knowledge, technical know-how, and skilled professional manpower, developed with the assistance of NSF's programs, provides the Nation with resources of incalculable value. These resources strongly influence all other national programs—from national security and economic growth, to better

education, health, and well-being for all our citizens.

At the same time, we must recognize that scientific progress is not a spigot which can be turned on and off again at will. Scientific research requires an unusually high degree of continuity. Major fluctuations in scientific programs and projects disrupt and impede progress in science to a much greater extent than would be the case in most other fields.

Similarly, the effective development of scientific and engineering manpower demands a high degree of continuity in educational programs and opportunities. If undergraduate and graduate students, and even young postdoctoral scientists, must interrupt their education in science and engineering for lack of opportunities, it is rare that they can ever return to such arduous intellectual pursuits in the future. Thus, their previous educational investment is largely wasted, and the Nation loses their creative, productive potential for the future.

A failure to restore the Foundation's funding to its level of 2 years ago is also likely to cause irreparable damage to the Nation's universities and colleges. The severe budget cuts and expenditure limitations in fiscal year 1969 have already caused considerable damage. Thus far, our institutions have been able to weather the storm, through temporary deferral of capital expenditures, and through the continuing availability of funds appropriated in fiscal year 1968. Such measures, however, cannot be further relied upon to avert disaster in fiscal year 1970. Consequently, if NSF funding is not restored to its previous level, the damage to the Nation's colleges and universities—which constitute one of the country's most valuable resources—will probably prove irreparable.

It is for these compelling reasons that the Committee on Labor and Public Welfare unanimously reported S. 1857. The importance of this bill can be more fully seen by placing the matter in historical perspective.

HISTORY

Before the mid-19th century, national strength was primarily based on a country's commercial capabilities, bolstered by supporting naval and military power. From the mid-19th to the mid-20th centuries, the underlying sources of national strength shifted from commercial capabilities to industrial power. During the Second World War, for example, the United States and its allies overwhelmed their adversaries by marshalling industrial might, despite America's unprepared state at the start of the war.

In the decades since the end of the Second World War, the sources of national strength have substantially shifted again—from the base of industrial power to one of scientific and technological expertise. This striking change can be seen most clearly in our defense programs, which have shifted from the mass production of planes, ships, and tanks to the research, development, and engineering of highly specialized, esoteric defense systems. The same sort of trans-

formation has taken place in the economy at large, as new technological products like the transistor or the computer created whole new science-based industries, while the traditional methods of producing goods increasingly yield to the inroads of automation.

Thus science and technology have come to constitute the cornerstone of national strength to such an extent that progress in these fields now serves as a major mark and measure of international prestige. The space program is a good example. The unfortunate fact that science and technology have not been sufficiently directed toward the pressing social and human problems of the Nation, I should point out, does not in any way limit the potential contributions these fields can make toward resolution of our problems. Indeed, one of our major needs today is to reorder national priorities to assure the fullest and most effective application of our scientific and technical knowledge to social and human problems.

Along with the increasingly crucial role of science in sustaining national strength, it has become necessary for us to place primary reliance on American-developed scientists and the American-developed scientific enterprise, notwithstanding the international character of scientific knowledge. During the Second World War, on the other hand, we were able to draw on decades of European progress in fundamental scientific knowledge. We were even fortunate enough to have the services of many of the leading European scientists, who had fled to America as refugees from tyranny. But in the world of today and tomorrow, we no longer have available this capital surplus of scientific knowledge and professional manpower.

RECOMMENDATION

America's future strength and success in coping with our unmet needs and social problems must derive from our own scientific enterprise and expertise. The National Science Foundation is the agency of the Federal Government charged with the responsibility of maintaining the health of that scientific enterprise in research and education. Thus NSF's programs are, in a very real sense, every bit as important to the national security as those of the Defense Department, and every bit as essential to the resolution of our social problems as the programs of HEW.

The Committee on Labor and Public Welfare fully recognizes the necessity for fiscal restraint, to help counteract the inflationary pressures on the economy. Nevertheless, the committee unanimously concurred with the decisions of the Johnson and Nixon administrations in concluding that it is clearly in the national interest to restore the NSF budget to its fiscal year 1968 level. I urge the Senate to reflect on the extreme importance of NSF's programs to the Nation's future, and strongly urge enactment of this bill to provide the Foundation with an adequate level of funding for fiscal year 1970.

I have prepared as exhibits an explanation of how this bill differs from the

House-passed authorization bill, and an excerpt from our committee report outlining the committee's actions and views. I ask unanimous consent that they be printed at this point in the RECORD.

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

EXHIBIT A

DECISIONS OF THE SENATE LABOR COMMITTEE REGARDING NSF BUDGET ITEMS CUT BY THE HOUSE COMMITTEE ON SCIENCE AND ASTRONAUTICS

1. CONSTRUCTION OF OCEANOGRAPHIC RESEARCH VESSEL, \$2 MILLION

House action

The House Committee recommended deferring construction of this vessel, arguing that the NSF was not completely using the existing ships in the fleet, and that NSF funding of a new ship should not be authorized during the same fiscal year that Congress was considering the recommendations of the Commission on Marine Science, Engineering and Resources.

Reasons for Senate restoration

The potential resources and opportunities afforded mankind by the ocean environment are enormous. Expanding our understanding and knowledge of this environment through oceanographic research is accordingly a national research aim of high priority. The present research fleet of 33 foundation-supported ships includes 19 between 17 and 45 years old. These ships must be replaced with newer vessels if the nation's oceanographic research effort is merely to hold its own. Any subsequent expansion in the effort designed to exploit future opportunities will require the construction of additional vessels, as well as these replacements. The present fleet of 33 ships, operated by 17 universities and non-profit institutions, is utilized by almost 1,000 research personnel, 1,150 graduate students, and 850 technicians. In addition, approximately 950 research and graduate student personnel from other institutions utilize these research platforms in any given year. Two of the ships are operated as national facilities, primarily for users from other institutions.

In response to written inquiries, the Foundation satisfied the committee that the current fleet is being as effectively utilized as vessel and weather conditions permit, and that due consideration is being given to measures to facilitate the wider participation of the academic community in such research.

Irrespective of any Congressional action that may result from the recommendations of the Commission on Marine Science, Engineering and Resources, it is clear that replacements are urgently needed for the oldest ships in the fleet, if the nation is to maintain its leadership in this field and take full advantage of the opportunities afforded by the ocean environment. Accordingly the committee recommends that the Senate authorize appropriations for the \$2 million requested for construction of another oceanographic research vessel.

2. ARECIBO, P.R., OBSERVATORY, \$3,300,000

House action

The House Committee recommended that resurfacing the telescope be deferred in order to curtail spending in FY 1970, and to permit the new Director of NSF to determine priorities in the whole field of astronomy and examine the Arecibo facility within that context.

Reasons for Senate restoration

The field of radio astronomy—the utilization and study of radio waves to increase man's understanding of the universe—is one of the most productive and promising fields

in science today. As is the case with basic science investigations in general, a timetable of specific practical results cannot be forecast for such work. But if the history of science and technology can be taken as a guide, then the ultimate benefits for mankind are likely to be considerable—even though they may occur in ways that cannot be envisioned today.

Two years ago a distinguished panel of experts, convened by NSF to set priorities for radio astronomy instruments, called for the resurfacing of the Arecibo reflector as a matter of the highest priority. In response to an inquiry from the Special Subcommittee on the National Science Foundation, the Director of NSF stated on June 3, 1969 that "the new Arecibo surface is the outstanding major improvement in U.S. radio astronomy capability which can be done at the lowest cost and earliest completion date." If the resurfacing is deferred for one or more years, the effectiveness of the nation's radio astronomers would be significantly lowered. Lack of adequate instrumentation would not only curtail the production of research results in this area, but also might induce trained specialists to start leaving the field, and graduate students not to enter it in the first instance. Accordingly, the committee recommends authorization of appropriations for \$3,300,000 for resurfacing the reflector at Arecibo, Puerto Rico.

3. INTERDISCIPLINARY RESEARCH PROGRAM, \$10 MILLION

House action

The House Committee recommended that this proposed new program be cut \$4 million (from \$10 million to \$6 million). The House Committee believed that NSF should proceed with discretion and support only the most promising proposals in this new area.

Reasons for Senate restoration

This new program has been designed to provide a means for funding interdisciplinary research on problems relevant to society. Many of the problems confronting society to which science and technology are especially relevant cannot be effectively approached on narrow disciplinary lines. Resolution of these problems requires the fusing together of contributions from a variety of fields in the physical, biological, and social sciences, as well as relevant professions such as law, medicine, and public administration. Unfortunately, the broad approaches which are necessary often cannot be appropriately sponsored within the scope and constraints of particular mission-oriented government agencies. Hence the need for this new NSF program to provide a government focal point for such efforts.

Moreover, there is a great need to involve the universities more fully in efforts to grapple with the pressing problems of society. Their inadequate involvement in the past has been a major contributory factor to the widespread student unrest prevalent today. This new program will enable NSF to stimulate the university community to turn its talents to these sorts of problems in the form of coordinated, interdisciplinary projects.

The potential contribution of this program in providing society with a foundation of understanding and reliable information from which these problems can be approached may prove of inestimable value in the critical years ahead. The unmet domestic needs of the nation are so vast—in education, pollution, transportation, urban affairs, nutrition, etc.—that promising approaches of wide applicability, such as this program, should be pursued without undue delay. Accordingly, the committee recommends that the Senate authorize appropriations for the full \$10 million requested for this program.

4. NATIONAL REGISTER OF SCIENTISTS AND ENGINEERS, \$1,315,000

House action

The Committee recommended deleting \$245,000 for expanded coverage of the National Register of Scientists and Engineers, questioning whether the emergency preparedness function of the register was still as urgent as it was during World War II when the register was established. Instead of the requested expansion, the Committee recommended a study to review the functions of the register.

Reasons for Senate restoration

The National Register of Scientists and Engineers was established during World War II to provide planning data necessary for effective utilization of the nation's scientific and engineering manpower in a time of national emergency. Since the Foundation assumed responsibility for the register in 1953, it has updated the information in it biennially, and has used the information to perform various studies of scientific and engineering personnel for national science planning purposes. Although at the time of the last registration in 1968, the register contained the names of approximately 50 percent of the scientists in the country, it included only about 10 percent of the engineers. In the scheduled registration in fiscal year 1970, the Foundation wishes to update the register and expand the coverage, primarily to include a much larger portion of the engineering community.

Because of their extensive training and unique skills, the nation's scientists and engineers constitute a major national resource that should be channeled in directions consonant with the national interest. While the Committee endorses the recommendation of the House Committee on Science and Astronautics that NSF reexamine the function of the register with respect to emergency planning, the importance of the register data for national science policy purposes is clear. Accordingly the Committee recommends that the Senate authorize the requested appropriation of \$1,315,000 for National Register activity in FY 1970, thereby permitting the planned expansion in register coverage.

EXHIBIT B

I. COMMITTEE ACTION

A. Chronology

On April 18, 1969, Senator Prouty introduced, S. 1856 and Senator Kennedy introduced S. 1867, both bills intended to authorize appropriations for the National Science Foundation. The bills were referred to the Committee on Labor and Public Welfare. On May 7, 1969, the Special Subcommittee on the National Science Foundation conducted a hearing on the bills. The Committee on Labor and Public Welfare met in executive session on July 1, 1969, and unanimously reported S. 1857, with an amendment in the nature of a substitute.

B. Summary

The purpose of S. 1857 is to authorize appropriations to the National Science Foundation for fiscal year 1970 in the amount of \$487,150,000 out of money in the Treasury not otherwise appropriated and \$3 million in foreign currencies which the Treasury Department determines to be in excess to the normal requirements of the United States. Since \$10 million has already been authorized for the national sea-grant program to be administered by NSF (under Public Law 89-688, as amended), enactment of S. 1857 would provide NSF with a total authorization for fiscal year 1970 of \$500,150,000.

C. Addition to authorization amount requested (\$150,000)

The Foundation originally requested \$150,000 in fiscal year 1970 for its State and local

intergovernmental science policy planning program. The testimony and prepared statements for the record pointed up the potential importance of this program. In effect the program provides small amounts of seed money to stimulate and assist State governments in fostering the more effective application of science and technology in promoting progress within their jurisdictions. In response to inquiry from the Special Subcommittee on the National Science Foundation, the NSF indicated that it could effectively utilize an additional \$150,000 over the original request. Because of the potential importance of this program and the growing interest among the States in participating in it, the committee recommends that the Senate authorize appropriations of \$300,000 for this program in fiscal year 1970.

D. Overall funding level

While the authorization of \$487,150,000, plus \$3 million in excess foreign currencies, recommended by the Committee on Labor and Public Welfare is \$150,000 more than the administration request to the Congress, it is almost \$118 million less than the original National Science Foundation request to the Bureau of the Budget, before it was reduced by the previous administration. In its subsequent review of the Federal budget, the present administration left the National Science Foundation budget item intact, recognizing the importance of this program to the national welfare. In effect this year's request is an attempt to restore the Foundation's level of 2 years ago, as can be seen from the table below.

Fiscal year	Budget request	Appropriations
1966	\$530,000,000	\$479,999,000
1967	525,000,000	479,999,000
1968	526,000,000	495,000,000
1969	500,000,000	400,000,000

The Committee on Labor and Public Welfare recognizes the current necessity for fiscal restraint to help counteract the inflationary influences operating on the economy. Nevertheless, the committee concurs with the decisions of the Johnson and Nixon administrations in concluding that it is in the national interest to restore the NSF budget to its fiscal year 1968 level. The reasons for this conclusion are as follows:

If the Senate approves the NSF authorization for fiscal year 1970 of \$490,150,000, as recommended, the Foundation will be barely able to keep pace with the mounting pressure of urgent national demands for research and education in science and engineering. It is very much in the national interest that NSF does manage at least to keep pace with those demands. Although the various programs of the National Science Foundation are, for the most part, undramatic and not readily understood by the layman, their potential importance to the national security and welfare should not be underestimated. The reservoir of scientific knowledge, technical know-how, and skilled professional manpower developed with the assistance of those programs provides the Nation with resources of incalculable value that strongly influence the development of all other national programs, from national security and economic growth to better education, health, and well-being for all our citizens.

At the same time it must be recognized that scientific progress is not a spigot that can be turned on and off again at will. Scientific research requires an unusual degree of continuity to achieve results of maximum value. Major fluctuations in scientific programs and projects disrupt and impede progress in science to a much greater extent than would be the case in most other fields. Similarly the effective development of scien-

tific and engineering manpower demands a high degree of continuity in educational programs and opportunities. If undergraduate and graduate students, and even young post-doctoral scientists must interrupt their education in science or engineering for lack of opportunities, it is rare that they can ever return to such arduous intellectual pursuits in the future. Thus, their previous educational investment is largely wasted, and the Nation loses their creative, productive potential for the future.

It is for these compelling reasons that the committee recommends that the Senate authorize appropriations to the National Science Foundation for fiscal year 1970 of \$487,150,000, plus \$3 million in excess foreign currencies.

E. Expiration of authorizations

Section 3 of S. 1857 amends the National Science Foundation Act of 1950, as amended by Public Law 90-407 (82 Stat. 360), to provide that all outstanding unfunded authorization would automatically expire at the close of the third fiscal year after the fiscal year for which the authorization was enacted.

F. Information for Congress

Section 6 of S. 1857 (which is identical to sec. 5 of the House authorization bill, H.R. 10878) requires National Science Foundation to keep the Senate Committee on Labor and Public Welfare and the House Committee on Science and Astronautics fully and currently informed of all the activities of the Foundation. The desirability of this provision arises from the unique status and role of science and technology in our society. For the layman—and when it comes to science and technology most Members of Congress must be viewed as laymen—scientific and technical programs are extremely difficult to comprehend. Indeed, it was partially to improve such comprehension that the National Science Foundation Act was revised last year to require annual review by a legislative committee. The committee believes this provision for full and current information will facilitate this important communication process between the scientific community and the Congress.

It should be emphasized that the inclusion of section 6 in the bill in no way adversely reflects on the past or present record of NSF in this respect. On the contrary, the Foundation, under its two distinguished Directors to date, has been exceptionally helpful and cooperative in its dealings with Congress in general, and with the Committee on Labor and Public Welfare in particular.

While it is not possible to foresee all the circumstances regarding which the committee should be kept informed, it is possible to identify certain items of interest to the committee. Included, for example, are proposed changes in the Foundation's budget or programs as presented to the committee, contemplated transfers of projects or programs from other agencies to the Foundation, or major program accidents, and in particular those involving loss of life.

II. COMMITTEE VIEWS

A. NSF sponsorship of transferred projects

In fiscal year 1970, the Foundation's budget request includes \$19 million in projects taken over by the Foundation from other agencies, primarily the Department of Defense, because these agencies are cutting back in their support of basic research in astronomy and nuclear and particle physics as not being directly relevant to their mission requirements.

The committee is concerned that heretofore it has been the accepted policy that mission agencies should support basic research both to improve the quality of their work and to provide a proper research base for long-term mission objectives. To say that

they are now supporting research only most relevant to their missions implies a shift in this policy. Consequently, this action has implications for the long-term support of basic research from a national point of view, and in particular upon the operations of the National Science Foundation.

The committee does not intend to imply that such transfers are necessarily detrimental to the NSF mission and programs. However, such transfers should not be made on an unquestioning basis. Each proposed transfer should be carefully and objectively examined to determine whether it contributes to, or detracts from, the overall NSF program. As a result of section 6 of the bill, the committee will have an opportunity to discuss such transfers with NSF prior to their approval.

B. Scientific priorities

The Nation's scientific leadership is confronted with the difficult problem of scientific priorities: of choosing and periodically recasting the proper balance among the Nation's investments in research, development, and engineering; between basic and applied research; and among disciplines, fields, and subfields of science and engineering. As long as available funds and the expansion in scientific manpower kept pace with scientific progress, these problems never became overly pressing. But now, and through the foreseeable future, the potential for scientific progress exceeds the anticipated funds and manpower that will probably be available. The recurring necessity for hard choices among competing programs and projects—all of which may be desirable in themselves—will increasingly characterize the scientific enterprise. Insofar as such choices were necessary in the past, they were based largely (and successfully) on the personal judgment of the Nation's scientific leaders. But the complexity of choice that is increasingly characterizing such decisions precludes reliance on ad hoc choices solely on the basis of personal judgment. It is imperative for NSF to continue and intensify its efforts to promote the development of more effective methods and criteria for allocating scientific resources on a more scientific basis, while at the same time identifying and delineating those factors and decisions to be determined within a broader context of public policy by the Nation's political leadership.

C. Applied research in the national interest

Last year's revision to the NSF Act authorized the Foundation to initiate and support applied research at academic and other non-profit institutions; and, when so directed by the President, to support through other appropriate organizations (including industrial organizations) applied scientific research relevant to national problems involving the public interest. Even prior to last year's amendments to the act, NSF had effectively undertaken major national programs with significant applied components in areas such as weather modification and the marine sciences. The committee recommends that NSF build on its excellent record in this regard by taking whatever steps may be necessary to prepare itself to respond effectively to future Presidential assignments or self-initiated programs of this sort. For example, it might prove useful to identify and delineate specific areas in which NSF could make important contributions through such programs to the fulfillment of the Nation's unmet domestic needs and the resolution of the pressing problems of society. The proposed new interdisciplinary research program should, of course, assist the Foundation in achieving these objectives.

D. Coordination of educational programs

The responsibilities of the Committee on Labor and Public Welfare cover a number of educational programs other than those conducted by the National Science Foundation.

Accordingly the committee wishes to emphasize the importance it attaches to NSF continuing to maintain effective coordination regarding its educational programs with the Department of Health, Education, and Welfare.

E. National distribution of support

Section 3(e) of the National Science Foundation Act provides that in exercising the authority and discharging the functions of the statute in pursuit of the objective of strengthening research and education in the sciences, the National Science Foundation shall "avoid undue concentration of such research and education." The committee wishes to reemphasize its concern that this stipulation be adhered to by the NSF in order that all sections of the Nation might equitably participate in the strengthening of the sciences envisioned by the law.

Mr. PROUTY. Mr. President, after careful deliberation, Congress revised the National Science Foundation's organic statute by the passage of Public Law 90-407 in July 1968. This act assigned new areas of responsibility to the Foundation, including the authorization to initiate and support applied research in academic institutions; broadened authority for carrying out certain important activities in international science and computers for research and education; and strengthened the Foundation's organizational structure.

In my view, perhaps the most important provision of the 1968 act was the one relating to the new channels of communication opened between the NSF and Congress by the requirement of an annual report from the National Science Board and specific authorizations for Foundation appropriations.

In accordance with this new legislative framework, I introduced for the administration on April 18 a bill to authorize appropriations for the Foundation for fiscal year 1970. At the time I remarked that it seemed desirable to provide authorization for the general purposes of the Foundation.

I considered this general authorization important in that it provides the Foundation the maximum degree of flexibility to use its resources to best fulfill its mandate. To lock in the authorizations for appropriations would seem unduly restrictive.

I am pleased that my recommendation for a general authorization was accepted by the distinguished chairman of the Subcommittee on the National Science Foundation (Mr. KENNEDY) and is embodied in his bill, S. 1857, now before the Senate.

In addition to the authorization of \$487 million requested by the National Science Foundation for its fiscal year 1970 activities, the subcommittee and full Committee on Labor and Public Welfare have added an additional \$150,000 to expand the Foundation's State science program.

This is a pilot program to help States and local governments find ways to employ science and technology in solving local problems. Because of the importance of this program and the need to involve more States in this effort, the committee recommended that the program be expanded. The Committee on Science and Astronautics in the other body made a similar recommendation and additional authorization.

In addition to this \$487,150,000, S. 1857 also authorizes the NSF to spend abroad up to \$3 million in excess of foreign currencies. Also the Foundation has been previously authorized an additional \$10 million for the national sea grant program under Public Law 89-688. Thus under S. 1857, the Foundation would have a total authorization for fiscal year 1970 of \$500,150,000.

As the committee report on S. 1857 indicates, this amount is almost \$118 million less than the original NSF request to the Bureau of the Budget and this sum requested by both the Johnson and Nixon administrations is an attempt to restore the Foundation's funding level of 2 years ago when the fiscal year 1968 appropriations were \$495 million.

The fiscal year 1969 appropriations for the Foundation amounted to only \$400 million and this cutback slowed scientific research and education throughout our Nation.

If we fail now to restore an adequate level of funding for the Foundation, I fear, we will seriously impair our scientific education and research capacities. I wish to remind Senators that the Subcommittee on the National Science Foundation and the Committee on Labor and Public Welfare, unanimously concurred with the budget recommendations of both the Johnson and Nixon administrations and reported a bill to authorize funding at a level which only slightly exceeds the fiscal year 1968 expenditures.

However, it is fruitless to argue for this authorization measure without a simultaneous plea for favorable consideration of the needs of the Foundation with respect to appropriations.

At this time I urge not only the passage of this authorization measure but full appropriations consonant with this authorization.

Equally important with the amount of funds authorized and appropriated is the manner in which the funds are spent. The committee report on S. 1857 reemphasizes the committee's concern about the national distribution of support for science education and research. The language included in the report at my request says:

Section 3(c) of the National Science Foundation Act provides that in exercising the authority and discharging the functions of the statute in pursuit of the objective of strengthening research and education in the sciences, the National Science Foundation shall "avoid undue concentration of such research and education". The Committee wishes to re-emphasize its concern that this stipulation be adhered to by NSF in order that all sections of the nation might equitably participate in the strengthening of the sciences envisioned by the law.

I feel this reemphasis essential and I am reminded of a comment by the late Representative Albert Thomas, of Texas, during hearings on the fiscal year 1964 NSF budget. Referring to States with low numbers of fellowship holders he said:

There is not that much difference in human nature, gentlemen, if you give these people the same opportunity, they will go places too.

Pursuant to my questioning during this subcommittee's hearings on May 7, Dr. Leland Haworth, the Director of the

Foundation, assured me that the Foundation was proceeding to strengthen science departments in smaller universities throughout the country. I trust that the language of the committee report will provide an additional stimulus to the Foundation to more evenly distribute its support among the States.

At the outset of my remarks, I indicated the beneficial new channels of communication opened by the National Science Foundation Act of 1968. You will note that section 6 of the bill now before us requires the Foundation to keep the appropriate committees in the House and Senate "fully and currently informed" with respect to all of the activities of the Foundation. As the committee report clearly states, inclusion of this language does not imply any dissatisfaction with the past or present record of NSF, but instead authorizes a continuing exchange of information and close oversight of the diverse activities of the Foundation.

The hearings on the authorization bill proved most informative. I would be remiss if I failed to say that the subcommittee has been characterized by harmony and cooperation. The unanimity of our decision on this bill reflects this mood and our concurrence in the need for adequate support of the essential funding of the National Science Foundation. I would urge Senators to support the measure and carefully consider the need to restore appropriations for the Foundation to their fiscal year 1968 level. Dr. Phillip Handler, Chairman of the National Science Board and president-elect of the National Academy of Sciences, spoke eloquently of the need for solid support of scientific research and education in the May 7 hearings. I shall conclude my remarks by quoting his urgings:

It is almost platitudinous, now, to say that science is the hallmark of the culture of these United States, the hallmark of the 20th century. Yet, it is no less true. Science is surely the leverage which our society has developed for shaping its future and for making the condition of man, at home and abroad, better than we have ever known it in the past.

History certainly bears out that contention. Today our Nation is stronger, healthier, and wealthier than it ever has been before, very largely because we have learned how to apply the findings of science for development of technologies which enrich all aspects of American life.

As a working scientist, I personally might wish that we could justify the scientific endeavor exclusively on its cultural merits, since all of us can enjoy the intellectual concepts of science and what these reveal of the nature of the universe and the nature of man. But I am well aware of the fact that it is most unlikely that the American people would support science even on the scale which we now do, on that basis alone. Nor is that necessary. We spend more on science as a nation than we do on art, largely because science has demonstrated that it is useful to our society. We have every reason to think that it will continue to be so in the future.

As our Nation goes about supporting fundamental research at the universities, Federal laboratories, and nonprofit institutions, the scientific community can offer no guarantees, no promises, that tomorrow's findings will be translated into direct human applications. But the corpus of scientific understanding has doubled in each decade for more than a century. That fact, of itself, is evidence that our ignorance has ex-

ceeded our understanding by a wide margin. We have every reason to believe that that is still true at the present time.

I know of no reason to believe that the scientific findings of tomorrow will be any less useful than those of yesterday. That is an article of faith. It is the only one we can offer to you as we ask your support of the fundamental scientific endeavor.

Mr. YARBOROUGH. Mr. President, I rise in support of the National Science Foundation Act Amendments of 1969. This is to authorize the continued work of the Foundation in the fields of scientific research, science information, and international science activities, as well as educational activities in both the pure and social sciences.

The Subcommittee of the Committee on Labor and Public Welfare on the National Science Foundation under the very able chairmanship of the distinguished senior Senator from Massachusetts has worked with great diligence to bring this bill to the Senate and I commend their efforts.

As the committee report shows in greater detail, the bulk of the spending which is being authorized is for the support of scientific research and for science education activities. We need to continue this work and enable research to be done in the civilian sector of our economy. We need to spend more of our research funds on activities which will better conditions on earth. And I wish that we were able to increase the funds which this Foundation has to spend. However, due to budgetary restrictions, we are only authorizing an amount equal to last year.

Every State in the Union and dozens and dozens of institutions of learning benefit by receiving research grants from the National Science Foundation. This work should be allowed to continue. I hope the Senate will pass this important legislation.

Mr. COOPER. Mr. President, the Senate today considers the bill S. 1857, a bill to authorize appropriations for activities of the National Science Foundation. I would like to draw the attention of my colleagues to a provision in this bill to provide \$5 million for the support of the international biological program. The international biological program represents the first large-scale ecological research activity on biological productivity and the biological basis of human welfare. It is essential that research of this character be supported and greatly increased if we are to meet the challenge of environmental quality with which we are faced. Time and time again in testimony before the Senate Committee on Public Works on various aspects of environmental quality—whether it be air or water pollution, rivers and harbors projects, or Federal highway projects, we receive testimony that the scientific data is simply not available to enable us to make valid judgments on the environmental impact of these programs and activities. We cannot, as we move into the seventh decade of the 20th century with its growing population and immense technology make wise decisions unless we have such research available.

I, therefore, hope that my colleagues will support this provision in the bill. Second, I would like to take this opportunity to invite the attention and sup-

port of my colleagues to a resolution introduced by Senator MUSKIE and which I cosponsor, Senate Joint Resolution 89 supporting the IBP, which is currently pending before the Committee on Labor and Public Welfare. I would hope that this resolution will be adopted by the Senate during this session. With unanimous consent I would like to insert at this point in the RECORD an editorial on the international biological program by Edward Deevey, currently president of the Ecological Society of America that appeared in the journal *BioScience*.

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

WHY AN INTERNATIONAL BIOLOGICAL PROGRAM?
(By Edward S. Deevey, Yale University)

For all animals and for man, today's material resources are tomorrow's garbage, and vice versa. Waste, therefore, does not exist. Living systems move matter around, into and out of many sources and sinks, but they do not create matter, or destroy it. Eventually, plants remake what we call resources out of what we call garbage. The energy they need to do this is captured from sunlight.

Most resources used by man are chemically reduced. Food, iron, and gasoline are examples. When they are used, oxygen is added to their molecules, and they gain weight. Therefore, the more resources are used, the faster the total weight of garbage increases. Fortunately, in turning oxidized compounds that were garbage into reduced compounds that are resources, plants restore the oxygen to the atmosphere.

Human societies are now so large, so complex, and use resources so rapidly, that they are in danger of drowning in their garbage. The problem is inescapable; there is no rug under which it can be swept. All sinks are temporary; like cesspools, they have a way of becoming septic when overloaded. "Waste resources" have seriously polluted the Great Lakes, and even the ocean cannot process all the garbage it now receives.

Most men understand these matters in principle. In detail, nobody understands them well enough. Partly, this is because living systems are amazingly complex and are turning out to be interlocked in unexpected ways. In addition, the pace of technological progress has intensified the need for understanding. Human ingenuity creates so many "new" resources, and they become garbage so quickly that old ways of handling garbage can no longer be counted on. Meanwhile, the old, familiar pollutants—silt in our reservoirs, manure on our farms, carbon and sulfur compounds in our air—pile up on an unprecedented scale and overflow the sinks that used to contain them.

When garbage is smoothly converted to resources, we speak of a system's "output" as "production." When interruptions occur in the same systems, we call the pileups "pollution," and notice that "production" is declining. Pollution, then, is deflected production. It can be channeled or controlled, but as every material pollutant is a potential resource, none can be eliminated entirely. Pollution is the internal friction of productive systems, part of the cost of maintaining output.

The International Biological Program is devoted to understanding the biological basis of human welfare. Because it is an international research program, operated in more than 70 countries, it emphasizes those kinds of biology that demand information from a global "field." These include human genetics and nutrition, human responses to stressful environments, transport of airborne spores and pathogens, colonization of islands and of distributed environments, and others not yet fully formulated. None is more impor-

tant than the one the US-IBP Committee has chosen as central: Analysis of Ecosystems. It is central because it focuses on man's central problem, as a dweller in environments: the relations, in depth and detail, between pollution and production.

Analysis of Ecosystems is not less international than other components of IBP. In the United States, however, it differs both in scope and in emphasis from its counterparts in other countries. In much of the world, where more food is man's paramount need, the emphasis logically falls on production. In the United States, as in other developed countries, production has been reasonably adequate, at least up to now, and the emphasis falls instead on pollution. In the ecological view, however, these problems are inseparable. Today's productive systems are always polluted in some sense; it is intensified pollution that short-circuits production, behaving exactly as a cancer in the system. The objective of Analysis of Ecosystems is to understand living systems well enough to recognize such cancers before they start.

The PRESIDING OFFICER. The question is on agreeing to the committee amendment in the nature of a substitute. The amendment was agreed to.

The PRESIDING OFFICER. The question is on the engrossment and the third reading of the bill.

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

THE CALENDAR

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of Calendar No. 392 and the remainder of the calendar, in sequence.

The PRESIDING OFFICER. Without objection, it is so ordered. The clerk will state the items on the calendar, beginning with Calendar No. 392.

SERVICEMEN'S GROUP LIFE INSURANCE AMENDMENTS ACT OF 1969

The bill (S. 1479) to amend chapter 19 of title 38, United States Code, in order to increase from \$10,000 to \$15,000 the amount of servicemen's group life insurance for members of the uniformed services was considered, ordered to be engrossed for a third reading, read the third time, and passed, as follows:

S. 1479

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Servicemen's Group Life Insurance Amendments Act of 1969".

SEC. 2. Section 767 of title 38, United States Code, is amended to read as follows:

"§ 767. Persons insured; amount

"(a) Any policy of insurance purchased by the Administrator under section 766 of this title shall automatically insure any member of the uniformed service on active duty against death in the amount of \$15,000 from the first day of such duty, or from the date of enactment of the Servicemen's Group Life Insurance Amendments Act of 1969, whichever is the later date, unless such member elects in writing (1) not to be insured under this subchapter, or (2) to be insured in the amount of \$10,000, or \$5,000.

"(b) If any member elects not to be insured under this subchapter or to be insured in the amount of \$10,000 or \$5,000, he may thereafter be insured under this subchapter

or insured in the amount of \$15,000 or \$10,000, under this subchapter, respectively, upon written application, proof of good health, and compliance with such other terms and conditions as may be prescribed by the Administrator."

SEC. 3. Until and unless otherwise changed on or after the date of enactment of this Act, a beneficiary designation and settlement option filed by a member with his uniformed service under subchapter III of chapter 19 of title 38, United States Code, prior to such date shall be effective with respect to the increased servicemen's group life insurance coverage provided pursuant to the amendment made by section 2 of this Act, and such increased amount of insurance shall be settled in the same proportion as the portion designated for such beneficiary or beneficiaries bore to the amount of insurance heretofore in effect under subchapter III of chapter 19 of title 38, United States Code.

Mr. MANSFIELD. Mr. President, I ask unanimous consent to have printed in the RECORD an excerpt from the report (No. 91-398), explaining the purposes of the measure.

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

SUMMARY OF THE BILL

Under present law, active duty servicemen are insured for \$10,000 under the servicemen's group life insurance program unless they choose either not to be insured or to be insured for \$5,000. Servicemen pay premiums based on comparable civilian mortality rates; the premium for \$10,000 in servicemen's group life insurance is currently \$2 per month. The Federal Government pays that portion of the cost of the insurance due to the extra hazard of active duty.

S. 1479 would increase the amount of the servicemen's group life insurance from \$10,000 to \$15,000.

BACKGROUND

Between 1956 and 1965 persons in active military service were not insured under Federal legislation unless they still retained Government life insurance obtained prior to April 25, 1951. With the intensification of hostilities in Vietnam, Congress enacted legislation in September 1965 providing group life insurance to servicemen on active duty. Coverage extends to all personnel on active duty (including reservists), provided they are ordered to active duty for a period of 30 days or more.

A serviceman is automatically insured for \$10,000 unless he indicates in writing that he wishes either to be insured for \$5,000 or not to be insured. The insurance continues for 120 days after the serviceman's separation from active duty, without additional cost to him, whether he is discharged, retired, or returned to non-active-duty Reserve status.

The individual serviceman's premium since 1965 has been set at \$2 per month for \$10,000 and \$1 per month for \$5,000. Of those servicemen eligible, 98.4 percent are maintaining the insurance and virtually all of these have the \$10,000 maximum coverage. The low cost to individuals is made possible by insuring all members of the uniformed services under a single group insurance master contract, and by the Government bearing the cost of the extra hazard attributable to military service. This extra hazard cost is calculated on the basis of the extent to which mortality in the uniformed services exceeds the mortality in the U.S. male civilian population of the same median age.

The program is administered by a commercial primary insurer, the Prudential Insurance Co. of America, under the supervision of the Veterans' Administration. Premiums for this insurance, including its cost of administration, are deducted monthly from

servicemen's pay and remitted by each uniformed service to the Veterans' Administration which in turn remits them to the primary insurer. All claims are paid by the primary insurer. However, in cases where there is some question as to the existence of the coverage, the Veterans' Administration makes the final decision.

The proceeds of the insurance can be paid either in a lump sum or in 36 equal monthly installments including interest on the unpaid balance. This gives an income of \$296.40 monthly on \$10,000 of insurance at the rate of interest now being paid. The beneficiary may choose the mode of payment unless the insured by designation restricts payments to 36 monthly installments.

The total amount of insurance in force is now \$36.8 billion, of which \$33.7 billion is related to 3.4 million members on active duty and \$3.1 billion is related to 310,000 persons separated from the service 120 days or less.

Under peacetime conditions, the servicemen's group life insurance program would be self-supporting and would not require any Government subsidy. However, because of the casualties in Vietnam, service deaths have far exceeded peacetime levels and the Government has made substantial contributions. These are summarized in table 1.

TABLE 1.—SERVICEMEN'S GROUP LIFE INSURANCE: SOURCE OF FUNDS

Fiscal year	(Dollars in millions)			Total
	Servicemen's premiums	Government contribution	Interest	
1966.....	\$52.5	\$27.3	\$0.4	\$80.1
1967.....	80.2	70.1	2.0	152.3
1968.....	83.0	146.5	3.1	232.6
1969.....	83.1	111.7	3.2	198.0
Cumulative.....	298.8	355.6	8.7	663.1

THE BILL

S. 1479 would increase the face value of servicemen's group life insurance from \$10,000. A serviceman would automatically be insured for \$15,000 unless he chose to be insured for \$10,000 or \$5,000 or not to be insured at all. The serviceman's monthly premium would be increased proportionately (to \$3 at the present rate of \$1 monthly per \$5,000 of insurance).

Improvement of monthly benefits for the survivors of servicemen and extension of social security coverage to servicemen have provided substantial benefits for the widows and children of men killed on active duty. But there remains a need for an adequate benefit that can be paid in a lump sum. It can enable the surviving family to pay off a debt which would have been repaid had the servicemen survived. It helps with all the substantial expenses of the family, and it can help see a child through school. It can be used to meet the unusual expenses associated with the death of the principal wage earner.

EFFECTIVE DATE

The automatic increase from \$10,000 to \$15,000 will be effective as of the date of enactment of the bill.

VIETNAM ERA VETERANS' LIFE INSURANCE READJUSTMENT BENEFITS ACT

The Senate proceeded to consider the bill (S. 2003) to provide a special Government life insurance program for veterans of the Vietnam era which had been reported from the Committee on Finance, with an amendment, on page 3, after line 2, strike out:

"Any eligible veteran may, within one hundred and twenty days after his discharge from active military, naval, or air service and (1) upon written application to the Administrator, (2) payment of the required premium, and (3) without meeting any requirement of good health, be granted insurance by the United States against the death of such veteran occurring while such insurance is in force.

And, in lieu thereof, insert:

Any eligible veteran who within one hundred and twenty days after the date of his discharge from active military, naval, or air service and without meeting any requirement of good health, or who within one hundred and eighty days after the date of his marriage, if such marriage occurs within five years after his discharge from active military, naval, or air service, and such marriage is his first marriage, and upon proof of good health, and who (1) makes written application to the Administrator, and (2) makes payment of the required premium, may be granted insurance by the United States against the death of such veteran occurring while such insurance is in force.

So as to make the bill read:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Vietnam Era Veterans' Life Insurance Readjustment Benefits Act".

Sec. 2. Chapter 19 of title 38, United States Code, is amended by redesignating subchapter IV as subchapter V; by renumbering sections 781 through 788 as sections 791 through 798, respectively; and by inserting after subchapter III a new subchapter as follows:

"SUBCHAPTER IV—VIETNAM ERA VETERANS' LIFE INSURANCE

"§ 781. Definitions

"For the purposes of this subchapter—

"(1) The term 'insurance' means Vietnam era veterans' life insurance.

"(2) The term 'widow' or 'widower' means a person who was the lawful spouse of the insured at the maturity of the insurance.

"(3) The term 'child' means a legitimate child, an adopted child, and if designated as beneficiary by the insured, a stepchild or an illegitimate child.

"(4) The terms 'parent', 'father', and 'mother' mean a father, mother, father through adoption, mother through adoption, persons who have stood in loco parentis to a member of the Armed Forces of the United States at any time before entry into active service for a period of not less than one year, and a stepparent, if designated as beneficiary by the insured.

"(5) The term 'eligible veteran' means a veteran who (A) served on active duty for a period of more than 180 days any part of which occurred during the Vietnam era and who was discharged or released therefrom under conditions other than dishonorable, or (B) was discharged or released from active duty, any part of which occurred during the Vietnam era, for a service-connected disability.

"§ 782. APPLICATIONS FOR VIETNAM ERA VETERANS' LIFE INSURANCE

"Any eligible veteran who within one hundred and twenty days after the date of his discharge from active military, naval, or air service and without meeting any requirement of good health, or who within one hundred and eighty days after the date of his marriage, if such marriage occurs within five years after his discharge from active military, naval, or air service, and such marriage is his first marriage, and upon proof of good health and who (1) makes written application to the Administrator, and (2) makes payment of the required premium, may be

granted insurance by the United States against the death of such veteran occurring while such insurance is in force.

"§ 783. AMOUNT OF INSURANCE

"Insurance shall be issued in any multiple of \$500 and the amount of insurance with respect to any eligible veteran shall be not less than \$1,000 or more than the maximum amount of insurance authorized under section 767 for persons insured under subchapter III of this chapter. No eligible veterans may carry a combined amount of Vietnam era veterans' life insurance, national service life insurance, and United States Government life insurance in excess of such maximum amount authorized in such section 767.

"§ 784. PLANS OF INSURANCE

"(a) Insurance under this subchapter may be issued on the following plans: modified life, ordinary life, twenty-payment life, thirty-payment life, twenty-year endowment, endowment at age sixty, and endowment at age sixty-five. All insurance issued under this subchapter shall be participating insurance.

"(b) Under such regulations as the Administrator may promulgate, a policy of insurance of any type issued under this subchapter may be converted or exchanged for any other type insurance issued under this subchapter. Whenever a policy of insurance issued under this subchapter is converted or exchanged for a policy issued on the modified life plan, the face value of the modified life policy shall be automatically reduced by one-half, without any reduction in premium, at the end of the day preceding the sixty-fifth birthday of the insured.

"(c) Any insured whose modified life insurance policy is in force by payment or waiver of premiums on the day before his sixty-fifth birthday may upon written application and payment of premiums made before such birthday be granted insurance under this subchapter on an ordinary life plan without physical examination in an amount of not less than \$1,000, in multiples of \$500, but not in excess of one-half of the face amount of the modified life insurance policy in force on the day before his sixty-fifth birthday. Insurance issued under this subsection shall be effective on the sixty-fifth birthday of the insured. The premium rate, cash, loan, paid-up, and extended values on the ordinary life insurance issued under this subsection shall be based on the same mortality tables and interest rates as the insurance issued under the modified life policy. Settlements on policies involving annuities on insurance issued under this subsection shall be based on the same mortality or annuity tables and interest rates as such settlements on the modified life policy. If the insured is totally disabled on the day before his sixty-fifth birthday and premiums on his modified life insurance policy are being waived, as provided in section 712 of this title, or he is entitled on that date to waiver, as provided in such section, he shall be automatically granted the maximum amount of insurance authorized under this subsection and premiums on such insurance shall be waived during the continuous total disability of the insured.

"§ 785. TERMS AND CONDITIONS; PREMIUM RATES

"Insurance granted under this subchapter shall be issued upon the same terms and conditions as national service life insurance, except (1) five-year level premium term insurance may not be issued; (2) the net premium rates shall be based on the 1958 Commissioners standard ordinary basic mortality table, increased at the time of issue by such an amount as the Administrator determines to be necessary for sound actuarial operations; (3) an additional premium to cover administrative costs to the Government as determined by the Administrator at

times of issue shall be charged for insurance issued under this subchapter and for any total disability income provision attached thereto; (4) all cash, loan, extended and paid-up insurance values shall be based on the 1958 Commissioners standard ordinary basic mortality table; (5) all settlements on policies involving annuities shall be calculated on the basis of the annuity table for 1949; (6) all calculations in connection with insurance issued under this subsection shall be based on interest at the rate of 3½ per centum per annum; (7) the insurance shall include such other changes in terms and conditions as the Administrator determines to be reasonable and practicable; and (8) all insurance issued under this subchapter shall be on a participating basis.

“§ 786. SURRENDER OF POLICY FOR CASH VALUE UPON REENTRY INTO MILITARY SERVICE; INSURANCE AFTER SEPARATION; WAIVER OF PREMIUMS

“(a) Any person in the active military, naval, or air service, who has an insurance contract under this subchapter, may elect to surrender such contract for its cash value. In any such case the person, upon application in writing made within one hundred and twenty days after the expiration from active service, may be granted, without medical examination, insurance under this subchapter, or may reinstate such surrendered insurance upon payment of the required reserve and the premium for the current month.

“(b) Waiver of premiums under this subchapter shall not be denied in any case of issue of insurance under this subchapter or reinstatement of insurance under this section in which it is shown to the satisfaction of the Administrator that total disability of the applicant commenced prior to the date of his application.

“§ 787. VIETNAM ERA VETERANS' LIFE INSURANCE FUND

“(a) There is created in the Treasury a permanent trust fund to be known as the Vietnam era veterans' life insurance fund. All premiums paid on account of Vietnam era veterans' life insurance shall be deposited and covered into the Treasury to the credit of such funds, which, together with interest earned thereon, shall be available for the payment of liabilities under such insurance, including payment of dividends and refunds of unearned premiums. Payments from this fund shall be made upon and in accordance with awards by the Administrator.

“(b) The Administrator is authorized to set aside out of such fund such reserve amounts as may be required under accepted actuarial principles to meet all liabilities under such insurance; and the Secretary of the Treasury is authorized to invest and reinvest such fund, or any part thereof, in interest-bearing obligations of the United States or in obligations guaranteed as to principal and interest by the United States, and to sell such obligations for the purposes of such fund.

“§ 788. VIETNAM ERA VETERANS' LIFE INSURANCE APPROPRIATION

“There is authorized to be appropriated such sums as may be necessary to carry out the provisions of this subchapter, to be known as the Vietnam era veterans' life insurance appropriation, for the payment of liabilities under Vietnam era veterans' life insurance. Payments from this appropriation shall be made upon and in accordance with awards by the Administrator.

“§ 789. APPLICABLE PROVISIONS

“The provisions of sections 706, 707, and the first sentence of section 708; the provisions of sections 709 through 711; the provisions of subsections (a), (b), and (c), and the last two sentences of subsection (d) of section 712; the provisions of sections 713

through 715; and the provisions of sections 717, 718, and 721, all of this title, shall be effective in the same manner and to the same extent with respect to Vietnam era veterans' life insurance issued under this subchapter as such provisions are applicable to national service life insurance. References in section 721 of this title to the national service life insurance fund and to the national service life insurance appropriation shall be deemed for purposes of this subchapter to refer to the Vietnam era veterans' life insurance fund and the Vietnam era veterans' life insurance appropriation, respectively.”

Sec. 3. Section 795 of title 38, United States Code, as redesignated by section 2 of this Act, is amended by striking out “section 784” and inserting in lieu thereof “section 794”.

Sec. 4. The table of sections at the beginning of chapter 19 of title 38, United States Code, is amended by striking out the heading

“SUBCHAPTER IV.—GENERAL

and everything below such heading, and inserting in lieu thereof the following:

“SUBCHAPTER IV.—VIETNAM ERA VETERANS' LIFE INSURANCE

“781. Definitions.

“782. Applications for Vietnam Era Veterans' Life Insurance.

“783. Amount of insurance.

“784. Plans of insurance.

“785. Terms and conditions; premium rates.

“786. Surrender of policy for cash value upon reentry into military service; insurance after separation; waiver of premiums.

“787. Vietnam Era Veterans' Life Insurance Fund.

“788. Vietnam Era Veterans' Life Insurance Appropriation.

“789. Applicable provisions.”

Sec. 5. This Act shall become effective on the first day of the third calendar month following the month in which it is enacted. In any case in which an eligible veteran is discharged prior to such effective date, he shall, for purposes of section 782 of title 38, United States Code, be deemed to have been discharged on the effective date of this Act.

Mr. MANSFIELD. Mr. President, I ask unanimous consent to have printed in the RECORD an excerpt from the report (No. 91-399), explaining the purposes of the measure.

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

SUMMARY OF THE BILL

The bill would establish a new Vietnam era veterans' life insurance program. Veterans of the Vietnam era (that is, those with service since August 5, 1964) would be eligible to apply for this new Government life insurance; the maximum face value would be the same as the maximum amount (presently \$10,000) under the servicemen's group life insurance program for servicemen on active duty. Insurance could be issued under seven different types, all of them permanent—that is, the premium would remain the same during the life of the veteran. The insurance would be “participating”—veterans would receive dividends which could be used to pay part of their next year's premium. The premium would be waived while the veteran was totally disabled. A disability income provision could be added to the policy at the veteran's option. Appropriations would repay the Vietnam era veterans' life insurance trust fund for the cost of both excess mortality and waiver of premiums which are traceable to the extra hazard of military, naval, or air service.

BACKGROUND

Ever since the War Risk Insurance Act of 1917 it has been recognized that the Government has a special role in meeting the insurance needs of servicemen, who are exposed to a substantially higher risk of death than their civilian counterparts. And between World War I and the Korean war, the Federal Government provided its veterans with an opportunity to purchase up to \$10,000 in low cost Government life insurance. The U.S. Government life insurance program had its origin in World War I. The national service life insurance program was established in 1940 to handle the insurance needs of World War II servicemen and veterans. Veterans' special life insurance was established for Korean veterans. But since 1956, only veterans with a service-connected disability have been able to purchase Government life insurance.

Under present law a serviceman on active duty may be insured for \$10,000 in servicemen's group life insurance for which he pays a premium of \$2 monthly. This insurance protection continues without further premium payment for 120 days following his separation from service. Within this 120 days, he may purchase a commercial insurance policy from any of about 600 commercial companies without a medical examination. He is guaranteed the right to purchase this insurance at standard commercial rates. This is a clear advantage for the veteran who was disabled in service, but it presents no advantage to the veteran in good health, since any civilian could purchase the same policy at the same rate. Thus only a veteran who was disabled in service receives advantageous treatment under present law.

The committee bill would establish a new program of low-cost Vietnam era veterans' life insurance available to all discharged veterans whether disabled or not. The bill would in no way restrict the right of the veteran to purchase commercial insurance as under present law; it would merely afford him the opportunity of purchasing Government life insurance.

ELIGIBILITY

Under the committee bill any veteran who has served on active duty for at least 6 months, any part of which occurred during the Vietnam era (that is, after August 5, 1964) who was discharged under conditions other than dishonorable, would be eligible to apply for Vietnam era veterans' life insurance. If he served for less than 6 months, but was discharged or released from active duty for a service-connected disability, he would also be eligible.

Any eligible veteran could apply for the insurance within 120 days after his discharge from active duty. Veterans who have already completed their active duty before the bill is enacted would have 120 days from the date of enactment of the bill.

If a veteran has not chosen to apply for Vietnam era veterans' life insurance within 120 days after his discharge, he would have an additional opportunity under the bill as reported if he marries for the first time within 5 years of his discharge. He would then be able to apply within 6 months of this marriage, providing he could show that he was in good health.

AMOUNT OF INSURANCE

Vietnam era veterans' life insurance can be issued in multiples of \$500, with a minimum amount of \$1,000 and a maximum amount equal to the maximum amount of servicemen's group life insurance that a serviceman on active duty may be insured. Under present law this maximum amount is \$10,000; under S. 1479 reported by the Finance Committee the limit would be raised to \$15,000, and in combination with S. 1650, a bill reported by the committee which would

provide double indemnity coverage in combat areas and for extrahazardous duty, the maximum would be raised to \$30,000. Thus if all three bills became law as reported by the Finance Committee, the maximum amount of Vietnam era veterans' life insurance would be \$30,000.

If the veteran already has national service life insurance or U.S. Government life insurance, the total insurance under all three programs could not exceed the maximum amount of servicemen's group life insurance.

The face value would be paid in one sum, or in a number of monthly installments under several different kinds of arrangements. Unless the insured elected otherwise, the insurance would be paid in 36 monthly installments.

PLANS OF INSURANCE

Seven different plans of insurance would be available in the Vietnam era veterans' life insurance program. Each of these plans is designed to fit some specific need of the insured. All plans are "permanent"—that is, the premiums remain the same throughout the life of the insured. Unlike national service life insurance for World War II veterans, Vietnam era veterans' life insurance would not be available on a term insurance basis. While term insurance is the most economical kind of insurance, the premiums for the same amount of insurance rise as the insured gets older, and the increases are substantial and even prohibitive in many cases after age 50 or 60. Faced with sharply increased premiums in their term insurance, many older World War II veterans find it difficult to understand the increasing cost of insurance protection, and they have criticized rate increases based on sound actuarial calculations. It was to avoid this problem that the committee bill provides only insurance plans under which premiums will not increase.

Modified life.—Modified life is the lowest premium plan of Vietnam era veterans' life insurance. Its low price is made possible by the fact that the face value of the insurance decreases by half at age 65, when most peoples' insurance needs are lower. For example, a \$10,000 modified life policy would pay \$10,000 in the event of death before age 65, but only \$5,000 in the event of death after age 65.

Ordinary life.—The ordinary life policy provides insurance protection by the payment of a fixed premium throughout the lifetime of the insured. Like all other plans of Vietnam era veterans' life insurance, the ordinary life policy has cash, loan, paid up, and extended insurance values beginning with the first policy year.

Twenty-payment life.—The 20-payment life policy provides insurance protection throughout the lifetime of the insured by the payment of a fixed premium for 20 years. At the end of the 20-year period premium payments cease, but the insurance continues in force and guaranteed values continue to accumulate.

Limited payment life policies are designed for those who desire protection for their whole life but who wish to eliminate premium payments after their earning power has been reduced, or has ceased altogether.

Thirty-payment life.—The 30-payment life policy is similar to the 20-payment life policy except that the fixed premium is payable for 30 years. Its practical uses are similar to those of the 20-payment life. Because of its longer premium period, its cost is less than 20-payment life and not much greater than ordinary life.

The premiums at selected ages for each of these four policies are shown on table 1.

TABLE 1.—MONTHLY PREMIUMS FOR \$10,000 LIFE INSURANCE UNDER S. 2003

Age	Modified life	Ordinary life	20-payment life	30-payment life
20.....	\$4.92	\$6.42	\$10.12	\$8.02
25.....	5.82	7.72	11.82	9.42
30.....	7.12	9.42	13.92	11.14
35.....	8.72	11.72	16.52	13.22
40.....	10.72	14.82	19.72	16.32

Source: Veterans' Administration.

Twenty-year endowment.—An endowment policy is one where the face amount is payable either at death or at the end of the endowment period if the insured survives. Endowment policy premiums are considerably higher than ordinary life insurance because a large portion of the premium represents cash savings, and the insurance value of the policy is correspondingly less.

Under a 20-year endowment, the period of coverage is 20 years. At the end of this time, if the insured is still alive the face amount is payable.

Endowment at age 60.—Under this plan of insurance, the endowment period extends from the initiation of the plan to age 60.

Endowment at age 65.—This kind of plan is similar to the endowment at age 60 plan except that the endowment period ends at age 65.

Premiums at selected ages for the three endowment plans are shown in table 2.

TABLE 2.—MONTHLY PREMIUMS FOR \$10,000 LIFE INSURANCE FOR ENDOWMENT POLICIES UNDER S. 2003

Age	20-year endowment	Endowment at age 60	Endowment at age 65
20.....	\$29.12	\$10.72	\$9.02
25.....	29.32	13.42	11.22
30.....	29.52	17.22	14.02
35.....	30.12	22.72	18.22
40.....	31.32	31.32	24.22

Source: Veterans' Administration.

PREMIUM RATES

Like national service life insurance, Vietnam era veterans' life insurance would be participating insurance. This means that veterans would receive dividends under the insurance program. These dividends could be applied against the next year's premium. This would assure that Vietnam era veterans' life insurance would be offered veterans at the lowest possible cost. The veterans' special life insurance offered Korean war veterans, by way of contrast, is nonparticipating. The extra funds which have accrued over the years under this program are not returned to the veterans who paid them.

To assure that the premium rates are reasonable, the committee bill would require that the rates be based on fairly recent mortality experience. In addition, the premium rates would have to assume an annual interest rate of 3½ percent. This is higher than the 3½-percent interest rate written into the law for the most recently enacted GI insurance, but it is the rate used by the Chief Actuary of the Social Security Administration in his most conservative long-range estimate of the interest yield on Government securities. These are the same kinds of securities that the Vietnam era veterans' life insurance trust fund would be required to invest in. The committee believes we can put our confidence in the actuarial estimates that serve as the basis for the Congress' actions to finance the social security program which offers protection to more than 90 percent of our population.

The premium would also include the cost of administration of the program as it did for the 1965 reopened national service life insurance program.

Rates under Vietnam era veterans' life insurance would be substantially lower than comparable commercial insurance rates. Table 3 compares rates under Vietnam era veterans' life insurance with average rates for the same kinds of policies charged by several large nonparticipating companies.

TABLE 3.—COMPARISON OF MONTHLY COST OF \$10,000 VIETNAM ERA VETERANS' LIFE INSURANCE POLICY WITH APPROXIMATE MONTHLY COST OF \$10,000 COMMERCIAL POLICY

	Vietnam era veterans' life insurance rate	Commercial rate ¹
a) Ordinary life insurance:		
Age 20.....	\$6.42	\$10.21
Age 25.....	7.72	11.80
Age 30.....	9.42	13.90
Age 35.....	11.72	16.57
Age 40.....	14.82	20.00
b) 20-payment life insurance:		
Age 20.....	10.12	17.43
Age 25.....	11.82	19.53
Age 30.....	13.92	22.02
Age 35.....	16.52	24.96
Age 40.....	19.72	28.44
c) 20-year endowment:		
Age 20.....	29.12	27.75
Age 25.....	29.32	37.94
Age 30.....	29.52	38.26
Age 35.....	30.12	38.85
Age 40.....	31.32	39.84
d) Endowment at age 65:		
Age 20.....	9.02	13.72
Age 25.....	11.22	16.28
Age 30.....	14.02	19.68
Age 35.....	18.22	24.50
Age 40.....	24.22	31.13

¹ These are not the actual rates of any particular company; they are the average rates of several large nonparticipating companies.

Source: Veterans' Administration.

DISABILITY PROVISIONS

A veteran who becomes totally disabled before age 65 for at least 6 months would have his insurance continued on a premium-free basis as under national service life insurance for the duration of his disability. Servicemen who became totally disabled while on active duty would be eligible for Vietnam era veterans' life insurance on a premium-free basis after their discharge, as long as they remain totally disabled.

A veteran could purchase disability insurance in addition to life insurance. If he became totally disabled he would receive a monthly payment of \$10 for each \$1,000 of Vietnam era veterans' life insurance held.

The cost of both excess mortality and the waiver of premiums for disability traceable to the extra hazard of service would be borne by the Government and would not be reflected in the premiums paid by veterans.

VIETNAM ERA VETERANS' LIFE INSURANCE FUND

The committee bill establishes a Vietnam era veterans' life insurance fund in the Treasury. This trust fund like the trust funds for other Government life insurance programs will have deposited in it the veterans' premiums as well as amounts from the Vietnam era veterans' life insurance appropriation. Benefit payments will also be made from this fund. Amounts not required for reserves and insurance liabilities will be invested in interest-bearing obligations of the United States or in obligations guaranteed as to principal and interest by the United States.

The amendment was agreed to. The bill was ordered to be engrossed for a third reading, read the third time, and passed.

INCREASE IN DEPENDENCY AND INDEMNITY COMPENSATION FOR SURVIVORS OF SERVICEMEN AND VETERANS

The Senate proceeded to consider the bill (S. 1471) to amend chapter 13 of title 38, United States Code, to increase dependency and indemnity compensation for widows and children, and for other purposes which had been reported from the Committee on Finance with amendments, on page 2, after line 6, strike out:

"(c) If any widow is entitled to dependency and indemnity compensation under subsection (a) and is in need of regular aid and attendance, the monthly rate of dependency and indemnity compensation payable to her shall be increased by \$50.

And, in lieu thereof, insert:

"(c) The monthly rate of dependency and indemnity compensation payable to a widow shall be increased by \$50 if she is (1) a patient in a nursing home or (2) helpless or blind, or so nearly helpless or blind as to need or require the regular aid and attendance of another person and by an additional \$25 if the death of her deceased husband resulted from an injury or disease received as a direct result of armed conflict or while engaged in extrahazardous service.

On page 3, after line 21, strike out:

Sec. 4. Section 410(a) of title 38, United States Code, is amended to read as follows:

"(a) The Administrator shall pay dependency and indemnity compensation to the widow, children, and parents of any veteran who dies (1) after December 31, 1956, from a service connected or compensable disability, or (2) while in receipt of or while entitled to receive compensation for a service-connected disability which was permanently and totally disabling for twenty years or longer. The standards and criteria for determining whether or not a disability is service connected shall be those applicable under chapter 11 of this title. The provisions of this chapter shall not apply where the death of a veteran occurs as a result of accidental causes having no relationship to his service-connected disability."

And, in lieu thereof, insert:

Sec. 4. Section 322 of title 38, United States Code, is amended by (1) inserting "(a)" immediately before "The"; and (2) adding at the end thereof the following subsections:

"(b) The monthly rate of death compensation payable to a widow under subsection (a) of this section shall be increased by \$50 if she is (1) a patient in a nursing home or (2) helpless or blind, or so nearly helpless or blind as to need or require the regular aid and attendance of another person and by an additional \$25 if the death of the veteran resulted from an injury or disease received as a direct result of armed conflict or while engaged in extrahazardous service."

On page 4, after line 23, insert a new section, as follows:

Sec. 5. (a) The first sentence of section 417(a) of title 38, United States Code, is amended by inserting "(1)" immediately after "unless", and by striking out the period at the end of such sentence and inserting in lieu thereof a comma and the following: "or (2) the total amount payable to the widow, children, or parents of such veteran under any such policy has been paid and such amount when added to any amount paid as death compensation is equal to or less than the total amount which would have been payable in dependency and indemnity compensation following the death of such veteran if such widow, children, or

parents had been eligible for such compensation upon the death of such veteran. Any person receiving death compensation at the time he becomes eligible for dependency and indemnity compensation pursuant to clause (2) of the preceding sentence shall continue to receive such death compensation unless he makes application to the Administrator to be paid dependency and indemnity compensation. An election by such person to receive dependency and indemnity compensation shall be final."

(b) The last sentence of section 417(a) of such title is amended by striking out "preceding sentence" and inserting in lieu thereof "first sentence".

(c) No dependency and indemnity compensation shall be payable to any person by virtue of the amendments made by subsection (a) of this section for any period prior to the effective date of this Act.

And on page 6, at the beginning of line 3, change the section number from "5" to "6"; so as to make the bill read:

S. 1471

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 411 of title 38, United States Code, is amended to read as follows:

"§ 411. Dependency and indemnity compensation to a widow

"(a) Dependency and indemnity compensation shall be paid to a widow at a monthly rate equal to \$130 plus 12 per centum of the basic pay of her deceased husband or at a monthly rate of \$170, whichever is greater.

"(b) If there is a widow and one or more children below the age of eighteen of a deceased veteran, the dependency and indemnity compensation paid monthly to the widow shall be increased by \$20 for each such child.

"(c) The monthly rate of dependency and indemnity compensation payable to a widow shall be increased by \$50 if she is (1) a patient in a nursing home or (2) helpless or blind, or so nearly helpless or blind as to need or require the regular aid and attendance of another person and by an additional \$25 if the death of her deceased husband resulted from an injury or disease received as a direct result of armed conflict or while engaged in extrahazardous service.

"(d) If the amount determined under subsection (a) involves a fraction of a dollar, the amount payable thereunder shall be increased by the Administrator to the next higher dollar."

Sec. 2. Section 413 of title 38, United States Code, is amended to read as follows:

"§ 413. Dependency and indemnity compensation to children

"Whenever there is no widow of a deceased veteran entitled to dependency and indemnity compensation, dependency and indemnity compensation shall be paid in equal shares to the children of the deceased veteran at the following monthly rates:

- "(1) One child, \$88.
- "(2) Two children, \$127.
- "(3) Three children, \$164.
- "(4) More than three children, \$164, plus \$32 for each child in excess of three."

Sec. 3. (a) Subsection (a) of section 414 of title 38, United States Code, is amended by striking out "\$29" and inserting in lieu thereof "\$32".

(b) Subsection (b) of section 414 of such title is amended by striking out "\$80" and inserting in lieu thereof "\$88".

(c) Subsection (c) of section 414 of such title is amended by striking out "\$41" and inserting in lieu thereof "\$45".

Sec. 4. Section 322 of title 38, United States Code, is amended by (1) inserting "(a)" immediately before "The"; and (2) adding at the end thereof the following subsections:

"(b) The monthly rate of death compensation payable to a widow under subsection (a) of this section shall be increased by \$50 if she is (1) a patient in a nursing home or (2) helpless or blind, or so nearly helpless or blind as to need or require the regular aid and attendance of another person and by an additional \$25 if the death of the veteran resulted from an injury or disease received as a direct result of armed conflict or while engaged in extrahazardous service."

Sec. 5. (a) The first sentence of section 417(a) of title 38, United States Code, is amended by inserting "(1)" immediately after "unless," and by striking out the period at the end of such sentence and inserting in lieu thereof a comma and the following: "or (2) the total amount payable to the widow, children, or parents of such veteran under any such policy has been paid and such amount when added to any amounts paid as death compensation is equal to or less than the total amount which would have been payable in dependency and indemnity compensation following the death of such veteran if such widow, children, or parents had been eligible for such compensation upon the death of such veteran. Any person receiving death compensation at the time he becomes eligible for dependency and indemnity compensation pursuant to clause (2) of the preceding sentence shall continue to receive such death compensation unless he makes application to the Administrator to be paid dependency and indemnity compensation. An election by such person to receive dependency and indemnity compensation shall be final."

(b) The last sentence of section 417(a) of such title is amended by striking out "preceding sentence" and inserting in lieu thereof "first sentence".

(c) No dependency and indemnity compensation shall be payable to any person by virtue of the amendments made by subsection (a) of this section for any period prior to the effective date of this Act.

Sec. 6. The amendments made by this Act shall become effective on the first day of the second calendar month following the month in which this Act is enacted.

Mr. MANSFIELD. Mr. President, I ask unanimous consent to have printed in the RECORD an excerpt from the report (No. 91-400), explaining the purposes of the measure.

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

SUMMARY OF THE BILL AS REPORTED

The bill as reported would provide an overall increase of 13 percent in the dependency and indemnity compensation program for the widows and orphans of servicemen and veterans whose death was service-related. It would do this by—

- (1) increasing a widow's monthly dependency and indemnity compensation payment from \$120 plus 12 percent of the monthly basic pay now being received by a serviceman whose rank and years of service are the same as that of the deceased serviceman or veteran to \$130 plus 12 percent of this monthly pay;
- (2) providing a minimum widow's monthly DIC benefit of \$170 (equivalent to the benefit received by the widow of a sergeant with 3 years of military service);
- (3) allowing an additional \$20 monthly for each minor child;
- (4) increasing by 10 percent monthly payments to children where there is no widow entitled to receive DIC, and to certain children age 18 and over;
- (5) allowing an additional \$50 monthly to widows requiring regular aid and attendance; this amount would be increased to \$75 if the deceased husband's death was re-

lated to combat action or other extra-hazardous duty; and

(6) extending dependency and indemnity compensation to certain widows whose husbands were insured under National Service Life Insurance on a premium-free basis.

GENERAL STATEMENT

By law monthly dependency and indemnity compensation payments are paid to the survivors of servicemen and veterans whose death is related to their military service. As the name implies, the purpose of the payments is to provide at least financial compensation for the loss suffered by these survivors. Thus dependency and indemnity compensation payments to widows and orphans are not based on the survivors' needs.

DIC payments to widows are related to the deceased serviceman's or veteran's military rank and length of service; generally, no additional amounts are paid for minor children. If there are minor children but no widow is entitled to receive DIC, the children receive monthly payments specified in the law, regardless of their deceased father's rank.

DEPENDENCY AND INDEMNITY COMPENSATION PAYMENTS TO WIDOWS

Before 1957, two major types of benefits were offered to the widows of deceased servicemen and veterans whose death was service-related: monthly death compensation payments, and a \$10,000 gratuitous indemnity. The monthly death compensation payment was \$87 to a widow whose husband's death was related to wartime military service, and \$69.60 to a widow whose husband's death was related to peacetime military service. Additional amounts were paid for minor children. Peacetime rates were set at 80 percent of wartime rates.

After extensive study, the Congress in 1956 completely revised the survivor benefit program. It was decided that higher monthly payments over a widow's lifetime would provide a more secure financial base for a widow than the gratuitous indemnity and the flat-rate death compensation program. The \$10,000 indemnity was therefore eliminated and the death compensation program was prospectively replaced by the new dependency and indemnity compensation program. Social security coverage was also extended to servicemen, although a widow of a serviceman would not generally be eligible to receive social security benefit until age 60 unless she had minor children.

Enacted after the end of the Korean conflict, the new program from the first was designed primarily to fit the needs of survivors of career servicemen whose death occurred during peacetime service. Unlike death compensation, DIC benefits were the same for deaths related to both wartime and peacetime service. And unlike death compensation or any other veterans' benefits, DIC payments were related to the rank of the serviceman or veteran. As long as the United States was not engaged in hostilities, it would be expected that few deaths would occur among lower ranking draftees, and most persons receiving DIC payments would be the survivors of career servicemen.

The original DIC law set the widow's monthly payment at \$112 plus 12 percent of the monthly basic pay currently received by a serviceman whose rank and years of service were the same as that of the deceased veteran. This formula was intended to provide for automatic increases in DIC payments as military pay was increased. It became clear within a few years, however, that the formula worked unevenly: it preserved the adequacy of DIC benefits for widows of higher ranking officers, but it was not sufficient for the widows of enlisted men. In 1963, the Congress attempted to meet this problem by raising the base amount from \$112 to \$120; the 12-percent factor was not changed.

Despite this modification, much the same situation obtains today as in 1963. Benefits for widows of higher ranking officers have kept up adequately with rises in the cost of living; benefits for widows of officers in the lower grades and higher ranking enlisted men could be brought up to an adequate level with a modification in the base amount of \$120; and benefits for widows of lower ranking enlisted men have fallen far behind increases in the cost of living. This situation is depicted in table 1.

The inadequacies of the present DIC program have been magnified by the fact that we are no longer in a peacetime situation. Most young men serving in Vietnam are draftees who intend to return to civilian life once their military obligation is completed. A Department of Defense study released earlier this year stated that the rank of sergeant (pay grade E-5) with 3 years of service generally represents the dividing line between civilians fulfilling their military obligation and persons who intend to make a career of the military service. As table 2 shows, the first five pay grades—the noncareer ranks—represent five-sixths of American deaths in Vietnam. These are precisely the ranks for which DIC benefits are now the most inadequate.

Thus the dependency and indemnity compensation program has proven more or less adequate in fulfilling the purpose for which it was intended—providing protection to the survivors of career military servicemen dur-

ing peacetime. It has not met the needs of survivors of noncareer servicemen who are fulfilling their military obligation in a time of war.

The committee bill is designed to meet these needs without sacrificing the aim of providing adequately for the survivors of career servicemen.

First, the committee bill would increase the base amount of the DIC formula from \$120 to \$130; the 12-percent relation to military basic pay would not be changed.

Second, the committee bill would provide a minimum widow's DIC benefit of \$170, equal to the amount received by the widow of a sergeant (pay grade E-5) with 3 years of service. In effect, this minimum would assure that the widows of virtually all noncareer enlisted men would receive this minimum benefit. The Veterans' Administration estimates that about one-half of the 165,000 widows now receiving dependency and indemnity compensation would receive the minimum benefit.

The Committee on Finance has always recognized the need for at least a minimal level of social security benefits. The committee feels it is time that this social security rationale be applied to the dependency and indemnity compensation program.

Table 1 shows illustrative increases in DIC payments since the program was initiated in January 1957, compared with the increases under S. 1471.

TABLE 1.—COMPARISON OF INCREASES IN DEPENDENCY AND INDEMNITY COMPENSATION UNDER PRESENT LAW AND UNDER S. 1471 AS REPORTED

Grade, rank, and length of service of deceased serviceman	DIC, 1957	DIC July 1969	Increase over 1957 rate (percent)	DIC under S. 1471	Increase over 1957 rate (percent)
E-1, recruit, 1/2 year.....	\$122	\$135	11	\$170	39
E-2, private, 1 year.....	123	136	11	170	38
E-3, private 1st class, 1 year.....	124	139	12	170	37
E-4, corporal, 1 1/2 years.....	127	146	15	170	34
E-5, sergeant, 2 1/2 years.....	132	158	20	170	29
E-6, staff sergeant, 13 years.....	142	175	23	185	30
E-7, sergeant 1st class, 17 years.....	147	185	26	195	33
O-1, 2d lieutenant, 1 year.....	139	167	20	177	27
O-2, 1st lieutenant, 2 1/2 years.....	145	185	28	195	34
O-3, captain, 5 years.....	157	209	33	219	39
O-4, major, 13 years.....	172	233	35	243	41
O-5, lieutenant colonel, 23 years.....	189	272	44	282	49
O-6, colonel, 23 years.....	202	292	45	302	50

TABLE 2.—VIETNAM DEATHS BY RANK, 1961-MARCH 1969

	Number of deaths	Percent of total
E-1, recruit.....	329	1
E-2, private.....	4,478	13
E-3, private 1st class.....	11,771	35
E-4, corporal.....	8,379	25
E-5, sergeant.....	3,394	10
Subtotal, first 5 pay grades.....	28,351	84
E-6, staff sergeant.....	1,494	4
E-7, to E-9.....	714	2
O-1, 2d lieutenant.....	600	2
O-2, 1st lieutenant.....	1,091	3
O-3, captain.....	866	3
Other officers and warrant officers.....	682	2
Total.....	33,798	100

DEPENDENCY AND INDEMNITY COMPENSATION BENEFITS FOR CHILDREN

Dependency and indemnity compensation benefits for children living with a widow are different from DIC benefits where there is no widow entitled. Additional types of DIC benefits for certain children over 18 are specified in the law.

Benefits when a widow is entitled.—The 1956 legislation establishing the dependency and indemnity compensation program also extended social security coverage to service-

men on active duty. Under the social security program, a widow with no minor children is not eligible for benefits until she reaches age 60 (age 50, if she is disabled). If she has minor children the children are eligible for social security benefits until they reach majority, and the widow is eligible for mother's benefits until the last child reaches majority.

Since the dependency and indemnity program was created, DIC benefits for children living with a widow have been related to social security benefits under a complicated formula. Under this formula, a widow with one child receives no additional DIC benefit for the child. If she has two children and receives less than \$136.20 monthly social security benefits, she may receive additional dependency and indemnity compensation of either \$28 or, if less, the difference between \$136.20 and the social security benefits she actually receives. If she has three or more children and receives less than \$136.20 in monthly social security benefits, she may receive additional DIC equal to the difference between \$136.20 and the social security benefits she actually receives (with a minimum social security benefit to a widow with two children now \$82.50, the maximum additional DIC allowance is \$53.70).

This complicated formula has the effect of denying DIC benefits to many children living with widows. The committee bill meets

this problem by eliminating the present connection between DIC children's benefits and social security, and by providing an additional DIC monthly allowance of \$20 for each minor child living with a widow. About 35,000 children will benefit from this provision, including 17,000 now receiving no DIC benefits. A comparison between present law and the committee bill is shown in table 3.

Benefits when no widow is entitled.—The original 1956 legislation establishing the dependency and indemnity compensation program provided specified amounts of DIC payments to children when no widow was entitled. These amounts were set at \$70 for one child, \$100 for two children, \$130 for three children, and \$25 for each additional child. In 1967, the amounts were set at their present levels of \$80 for one child, \$115 for two children, \$149 for three children, and \$29 for each additional child. About 44,000 children receive these benefits today.

The committee bill provides a 10-percent cost-of-living increase in these benefits, as shown in table 4.

Benefits to certain children 18 and over.—The original 1956 legislation also specified DIC amounts payable in certain cases. A child over age 18 who became permanently incapable of self-support before reaching age 18 was entitled to \$25 additional DIC if there was no widow entitled, and \$70 additional DIC if there was a widow receiving DIC. A child between 18 and 21 (now 23) who was a student was entitled to an additional \$35 in monthly DIC if there was a widow entitled.

These amounts were set in 1967 at \$29, \$80, and \$41, respectively, the levels under present law. More than 6,000 children 18 and over receive benefits under this section of the law. The committee bill provides a 10-percent cost-of-living increase in these benefits, as shown in table 4.

TABLE 3.—COMPARISON OF MAXIMUM DIC BENEFITS FOR CHILDREN LIVING WITH A WIDOW UNDER PRESENT LAW AND UNDER S. 1471

	Maximum under present law	Allowance under S. 1471
Additional DIC allowance for—		
1 child.....	No allowance...	\$20
2 children.....	\$28.....	40
3 children.....	\$53.70.....	60
4 children.....	\$53.70.....	80
Each additional child.....	No allowance...	20

TABLE 4.—DEPENDENCY AND INDEMNITY COMPENSATION BENEFITS TO CHILDREN WHERE NO WIDOW IS ENTITLED AND IN CERTAIN SPECIFIED CASES

	Present law	S. 1471
1 child.....	\$80	\$88
2 children.....	115	127
3 children.....	149	164
Each additional child.....	29	32
Disabled child above age 18:		
Where no widow is entitled to DIC.....	29	32
Where widow is entitled to DIC.....	80	88
Student, age 18 to 23, where widow is entitled.....	41	45

ADDITIONAL ALLOWANCE FOR WIDOWS REQUIRING REGULAR AID AND ATTENDANCE

For decades, the compensation program for veterans with service-connected disabilities has provided higher payments for those veterans whose disabilities require them to have regular aid and attendance.

In 1951, special provision was made for additional pension payments to veterans with non-service-connected disabilities who require regular aid and attendance.

Most recently, in 1967, Public Law 90-77 extended an aid and attendance allowance of \$50 for the first time to widows entitled to a pension.

The committee bill provides a \$50 additional monthly allowance for widows receiving dependency and indemnity compensation or death compensation who require regular aid and attendance, thus providing a benefit at least equal to that received by a widow entitled to a pension.

However, the committee feels that additional recognition should be given in cases where the death of the serviceman or veteran is related to armed conflict or extrahazardous service. The principle of providing a higher benefit for servicemen disabled in wartime or in the performance of extrahazardous service during peacetime is already established in our disability compensation law.

The committee bill applies this same principle by providing an additional \$75 allowance (instead of \$50) for a widow requiring regular aid and attendance whose husband's death "resulted from an injury or disease received as a direct result of armed conflict or while engaged in extrahazardous service." This language is similar to the present provision of law permitting higher disability compensation payments for servicemen disabled in peacetime service if the injury or disease resulted from extrahazardous service.

The committee intends that the term "extrahazardous service" shall include only service which is more hazardous than normal peacetime service and where the extra hazard is an inherent part of the military duty including (but not limited to) (a) service under conditions simulating war; (b) service recognized as involving risks beyond ordinary peacetime service, such as dangerous testing of weapons, duty on aircraft, duty on a submarine, or exposure to unusual climatic conditions or unusual disease; and (c) service in campaigns, expeditions, occupations, and similar duty inherently more dangerous than usual peacetime duty.

For example, the additional amount would be payable if the serviceman died while attempting to put out a fire in an ammunition dump—even though he was not eligible for extrahazardous duty pay. But it would not be payable if a serviceman receiving extrahazardous duty pay died in an airplane crash while on vacation, or if a serviceman stationed in Vietnam died in an automobile accident in no way related to his military duties or hostile action. The Veterans' Administration would be required to evaluate each death individually to determine that it meets the criteria of the bill in order for the widow requiring regular aid and attendance to receive \$75 instead of \$50 monthly.

The Veterans' Administration estimates that in the first year the section is effective, 4,200 widows receiving dependency and indemnity compensation and 70 widows receiving death compensation would be eligible for the additional monthly allowance; of the total, about 10 percent will be eligible for the higher \$75 allowance.

EXTENDING DEPENDENCY AND INDEMNITY COMPENSATION TO CERTAIN SURVIVORS OF VETERANS WHO WERE INSURED UNDER GOVERNMENT LIFE INSURANCE ON A PREMIUM-FREE BASIS

Before the dependency and indemnity compensation was established in 1956, two major types of benefits were offered the survivors of deceased servicemen: monthly death compensation payments, and a \$10,000 gratuitous indemnity. The death compensation payments were small monthly payments, with the same amount payable to all widows whose husbands were killed in wartime service. The \$10,000 gratuitous indemnity had been au-

thorized at the beginning of the Korean war as a free equivalent to the \$10,000 National Service Life Insurance that had been offered to servicemen during World War II. Those servicemen who still had National Service Life Insurance (or pre-World War II U.S. Government life insurance) at the beginning of the Korean war were given the choice of either dropping their National Service Life Insurance in order to receive the \$10,000 gratuitous indemnity, or continuing the National Service Life Insurance with the premiums waived—in effect, receiving \$10,000 in gratuitous life insurance. The same choice applied to holders of U.S. Government life insurance.

When the Congress in 1956 revised the survivor benefit program, the \$10,000 indemnity was eliminated, and in its stead the new program of dependency and indemnity compensation was established, with much more generous monthly payments to widows than had been provided under death compensation.

While the \$10,000 gratuitous indemnity was eliminated from the law, however, the Veterans' Administration ruled that they had a contractual obligation to continue National Service Life Insurance on a premium-free basis to those servicemen who had secured the waiver prior to the new law. In the light of this ruling, the Congress decided to deny monthly dependency and indemnity compensation payments to survivors receiving payments under National Service Life Insurance that had been continued in force on a premium-free basis. These survivors were and still are permitted to receive only the lower monthly death compensation payments, which have not been increased in 15 years. In view of this provision, a great effort was made to encourage as many servicemen as possible to resume payment of premiums for their National Service Life Insurance rather than having it continued free, so that their widows would be eligible for the much more adequate monthly dependency and indemnity compensation payments. It is a tribute to that effort that although many servicemen still hold National Service Life Insurance, almost all of them pay premium to insure that their survivors will be eligible for dependency and indemnity compensation. About 165,000 widows are receiving dependency and indemnity compensation today; however, because of the prohibition in the law just described, some 2,800 widows are barred from receiving dependency and indemnity compensation.

The committee bill would end this situation which forever denies dependency and indemnity compensation to a widow who received a \$10,000 gratuitous insurance benefit upon her husband's death. Under section 5 of the bill as reported, the Veterans' Administration would compute the total amount of dependency and indemnity compensation which would have been payable to the deceased's survivors had they been eligible to receive it. When the total amount of insurance benefits and death compensation actually paid the survivors equals or is less than the DIC they would have received had they been eligible, the survivors would be eligible to apply for dependency and indemnity compensation. The Veterans' Administration estimates that about 700 widows would now be eligible to receive dependency and indemnity compensation under this proposal.

This provision would be fair to these widows who have been limited to receiving death compensation, and it would be fair to the many servicemen who have wisely chosen to pay for their National Service Life Insurance so that their wives are adequately protected. Both groups would be treated equitably.

TABLE 5.—COMPARISON OF DEPENDENCY AND INDEMNITY COMPENSATION PAYMENTS UNDER PRESENT LAW AND UNDER S. 1471 AS REPORTED: ILLUSTRATIVE CASES

	DIC under—		Percentage increase
	Present law	S. 1471	
1. Widow of private with 1 year of service, no children.....	\$136	\$170	25
2. Widow of private 1st class with 1 year of service, 1 child.....	139	190	37
3. Widow of corporal with 1½ years of service, 2 children.....	146	210	44
4. Widow of sergeant with 2½ years of service, 3 children.....	158	230	46
5. Widow of staff sergeant with 13 years of service requiring regular aid and attendance, no minor children.....	715	260	48

¹ Assumes widow receives more than \$136 in social security benefits.

² Assumes widow receives more than \$136 in social security benefits.

³ Assumes husband's death was related to armed conflict or extrahazardous service.

EFFECTIVE DATE

The amendments under the committee bill become effective on the first day of the second calendar month following the month of enactment of the bill.

COST OF THE BILL

The Veterans' Administration has furnished the following estimates of the additional cost of the committee bill during the first full year the provisions are in effect.

1. Increase DIC payment to widow to \$130 plus 12 percent of the monthly basic pay now being received by a serviceman whose rank and years of service are the same as that of the deceased veteran.....	\$20,184,000
2. Provide minimum widow's benefit of \$170.....	20,876,000
3. Provide additional \$20 monthly for each child.....	4,800,000
4. Provide additional \$50 monthly if widow requires regular aid and attendance; \$75 allowance if deceased husband's death was related to combat action or other extrahazardous duty.....	2,683,000
5. Increase by 10 percent benefits to children where there is no widow entitled and to certain children age 18 and older.....	3,552,000
6. Extend DIC to certain widows whose husbands were insured under National Service Life Insurance on a premium free basis.....	745,000
Total.....	52,840,000

It is estimated that about two-thirds of the additional expenditures under the bill will go to widows and children whose husbands and fathers were in the lowest five enlisted ranks—the ranks of the noncareer servicemen.

The amendments were agreed to.

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

DOUBLE INDEMNITY SERVICEMEN'S GROUP LIFE INSURANCE COVERAGE FOR SERVICEMEN ASSIGNED TO EXTRAHAZARDOUS DUTY

The Senate proceeded to consider the bill (S. 1650) to amend chapter 19 of title 38, United States Code, to provide double indemnity coverage under servicemen's group life insurance for members of the uniformed services assigned to duty in a combat zone which had been reported from the Committee on Finance, with amendments, on page 1, line 4, after the word "thereof" strike out "a new paragraph as follows" and insert "the following new paragraphs:

(4) The term "extrahazardous duty" means duty performed in a combat zone or duty for which a member is entitled to incentive pay under section 301 or 310 of title 37, United States Code.

On page 2, at the beginning of line 3, strike out "(4)" and insert "(5)"; in line 8, after the word "adding", strike out "at the end thereof" and insert "after subsection (b)"; in line 14, after the word "to", strike out "duty in a combat zone" and insert "extrahazardous duty"; in line 16, after the word "subsection" strike out "shall include any case in which the death of a member resulted from combat activities or the performance of extrahazardous duties while such member was assigned to duty in a combat zone; and such coverage"; on page 3, line 5, after the word "to" strike out "duty in a combat zone" and insert "extrahazardous duty"; and in line 7, after the word "to" strike out "duty in a combat zone" and insert "extrahazardous duty" so as to make the bill read:

S. 1650

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 765 of title 38, United States Code, is amended by adding at the end thereof the following new paragraphs:

"(4) The term 'extrahazardous duty' means duty performed in a combat zone or duty for which a member is entitled to incentive pay under section 301 or 310 of title 37, United States Code.

"(5) The term 'combat zone' means any area designated by the President of the United States by Executive order as a combat zone for the purposes of section 112 of the Internal Revenue Code of 1954."

Sec. 2. Section 767 of title 38, United States Code, is amended by adding after subsection (b) a new subsection as follows:

"(c) Any policy of insurance purchased by the Administrator under section 766 of this title for any member shall provide double indemnity coverage against death resulting from an injury or disease incurred or aggravated in line of duty while such member is assigned to extrahazardous duty. Double indemnity coverage provided for under this subsection shall continue in effect during any period a member is temporarily outside a combat zone to which he is assigned so long as such period does not exceed thirty-five consecutive days."

Sec. 3. Section 769(a) of title 38, United States Code, is amended by adding at the end thereof a new sentence as follows: "No deduction may be made from the basic or other pay of a member for double indemnity coverage provided under section 767(c) of this title for any month except a month (or portion thereof) in which such member was assigned to extrahazardous duty; and none of the costs attributable to such additional coverage for members assigned to extrahazardous duty shall be paid for by members not protected by double indemnity coverage."

Sec. 4. The amendments made by the first three sections of this Act shall become effective on the first day of the second calendar month following the month in which this Act is enacted.

Mr. MANSFIELD. Mr. President, I ask unanimous consent to have printed in the RECORD an excerpt from the report (No. 91-401), explaining the purposes of the measure.

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

SUMMARY OF THE BILL

Under present law, active duty servicemen are insured for \$10,000 under the servicemen's group life insurance program unless they choose either not to be insured or to be insured for \$5,000. Servicemen pay premiums based on comparable civilian mortality rates; the premium for \$10,000 in servicemen's group life insurance is currently \$2 per month. The Federal Government pays that portion of the cost of the insurance due to the extra hazard of active duty.

S. 1650 would provide double indemnity servicemen's group life insurance coverage for members of the uniformed services assigned to duty in a combat zone or assigned to extrahazardous duty.

BACKGROUND

Between 1956 and 1965 persons in active military service were not insured under Federal legislation unless they still retained Government life insurance obtained prior to April 25, 1951. With the intensification of hostilities in Vietnam, Congress enacted legislation in September 1965 providing group life insurance to servicemen on active duty. Coverage extends to all personnel on active duty (including reservists), provided they are ordered to active duty for a period of 30 days or more.

A serviceman is automatically insured for \$10,000 unless he indicates in writing that he wishes either to be insured for \$5,000 or not to be insured. The insurance continues for 120 days after the serviceman's separation from active duty, without additional cost to him, whether he is discharged, retired, or returned to nonactive duty reserve status.

The individual serviceman's premium since 1965 has been set at \$2 per month for \$10,000 and \$1 per month for \$5,000. Of those servicemen eligible, 98.4 percent are maintaining the insurance and virtually all of these have the \$10,000 maximum coverage. The low cost to individuals is made possible by insuring all members of the uniformed services under a single group insurance master contract, and by the Government bearing the cost of the extra hazard attributable to military service. This extra hazard cost is calculated on the basis of the extent to which mortality in the uniformed services exceeds the mortality in the U.S. male civilian population of the same median age.

The program is administered by a commercial primary insurer, the Prudential Insurance Co. of America, under the supervision of the Veterans' Administration. Premiums for this insurance, including its cost of administration, are deducted monthly from servicemen's pay and remitted by each uniformed service to the Veterans' Administration which in turn remits them to the primary insurer. All claims are paid by the primary insurer. However, in cases where there is some question as to the existence of the coverage, the Veterans' Administration makes the final decision.

The proceeds of the insurance can be paid either in a lump sum or in 36 equal monthly installments including interest on the unpaid balance. This gives an income of \$296.40 monthly on \$10,000 of insurance at the rate of interest now being paid. The beneficiary may choose the mode of payment unless the

insured by designation restricts payments to 36 monthly installments.

The total amount of insurance in force is now \$36.8 billion, of which \$33.7 billion is related to 3.4 million members on active duty and \$3.1 billion is related to 310,000 persons separated from the service 120 days or less.

Under peacetime conditions, the servicemen's group life insurance program would be self-supporting and would not require any Government subsidy. However, because of the casualties in Vietnam, service deaths have far exceeded peacetime levels and the Government has made substantial contributions. These are summarized in table 1.

TABLE 1.—SERVICEMEN'S GROUP LIFE INSURANCE: SOURCE OF FUNDS

(Dollars in millions)				
Fiscal year	Service- men's pre- miums	Govern- ment contri- bution	Inter- est	Total
1966.....	\$52.5	\$27.3	\$0.4	\$80.1
1967.....	80.2	70.1	2.0	152.3
1968.....	83.0	146.5	3.1	232.6
1969.....	83.1	111.7	3.2	198.0
Cumulative....	298.8	355.6	8.7	663.1

THE BILL

The bill provides double indemnity insurance coverage for servicemen assigned to a combat area or assigned to extrahazardous duty. The serviceman would automatically be insured for double his previous amount unless he chose to be insured for a lesser amount. The double indemnity coverage under the bill would also include any case in which the death resulted from injuries or disease incurred while in a combat zone or assigned to extrahazardous duty even though the death itself occurred later in some other location. In any case, no benefit could be paid for deaths occurring more than 120 days after discharge.

The present veterans' laws in a number of instances recognize the difference between deaths or disabilities related to extramilitary hazards in wartime:

Disability compensation payments are higher for disabilities incurred in wartime than for those incurred in peacetime; however, disabilities resulting from extrahazardous service are payable at the wartime rates.

The other type death compensation benefits for widows were higher for deaths related to wartime service than those related to peacetime service.

Pensions for non-service-connected disabilities are available only to veterans with wartime service.

Under another bill reported by the committee (S. 1471), a higher allowance would be paid a widow requiring regular aid and attendance if her deceased husband's death was related to combat action or extrahazardous service.

Servicemen's group life insurance involves Government contributions only to the extent that excess deaths occur in wartime.

The committee bill gives recognition to the extra risks faced by a serviceman assigned to a combat area or assigned to extrahazardous duty. It also recognizes that it is ordinarily difficult for a serviceman to purchase commercial life insurance if he is about to be assigned to a combat area or to extrahazardous duty.

Testimony presented before the Finance Committee in 1951 by the chairman of the Joint National Service Life Insurance Committee of the American Life Convention of Chicago and the Life Insurance Association of America of New York, Associations of Legal Reserve Life Insurance Cos., is equally applicable today:

We wish to make it abundantly clear that the life insurance companies fully recognize

the need for a Government program which will provide a measure of protection to the dependents of servicemen while on active duty in the Armed Forces of our country in time of war, or who lose their normal insurability while in such service. The life insurance companies who commonly issue complete coverage on servicemen during peacetime and even in wartime are in a position to offer insurance on a part of the risk, that is, the normal hazards as distinguished from the abnormal hazards of service in time of war. When the prospects of abnormal hazards of war become too great, the private companies cannot issue new insurance to include these hazards without charging premium rates which are so high that few servicemen could afford to buy the protection. It is obvious that when the Government undertakes to insure these hazardous risks at rates based on normal hazards, the excess mortality cost is borne by the taxpayers, as we believe it should be. To the extent that the Government insures the normal hazards, the Government furnishes coverage which is readily available from private insurers. We recognize however that during the period of active service while the Nation is at war or in a national emergency, it is not practical to limit the Government coverage to death resulting from only the abnormal hazards.

The amendments were agreed to.

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

The title was amended, so as to read: "A bill to amend chapter 19 of title 38, United States Code, to provide double indemnity coverage under Servicemen's Group Life Insurance for members of the uniformed services assigned to extrahazardous duty, including duty in a combat zone."

DISMEMBERMENT INSURANCE COVERAGE UNDER SERVICEMEN'S GROUP LIFE INSURANCE

The Senate proceeded to consider the bill (S. 2186) to amend chapter 19, United States Code, so as to provide dismemberment insurance coverage under the servicemen's group life insurance program, which had been reported from the Committee on Finance, with amendments, on page 1, at the beginning of line 5, strike out "(c)" and insert "(d)"; in line 8, after the word "the", strike out "loss" and insert "anatomical loss or loss of use"; on page 2, line 3, after the word "the" where it appears the second time, strike out "loss" and insert "anatomical loss or loss of use"; in line 7, after the word "the" strike out "loss" and insert "anatomical loss or loss of use"; in line 9, after the word "loss" insert "or loss of use"; in line 15, after the word "the", strike out "loss" and insert "anatomical loss or loss of use"; in line 20, after the word "dismemberment" insert "(including loss of use of one or more limbs and the loss of sight in one or both eyes)"; and on page 3, line 5, after the word "dismemberment" insert "(including loss of use of one or more limbs and loss of sight in one or both eyes)"; so as to make the bill read:

S. 2186

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 767 of title 38, United States Code, is amended by adding at the end thereof a new subsection as follows:

"(d) Each policy purchased under this subchapter shall, subject to such terms and conditions as the Administrator may approve, provide dismemberment insurance coverage as follows: (1) for the anatomical loss or loss of use of one hand or one foot or the loss of sight of one eye, the insured shall be paid an amount equal to one-half of the face value of the insurance; and (2) for the anatomical loss or loss of use of two or more of such members, the insured shall be paid an amount equal to the full face value of the insurance. Dismemberment insurance shall be paid to an insured who suffers the anatomical loss or loss of use of one or more limbs or the sight in one or both eyes if such loss or loss of use occurs as the direct result of and within a period of ninety days after a bodily injury has been suffered by such insured. The total amount of insurance paid under any policy of servicemen's group life insurance on account of any one accident shall not exceed the face value of such policy. No payment shall be made under this subsection for the anatomical loss or loss of use of a limb or loss of eyesight as the result of an intentionally self-inflicted injury."

SEC. 2. The second sentence of section 769 (b) of title 38, United States Code, is amended to read as follows: "Such cost shall be determined by the Administrator on the basis of excess mortality and dismemberment (including loss of use of one or more limbs and the loss of sight in one or both eyes) suffered by members and former members of the uniformed services insured under this subchapter above that incurred by the male civilian population of the United States of the same age as the median age of members of the uniformed services (disregarding a fraction of a year) as shown by the records of the uniformed services, the primary insurer or insurers, and the Department of Health, Education, and Welfare, together with the most current estimates relating to mortality and dismemberment (including loss of use of one or more limbs and loss of sight in one or both eyes)."

SEC. 3. This Act shall become effective on the first day of the second month following the month in which enacted.

Mr. MANSFIELD. Mr. President, I ask unanimous consent to have printed in the RECORD an excerpt from the report (No. 91-402), explaining the purposes of the measure.

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

SUMMARY OF THE BILL

Under present law, active duty servicemen are insured for \$10,000 under the servicemen's group life insurance program unless they choose either not to be insured or to be insured for \$5,000. Servicemen pay premiums based on comparable civilian mortality rates; the premium for \$10,000 in servicemen's group life insurance is currently \$2 per month. The Federal Government pays that portion of the cost of the insurance due to the extra hazard of active duty.

The bill as reported by the committee would add to servicemen's group life insurance coverage indemnity payments in the event of dismemberment or loss of use of a hand or foot, or loss of sight of an eye. One-half of the face value of the insurance would be paid if the serviceman suffered anatomical loss or loss of use of one hand, one foot, or the sight of one eye; the full face value would be paid in the event of anatomical loss or loss of use of two or more such members.

BACKGROUND

On September 29, 1965, legislation was enacted which provided group life insurance to members on active duty in the uniformed services. The coverage is automatic for \$10,000 of insurance unless the member

elects in writing to be insured for \$5,000, or not to be insured at all. The insurance continues for 120 days after separation from service, without any premium payment during this period.

Premiums for this insurance, including its cost of administration, are deducted monthly from servicemen's pay and remitted by each uniformed service to the Veterans' Administration, which in turn remits them to the primary insurer. The individual serviceman's premium, subject to change in accordance with the actual experience, has been set at \$2 per month for \$10,000 and \$1 per month for \$5,000.

FEDERAL EMPLOYEES' GROUP LIFE INSURANCE PROGRAM

Federal employees under present law are also eligible to purchase group life insurance under Federal legislation. In addition to providing insurance against death, however, the Federal employees' group life insurance program also incorporates protection in the case of loss of limb or sight. A Federal employee insured under this program receives one-half the face value of the insurance in the event of loss of a hand or foot or the loss of sight of one eye. The full face value of the insurance is payable in the event of loss of two or more such members. The dismemberment insurance is payable if the loss occurs as a direct result of and within 90 days after a bodily injury, providing it was not intentionally self-inflicted.

THE BILL

S. 2186 is patterned after the provisions of the Federal employees' group life insurance program. The committee feels that our servicemen, who face a much greater risk of physical injury, deserve at least as much protection as our Federal civilian employees.

The committee bill is broader than the Federal civilian employee program in one major respect: it provides the indemnity in the event of "loss of use" of hand or foot as well as in the case of anatomical loss. This similar treatment is well established in our compensation program for disabled servicemen and veterans, and it is particularly timely in these days when medical advances have been so effective.

Financing the additional protection would be on the same basis as the servicemen's group life insurance program as a whole: the serviceman will pay that part of the cost associated with comparable civilian risk, while the Government will bear the military extra hazard cost.

The Veterans' Administration estimates that it will not be necessary to raise the servicemen's \$2 monthly premium (for \$10,000 of insurance) to fund this additional protection.

The amendments were agreed to.

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

DISTRICT OF COLUMBIA COURT REORGANIZATION ACT OF 1969

The Senate proceeded to consider the bill (S. 2601) to reorganize the courts of the District of Columbia, and for other purposes, which had been reported from the Committee on the District of Columbia, with an amendment, to strike out all after the enacting clause and insert an amendment in the nature of a substitute.

PRINTING OF COMMITTEE SUBSTITUTE IN RECORD DISPENSED WITH

Mr. MANSFIELD. Mr. President, in view of the great length of the committee amendment to the bill (S. 2601)

to reorganize the courts of the District of Columbia, and for other purposes, which is in the nature of a substitute for the introduced bill, I ask unanimous consent to dispense with the printing of the committee amendment in the CONGRESSIONAL RECORD.

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

Mr. MANSFIELD. Mr. President, I ask unanimous consent to have printed in the RECORD an excerpt from the report (No. 91-405), explaining the purposes of the measure.

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

PURPOSE OF BILL

S. 2601 as amended by this committee constitutes a vital measure for the reduction of crime committed in the National Capital, as the bill's principal purpose is to improve the administration of justice in the District of Columbia, especially in the area of criminal law.

Toward this end, the bill (S. 2601) recommended by this committee provides— a merged local court system, with an enlarged judiciary sufficient to meet growing caseloads, and with general jurisdiction over all local matters;

good behavior tenure (after an initial 4-year term) and compensation for the local judiciary adequate to attract quality personnel to the bench;

a strengthened judicial selection process, moving toward a merit system of selection, and a well-defined mechanism for ridding the bench of unfit judges, as further assurances of judicial competence;

a court executive officer to infuse management, know-how into court operations, to enhance the efficient as well as just disposition of court business;

an independent Advisory Committee on the Administration of Justice in the District of Columbia Courts, to exercise continual oversight of the courts' operations, and to spur legislative and other modes of judicial reform when necessary;

a modern office of medical examiners to replace the antiquated local coroner's office; amendments updating the District's law of criminal procedure; and

other amendments to substantive and procedural law necessary to effect the court reorganization.

NEED FOR LEGISLATION

Available statistics on crime in the National Capital indicate alarming and unremitting increases. Expert analyses and the testimony of numerous witnesses would indicate as well that the incidence of crime can be traced in significant part to the inadequacy of the District's judicial machinery and to critical defects here in the administration of criminal justice.

The committee is advised, most notably, that the total of crime index offenses reported in the District of Columbia for the 12-month period ending July 1969, stands at 55,531, an increase of 24.4 percent over July of 1968. The incidence of homicide has increased 38.2 percent, from 178 to 246 for the same period; the number of rapes has increased 69.5 percent, from 190 to 322; the number of aggravated assaults has increased 10.7 percent, from 3,085 to 3,414; reported cases of burglary have increased 18.8 percent, from 16,683 to 19,827; larceny has increased 34.5 percent, from a reported 7,439 to 10,007; and the incidence of robbery has increased 55.6 percent, from a reported 6,809 for the year ending July 1968, up to 10,592 for the 12-month period ending July of this year.

The committee is advised likewise that the deterrent impact of swift trial and punishment has been severely undermined in the

National Capital, as the median time lapse from filing to final disposition in felony proceedings has increased from approximately 8 months or, more precisely, 34 weeks during fiscal year 1964, to a crippling figure of 9½ months or 41 weeks during fiscal year 1968. The median time lapse in the District of Columbia has remained more than triple the median lapse in other Federal district courts. To be compared also is the recommendation of the Committee on the Administration of Justice of the Judicial Council of the District of Columbia that the principal felonies—murder, rape, robbery, and first degree burglary—be disposed of within 6 weeks of indictment, to preserve the deterrent function of our system of criminal justice. The President's Commission on Crime in the District of Columbia has recommended that persons who are potentially dangerous to the community be tried within 30 days after indictment.

The backlog of pending criminal cases in the only existing felony court in the National Capital, the Federal district court, increased over the last calendar year, and is reported to stand currently at approximately 1,669 cases—notwithstanding an exemplary implementation of the visiting judge program locally, and an unsurpassed number of days on the bench per district court judge. To be compared is the total number of criminal cases disposed of during calendar year 1968—namely, 1,890—and the fact that a significant proportion of the serious crime committed in the District of Columbia can be attributed to persons at large awaiting trial on earlier charges.

Evidence amassed by the President's Commission on Crime in the District of Columbia dramatically illustrated the profound adverse effect of congestion and delay on the administration of justice. The Commission reported that, although there has been a steady increase in the number of felonies committed within the District of Columbia in recent years, there has been a decrease in the number of felonies actually prosecuted in the courts. Additionally, there has been a sharp increase in the number of pleas to lesser offenses that have been negotiated by the prosecutors. The Commission concluded from these facts that the U.S. attorney's office, cognizant of the backlog in the district court and of the consequent inability of the court to handle its caseload, tends (1) to "no paper"; that is, refuse to prosecute cases that otherwise might be prosecuted if the courts were not so congested, and (2) to bargain for guilty pleas to lesser offenses than charged. Such a situation short circuits the enforcement of the law. Respect for the law cannot be maintained if an offender, although apprehended, may not be charged, and, if charged, can probably "cop a plea."

This committee was mindful of the anomaly inherent in burdening a Federal district court with sole general jurisdiction over the full panoply of local legal matters. The burden is acute in the District of Columbia, the seat of the Federal Government, where, in the absence of inordinately crowded dockets (both civil and criminal), a substantial and greater quantum of genuinely Federal litigation might best and conveniently be brought. Yet, at present the median time for civil jury trial in the U.S. District Court for the District of Columbia is nearly double the median for Federal district courts nationwide. In recent years as many as 12 out of 14 judges of the Federal court in the National Capital have been assigned full time to the trial of local felony offenses.

Finally, the committee was likewise mindful of the inefficiency fostered by the existing court system. The 893-page publication constituting the record of hearings on court reorganization before this committee (Crime in the National Capital, pt. 3, U.S. Senate Committee on the District of Columbia, 91st Cong., first sess.) details the committee's findings regarding management deficiencies

in the existing system. Moreover, note should be taken of such wasteful, dysfunctional institutional defects (in the existing system) as (1) differentiated jurisdiction over related offenses—whereby, as an illustration, an individual charged with both felony and lesser, local misdemeanor offenses cannot be tried at once on all charges—(2) differentiated jurisdiction over related civil matters—whereby, for example, except as to matters before the domestic relations branch, the court of general sessions is divested of jurisdiction over any civil matter where title to real property is at issue, no matter how insignificant the controversy or amount in controversy—and (3) the absence of independent, general equity powers in a modern court of law, the general sessions court.

HISTORY OF LEGISLATION

The committee has had for consideration during this session six bills on the subject generally of court reorganization—S. 1066, S. 1067, S. 1214, S. 1215, S. 1711, and S. 2601. Although S. 2601 was not introduced and referred to this committee until July 11, 1969, hearings on the other bills were conducted as early as May 19, 20, 21, and 22, 1969. Following the introduction of S. 2601, further hearings were conducted on July 15, 16, and 17, 1969, and on August 7, 1969. The record available to the committee on the specific subject of court reorganization includes the testimony and other official communications from over 100 agencies, officials, organizations, lawyers, judges, and other citizens. Reference has been made notably to the publication "Crime in the National Capital," U.S. Senate Committee on the District of Columbia, 91st Congress, first session, part 3, Reorganization of the District of Columbia Courts, and related thereto, part 1, Implementation of the Recommendations of the President's Commission on Crime and Regional Aspects of the Crime Problem, part 2, Drug Abuse in the Washington Area, and part 2A, also Drug Abuse in the Washington Area. Moreover, as court reorganization hearings were conducted jointly with the Subcommittee on Improvements in Judicial Machinery of the Senate Committee on the Judiciary, some reference has been made likewise to the publication "Federal Judges and Courts," Subcommittee on Improvements in Judicial Machinery of the Senate Committee on the Judiciary, 91st Congress, first session. In sum, of the official legislative materials available to and relied upon by the committee in preparing the amended version of S. 2601 now reported, the published materials alone are nearly 3,000 pages in length.

The legislation recommended by this committee consists, to repeat, of an amended version of the bill S. 2601 as introduced. It should be noted that the amendatory process drew heavily upon other legislation on court reorganization, both that which was pending at the time of the consideration of S. 2601 and other legislation considered by this committee in recent years. Also, the amendments, including recommendations of the local bar association and its staff, were made largely in cooperation with the staff of the Department of Justice. Finally, reference should be made to another bill, pending S. 2869, to revise the criminal law and procedure of the District of Columbia (91st Cong., first sess.). The latter bill contains those provisions of the original S. 2601, as introduced, which fell outside of the scope of the court reorganization as such, which were not technically requisite for full implementation of the provisions of title I on court reorganization in S. 2601 as introduced, and which, according to numerous community witnesses before this committee, could not be adequately dealt with without further submissions of testimony and other advice.

ABSTRACT OF BILL

Briefly, S. 2601, as amended creates a unified and expanded trial bench, the District

of Columbia Superior Court, with eventual jurisdiction over all civil and criminal matters of a purely local nature.

The bill expands the District of Columbia Court of Appeals and renders it the final reviewing authority of the District. As original jurisdiction gradually devolves upon the new Superior Court, final appellate jurisdiction likewise devolves upon the District of Columbia Court of Appeals.

Amended S. 2601 creates an advisory committee to assist in the selection of local judges, a removal commission to superintend the removal of local jurists who are disabled or guilty of misconduct, and a new outside advisory committee to oversee the administration of justice here generally and intercede for the courts with the Congress.

An executive officer under the bill would lend managerial expertise to the operations of the court. The outmoded local office of the coroner is abolished, to be replaced by medical officers with largely medical functions to perform (the new office of medical examiners).

Finally, under title II of S. 2601 as amended, the courts of the District are granted the modern bases of personal jurisdiction and modes of out-of-town service in civil actions approved by recent case law and incorporated in the first two articles of the Uniform Interstate and International Procedure Act.

(See appendix herein for description of existing judiciary for the District of Columbia.)

PRINCIPAL FEATURES OF THE BILL

Timing of jurisdictional transfer

A major feature of S. 2601 is the transfer of jurisdiction over District of Columbia litigation from the U.S. District Court for the District of Columbia to the new Superior Court for the District of Columbia. This transfer will bring the jurisdiction of the U.S. courts in the District of Columbia in line with the jurisdiction exercised by the Federal courts in the several States, and will give the local courts jurisdiction over all purely local matters.

The Senate District Committee has concluded that the plan of jurisdictional transfer would best be set forth in a single piece of legislation, as an indefinite or incomplete transfer would make adequate and necessary planning extraordinarily difficult, if not impossible.

In determining, further, the pace at which transfer of jurisdiction should be accomplished, the committee was mindful of the wisdom expressed by the present chief judge of the District of Columbia Court of General Sessions, the Honorable Harold Greene, in a speech delivered in January 1969. Judge Greene stated: "A court is not a commodity that can be produced, full blown, like an electric appliance. A judicial tribunal, to be an effective instrument of justice, must grow in an orderly progression, by measured, natural states." This concise statement expresses well the need for staging the transfer of jurisdiction in an orderly progression, to assure an orderly development of the court receiving the judicial business.

To accomplish that end, this committee has decided to recommend a transfer of jurisdiction in four stages, over an extended period of 5 years. This pace was selected because:

1. Although the general sessions court has made significant improvements in its operations during the past several years, the local court still suffers from an almost overwhelming caseload, and from some severe defects in personnel and administration.

2. As some local cases are moved out of the U.S. District Court for the District of Columbia, the latter court, with its present and largely irreducible number of judges, will be better able to dispose of its staggering backlog and better equipped to give prompt attention to pending matters.

3. The U.S. District Court for the District of Columbia now has facilities which, though not expandable, are amply suited to the needs of the court, while the local courts must await the construction of truly necessary facilities.

4. The present very effective operations of probate work in the U.S. District Court should not be transferred until a time when fully adequate facilities and resources can be expected to be available for the local court.

The following table sets forth the proposed jurisdictional transfer:

S. 2601, AS INTRODUCED

First stage (6 months after enactment)

(1) Consolidation of all general sessions, Tax Court and juvenile court jurisdiction in the superior court.

(2) Civil controversies up to \$50,000 and all purely local personal injury cases.

(3) Land condemnation, real property, actions, quo warranto, habeas corpus, etc.

(4) District of Columbia felonies up to 15 years.

Second stage (2 years after enactment)

(1) Probate, mental health and other guardianships.

(2) Remaining District of Columbia felonies are transferred and the superior court ceases to be a committing magistrate for Federal courts.

Third stage (3 years after enactment)

(1) Remaining local jurisdiction including cases over \$50,000.

S. 2601, AS AMENDED

First stage (6 months after enactment)

(1) Same.

(2) Civil cases up to \$50,000 (transfer tied to jurisdictional amount only).

(3) Same, except land condemnation reserved until 3d stage.

(4) Same.

Second stage (2 years after effective date)

(1) Same, except reserve probate until fourth stage.

(2) Same.

Third stage (4 years after enactment)

(1) Land condemnation.

(2) All local civil jurisdiction, except probate.

Fourth stage (5 years after enactment)

(1) Probate.

Size of court

Meeting the criminal case backlog requires adequate additional judgepower. The Committee on the District of Columbia was impressed with the reasonableness of the proposal of the Department of Justice for 10 additional trial court judgeships in the first phase of reorganization.

The Committee on the Administration of Justice of the District of Columbia Judicial Council and the chief judge of the District of Columbia Court of General Sessions had earlier recommended the creation of five additional judgeships just to enable that court to cope with its existing workload and commence reducing the crescent backlog of pending criminal cases.

The Committee on the Administration of Justice further recommended the creation of seven additional positions for the general sessions bench as the necessary increase to cope at the outset with the demands of jurisdictional transfer.

Of this total of 12 positions recommended by the Committee on the Administration of Justice, the Congress has so far provided only two, leaving a figure of 10 (three remaining for the existing workload, plus seven to meet the new demands of expanded jurisdiction). The bill S. 2601 provides for the first phase of transfer precisely this figure of 10.

The Senate District Committee is advised that of the seven additional positions needed to meet the new demands of the first jurisdictional transfer, at least two would be re-

quired to process new civil business, and five to process new felony filings. Then in the second and third phase of transfer, with the rerouting of all local litigation except matters in probate, additional positions would be created commensurately.

Many new civil actions filed in the first phase of transfer can be expected to reach trial readiness at approximately phase 2. It is with this in mind that the new positions for handling civil business are relatively delayed. Nevertheless, at each phase, the creation of new judgeships precedes the likely actual accession of the new workload by a recommended lead time of 6 months.

Significantly, the nine new positions recommended for phase 2 in S. 2601 reflect the completed transfer at that phase of full and exclusive local criminal jurisdiction. To be compared is the recommendation of the Chief Judge of the U.S. District Court for the District of Columbia, presently charged with the District's plenary criminal jurisdiction: "In my opinion 15 additional judges would be a realistic minimum figure just to try title 22 indictments if such indictments are to be tried expeditiously."

It should be noted that the overall figure in S. 2601 for new trial bench positions has been characterized by the administration as "tentative." While recommending authorization now for an eventual superior court bench of 50 judges at the completion of all civil and criminal jurisdictional transfer (compared with 27 at present), the administration has suggested that experience in the first months and phase of the reorganized court may justify a legislative adjustment at some future date in the overall authorization.

Finally, the recommended and much needed increase in the size of the local court of appeals is only loosely tied to the ultimate size of the trial bench. The recommendation as to the size of the District of Columbia Court of Appeals (to encompass nine judges, as compared with six at present) reflects not only an expected augmented workload, but as well the needs of the court's grave, new responsibility—as supreme bench for the District.

Tenure provisions

In drafting the tenure provision of the amended bill, the committee was conscious both of the inexactness of the art of judicial selection and of the importance of tenure in attracting the most competent men to the bench. The committee recognized that the constitutional requirement of "good behavior" tenure has played a significant role in the historic high quality of the Federal bench. On the other hand, the committee was aware that virtually no State has provided such tenure for its judges, an apparent recognition that the opportunity to review the quality of a judge's performance also has its obvious advantages. The committee, therefore, sought a tenure provision that would combine the attractiveness of the federal system with the opportunity for some review of the judge's work.

The term of office that is being proposed is patterned after the provisions of the constitution of the State of New Jersey, adopted in 1947 as a result of Judge Vanderbilt's noted efforts to improve that State's judicial machinery. The New Jersey State constitution provides for a "trial" term of 7 years followed by reappointment to office during "good behavior." The advantages of such a system are readily apparent. After appointment to the bench, a man may perform differently or display a different temperament than he has as an advocate. Even reasonable expectations can be subject to disappointment.

The 4-year trial term that the committee is proposing will afford the appointing authority the opportunity to measure the appointee's performance and temperament as a

judge. Moreover, the judge will have the opportunity to appraise his new life as an arbiter rather than an advocate. The committee expects that judges who perform their duties with integrity and ability, and who display judicial temperament during a 4-year term, will, if they so desire, be renominated and reconfirmed for a good behavior term.

Improving the quality of the local bench

The quality of judicial nominees will make or break a court system. Such concern was expressed in the hearings about the transfer of both appellate and trial jurisdiction from the Federal courts in the District of Columbia to the local courts stems mainly from apprehension that the caliber of the local bench may be substantially below that of the Federal bench. (See, for example, hearings, at pp. 805-806.) It must be noted, however, that a number of men who have served as local judges have gone on to serve with distinction on the Federal bench. Furthermore, the quality of the local bench has been steadily improving in recent years. Regardless, the committee, in reviewing the problems of the local courts, became aware of the need to assure that the new local courts be manned by thoroughly able jurists.

To assure a strengthened local judiciary, the bill as amended provides for a judicial selection process which approximates a merit system of selection. The bill also provides well-defined judicial removal machinery, as further assurance of judicial competence, for ridding the bench of unfit or disabled judges.

Both the American Bar Association and the American Judicature Society have endorsed the merit selection of judges through the means of a nominating commission of judges, lawyers, and laymen, submitting names of qualified persons to the appointing authority. The District of Columbia Bar Association and the Committee on the Administration of Justice have specifically endorsed a judicial nominating commission for the District of Columbia. A bill embodying the views of the local organizations was introduced in the 2d session of the 90th Congress by Senator Tydings and reintroduced this session as S. 1214. As introduced S. 2601, however, contained no provision for a judicial nominating commission.

The bill as amended provides for an Advisory Committee on Judicial Selection which will recommend members of the bar to fill vacancies on the District of Columbia Court of Appeals and the Superior Court of the District of Columbia. The recommendations will be sent to the Attorney General who presently has the responsibility for advising the President on judicial nominations. The President will be free to appoint a recommended member of the bar or to make his own selection without further explanation.

Like the commissions recommended by the Bar Association, the Advisory Committee on Judicial Selection will be composed of judges, lawyers, and laymen. The President will select the chairman, a lawyer, and one other member who may be a layman. The Commissioner of the District of Columbia will select two members, one of whom must be a lawyer. The chief judge of the District of Columbia Court of Appeals will select a lawyer and a judge of his court to serve as members of the advisory committee. The chief judge of the superior court will select a judge of his court to serve on the advisory committee.

The committee expects that thoroughly competent and highly motivated individuals will be appointed to the Advisory Committee on Judicial Selection. Indeed, the appointees should be persons with a good knowledge of the courts and the community. Of course, the value of their recommendations will depend upon the appointing authority's willingness to accept the advisory committee's guidance.

State nominating commissions have raised the level of judicial competence. One commentator has written:

"The quarter century of experience with

the plan in Missouri, as studied by any conscientious student, confirms it has definitely improved the judiciary of that State, and without sacrifice of any legitimate interest or any proper principle of government or justice. The subsequent action of States like Kansas, Alaska, Iowa, Nebraska, and Illinois reconfirms this confirmation."

Another commentator has pointed out that within those jurisdictions in Missouri using the merit selection system "there has been no significant concern in the legal community during recent years with the problem of judicial misconduct. And one can hardly help remarking that all three recent misconduct cases [in Missouri] were in non-Missouri plan circuits."²

On occasion, opposition to the merit selection plan has been based on a fear that a nominating commission's recommendations would be restricted to a certain segment of the bar. The amended bill, by providing that recommendations may be ignored by the appointing authority, avoids this dilemma. If a particular list of nominees is too restrictive, the President may select from outside the list, although it is hoped that such selection would be based upon reasons of a particular person's qualifications and not his political allegiance.

The committee also expects that the mechanism of an Advisory Committee on Judicial Selection will expedite the selection process of local judges. The Advisory Committee must make its recommendations within 40 days of a vacancy. Such expeditious recommendation hopefully will stimulate expeditious nomination. Expedition has not been a hallmark of the present nomination process. Vacancies have existed in the local courts for months and even years, while the appointing authority searches for candidates and listens to those interested in particular candidates.

Two recent vacancies on the court of general sessions existed for more than 8 months before nominations were sent to the Senate. When the District of Columbia Court of Appeals got its most recent addition of judgeships, two of those positions were not filled for more than 8 months after creation of the positions, and one of those judgeships remained open for nearly a year. Such delays are intolerable in these days of burgeoning dockets and lagging justice. The 40-day requirement for recommendations by the Advisory Committee should serve as an effective counterforce to the past inertia in the selection process of local judges.

No method of judicial selection, however perfect, can guarantee that a judge will be physically able and of exemplary behavior throughout his tenure. Judges, like all men, grow old, and, with the loss of vigor so much a part of their character at an earlier age, become unable to perform the demanding duties of judicial office. Therefore, the bill provides for mandatory retirement at age 70. Such mandatory retirement, however, can only avoid problems caused by superannuated judges.

All men can fall prey to human frailties other than age. Upon occasion some judges, thankfully very few, are alcoholics, or are continually intemperate, or are unable to adhere to the boundaries of ethical propriety. Some may even indulge in criminal activity, such as bribery, income tax evasion, or extortion, to mention a few actual recent examples in the State court systems. When even a single judge is guilty of such transgressions, the faith and confidence of our citizens in the courts is shaken. The administration of justice is dealt a grievous blow.

¹ Garwood, "Judicial Section and Tenure—The Model Article Provisions," *Journal of American Judicature Society*, June 1963.

² Braithwaite, "Removal and Retirement of Judges in Missouri," 1968 *Wash. U.L.Q.* 378, 411.

To maintain public confidence in the courts and to assure a mechanism to deal with unfit judges, there is a need for the creation of a commission to effect the removal of unfit judges and the retirement of those who are disabled. Such a commission is an essential ingredient of a sound court structure. Consequently, the bill creates a District of Columbia Commission on Judicial Disabilities and Tenure.

Commissions or special courts to adjudicate questions regarding the disability, misconduct or other unfitness of judges now exist in the following States: Alaska, California, Colorado, Delaware, Florida, Idaho, Illinois, Maryland, Michigan, Missouri (Kansas City), Nebraska, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Texas, Utah, and Vermont.

These State bodies, like the District of Columbia Commission on Judicial Disabilities and Tenure, are designed to investigate complaints brought against judges, to dismiss those which are unfounded, and to accord a hearing on those which are credible with the protections of due process for the judge whose health or conduct is drawn into question. The operations of the State bodies, particularly the California Commission on Judicial Qualifications, have proven effective in preserving the public confidence in the bench and in protecting the judiciary from unfounded accusations.

The composition of the District of Columbia Commission will stress nonjudicial membership and will avoid placing a judge of the local court system in the difficult position of judging the conduct or health of a brother judge. The District of Columbia Commission's two judge members will come from the U.S. District Court for the District of Columbia on assignment by the chief judge of that court. The other five members will be selected by the President (three members, including the Chairman, two of whom must be lawyers) and the Commissioner of the District of Columbia (two members, one of whom must be a lawyer). The majority of the Commission will thus be made up of lawyers and laymen. This preponderance of nonjudicial membership follows the membership pattern of the commission in Florida, Idaho, Missouri (Kansas City), New Mexico, Texas, and Utah.

The creation of a removal commission in the District of Columbia was endorsed by virtually every witness at the committee's hearings.

The value of a removal commission is perhaps best stated by Jack E. Frankel, executive secretary of the California Commission on Judicial Qualifications:

"Knowing the constitution of the human animal, it can be assumed there have been, there are, and there will be, instances among judicial officers of lack of fitness. Such cases are rare compared to the great preponderance of conscientious and able judges. Nevertheless, a suitable legal remedy is essential.

"Not only is the independence of the judiciary protected, but we are convinced that the strength and capability of the judicial branch of the Government is greatly enlarged. The existence of such a body, functioning and able to be used if and when necessary, is an effective element in the strengthening of the judicial system, and is leading to a higher standard of judicial conduct."³

At present, the only means available to rid the local bench of a sick or venal judge is through the process of impeachment by the House of Representatives and trial by the U.S. Senate. To believe that the Congress at this time in our history has the time to police the local judiciary through the impeachment process is just not realistic. That process has

not even proven viable when the conduct of Federal, good-behavior tenure judges is drawn into question.

Court administration

If an attempt were made to transfer jurisdiction among the courts within the District of Columbia without providing for means to assure the better administration of those courts, such transfer would be futile. The transfer would merely shift the case backlog and attendant problems without really offering the hope for better administration of justice.

During hearings on the operations of the courts in the District of Columbia and on the detailed provisions of S. 2601, the committee heard a wealth of testimony on the ineffective operation of the District of Columbia judicial system as now structured and managed. Testimony pointing to administrative inertia, and to calendar congestion and breakdowns made it abundantly clear that solutions beyond adding more judges and supporting personnel were called for. To bring better administration to the local courts, the amended bill restates the authority of the respective chief judges, creates an Executive Officer to assist them in their managerial functions, provides a new means of handling court system functions, and assures on-going assistance to the courts from a body akin to the present Committee on the Administration of Justice of the Judicial Council of the District of Columbia.

The chief judges of the respective courts remain responsible for the internal management of their courts. But as these courts enlarge, the administrative problems now afflicting their operations will multiply, unless adequate assistance is provided for managing these courts.

The existing Committee on the Administration of Justice in the District of Columbia stressed in its testimony that the provision for a court executive in the local trial court was the major need of the courts in the National Capital. (Hearings, pp. 635, 640, 643-644, 646, 647-648, 650.) Indeed, the importance of the court executive was well stated by Mr. Edward C. Gallas, former court administrator for the Los Angeles Superior Court and consultant to the management study of the District of Columbia Courts which has been underway for 2 years (Hearings, p. 774):

"I would say at the outset that I would not, for one recommend that you waste your time or your efforts on these questions of jurisdiction, questions of additional judges, questions of additional staff, unless you get some management at the top of the court system. It has been my observation and my conclusion from reading some of the data that has been provided to me and presented to the committee with which I am associated that the management of the court here is notable for its lack of management, and I would recommend, Mr. Chairman, that the first bill, no matter what else you do, that you try to get out of this committee and out of the Senate is the one that would create the position of an executive who could start putting the house in order.

Testimony documenting calendar breakdowns, long and seemingly unending waiting time for witnesses, wasted time for jurors, and failure to communicate with parties to assure appearance in court convinced the Senate District Committee that a court executive was essential to better court operation. In reaching this conclusion, the committee was not unmindful of the serious and determined efforts made by Chief Judge Harold Greene to improve the workings of the court of general sessions. Judge Greene, in fact, has struggled against heavy odds (a lack of a truly adequate physical facilities, a lack of prestige attached to his court, ingrained and inefficient court habits and attitudes, several recalcitrant judges, and an inadequate staff) to keep his court from being

overwhelmed by an ever-expanding caseload. He has performed yeoman service; he deserves the applause of the Congress and the community. He would be better equipped to handle the increased pressure of a larger court handling a broader jurisdiction, if he had the assistance of a court executive officer.

The administration's proposal set up a single executive officer for the District of Columbia court system and created a Joint Committee on Judicial Administration composed of five judges (two appellate and three trial judges). The executive officer was to work not only within the appellate and trial courts but also for the joint committee on court system matters. S. 2601 as introduced, however, did not define the court system chores of the joint committee, and, by not doing so, left unworkably vague the control to be exerted over the executive officer by the two chief judges and the joint committee, and the ultimate areas of authority to be controlled by the joint committee.

The amendment of the Senate District Committee to new chapter 17 of title 11, District of Columbia Code, are aimed in large part at eliminating this vagueness concerning the duties of the joint committee and the control of the executive officer. Section 11-1701, as reported by the committee, states specific areas over which the joint committee has jurisdiction. These duties include the preparation of an annual report and an annual budget, personnel recruitment, space allocation, procurement, and disbursement. These areas relate to the court system as a whole and, in fact, make up the bulk of the work performed for the Federal court system by the Administrative Office of the U.S. Courts. In addition, the joint committee will have some oversight function, with a view toward recommending improvements in court operations through legislation or court action.

Section 11-1701, as reported by the Senate District Committee, makes tenable the joint committee concept. Still, it must be recognized that administration by committee rather than by a single chief officer is vulnerable to myriad difficulties and roadblocks. The joint committee was originally proposed by the Department of Justice. Its worth was questioned during hearings on the bill (S. 2601) by a number of witnesses. The Senate District Committee remains somewhat skeptical of the utility of the joint committee and believes that this aspect of administration, if the courts are to run more smoothly, requires continued scrutiny.

The executive officer will be subject to the control of the point committee in performing duties in the precise areas of responsibility enumerated in new section 11-1701.

When working in the respective local courts, however, the court executive is to be controlled by the respective chief judges. The control of the executive officer cannot be stressed too heavily. He is not intended to be a czar with dictatorial powers over judicial performance. He is meant to be a managerial assistant to the joint committee, and to the chief judges who remain ultimately responsible, under the provisions of chapters 7 and 9 and section 11-1702, title 11, District of Columbia Code, for the effective administration of justice within the local appellate and trial courts. Experience has demonstrated, particularly in the well-run Los Angeles Superior Court, that the court executive or administrator, in order to perform a valuable function, must have the confidence and support of the judges with whom he works as well as stature within the system.

To assure the recruitment of a top-flight court executive, section 11-1703 requires that he be selected from a list submitted by the Administrative Office of the U.S. Courts. Such a selection process was recently favored by the Senate when it passed legislation creating court executives for the Federal courts. (See S. 952, secs. 9 and 10, passed by Senate,

³ Frankel, "Removal of Judges: California Tackles an Old Problem," A.B.A. Journal (Feb. 1963).

June 23, 1969.) To assure that the respective chief judges are inclined to accept and utilize the court executive, his selection must be concurred in by the respective chief judges. To give the executive needed stature, he is to receive the salary of a local trial judge. The need for such a salary was well stated by Edward Gallas, when he testified:

"In my judgment it would be a serious mistake not to pay him exactly the salary the judge gets, because the judges will then—whether we like it or not, in our system, the American way of doing things, salary is an evidence of stature. If he doesn't have the same status as a judge he isn't going to be completely effective. I know this from experience. When I started in the Los Angeles Superior Court it happened, and I didn't really inquire as to the salary relationship, which was a mistake, but my salary was less than that of a judge, some \$3,000 less. It took 4 or 5 years to get the salary established at the same rate as that of the judges.

"I will say that the judges themselves recognize that this is important, that the man they attract should be one whom they believe is a professional in his own right just the same as they are in their own business. Money doesn't buy necessarily what you want. The competence you are going to get is going to be determined more on the wisdom of the selection you make. You can get just as qualified a guy possibly for less money, but he won't have the stature; he won't have the acceptance; a person who is one who is considered at a lower echelon, and you will get runners and you will get clerical types as your executives unless you meet this problem head on."

An Advisory Committee on the Administration of Justice in the District of Columbia Courts is created by the new section 11-1705 in the mold of similar oversight organizations existing under the laws of the States of Florida (sec. 43-15, Fla. Stat.), Oregon (sec. 1.610, Oreg. Rev. Stat.), and Washington (ch. 2.52, Rev. Code, Wash. Ann.), to continue the outstanding work performed by the Committee on the Administration of Justice of the District of Columbia Judicial Council. The present committee was organized by the Federal Judicial Council to bring the enlightenment of the bar to the problems plaguing the present court structure. Largely through the efforts of Senator Tydings this volunteer organization received a foundation grant, and has been functioning during the past 2 years with a staff of lawyers and former court administrators.

Under the chairmanship of Gerhard A. Gesell (until his appointment to the Federal bench) and Newell W. Ellison, the committee and its study team have painstakingly reviewed every facet of local court operations, and has put forward suggestions to the courts for internal improvements and to the Congress for structural change. It may be truly stated that without the work of this volunteer committee and its study team, the real problems of the present judicial structure may never have been uncovered; and legislative efforts to restructure the courts and improve their operations may well have taken considerably longer. Indeed, the administration in preparing its proposal, and this committee in analyzing the local courts' predicament and in reporting this needed legislation drew heavily upon the reports, data, suggestions, and ideas of the Ellison committee.

With court reorganization clearly taking the Federal Circuit Council out of local court management, and with the expiration of the foundation grant which gave the Ellison committee the wherewithal to conduct its studies, there is a real possibility that the valuable contribution the Ellison committee has made to local court reform will be lost, unless some congressional action is taken.

The Senate Committee on the District of Columbia, believing in the value of the work

of the Ellison committee and at the same time relying on the statutory models of several of the States, has created in new section 11-1705 an ongoing Advisory Committee on the Administration of Justice in the District of Columbia Courts. The Advisory Committee will be composed of seven members, two selected by the Advisory Committee on Judicial Selection, two selected by the Commission on Judicial Disabilities and Tenure, two members selected by the respective local chief judges and one member selected by the other six members. This manner of selection assures that those vitally interested in the quality performance of the local courts will have a voice in the appointment of members to the Advisory Committee.

The Advisory Committee on the Administration of Justice (1) will survey the organization, practice, and methods of administration and operation of the local court system, (2) will provide a focus for nonjudicial participation in improving the administration of justice, (3) will create in this time of transition for the court system, a body which can carefully evaluate the transfer and report to the courts and Congress on ways to deal with unforeseen eventualities, and (4) will serve as an independent spokesman to the Congress on the ongoing needs of the local judicial system. By ventilating the judicial system to nonjudicial attitudes, the Advisory Committee can help the new court system to avoid the occasionally self-serving and less reliable or objective course of the present system. The oversight and other responsibilities will follow the statutory guidelines provided for the joint committee by new section 11-1701 and by the relevant statutes of the States of Florida, Oregon, and Washington looked to in the formulation of 11-1701. The Advisory Committee can continue to make those sound suggestions for court improvement which have been the fruit of the Ellison committee's labor.

The Advisory Committee has some precedent in the committee formed in the late 1940's and maintained during the 1950's by the Federal district court Chief Judge Bolita Laws. The committee, composed of laymen and lawyers, helped the court system in many ways, and its demise, after Judge Law's death, was a blow to the effective operation of the local courts.

The creation of a secretariat for the Advisory Committee is essential to its proper functioning. An executive secretary and the other assistants authorized pursuant to section 11-1705(d) will be the essential fact-finders for the Advisory Committee, and in addition may be utilized, by the specific terms of section 11-1705(d), as staff for the Advisory Committee on Judicial Selection and the Commission on Judicial Disabilities and Tenure—thus eliminating or substantially reducing the need for the creation of a separate staff for each of the three functioning bodies newly created by this legislation.

The Joint Committee on Judicial Administration and the Advisory Committee on the Administration of Justice will cosponsor an annual Conference of Citizens and Judges. Such citizens' conferences have been conducted in more than two-thirds of the States by the American Judicature Society, and have proven to be an effective way of informing the public about court needs and of stimulating the movement for necessary judicial reforms. On September 5 and 6, 1969, such a citizens' conference was held in Annapolis, Md., and was deemed unqualifiedly a success by all observers.

Costs of reorganization

Preliminary estimates supplied to this committee regarding the annual operating expenses of the entire local court system, as reorganized under the amended bill S. 2601, indicate for phase 1 of the proposed jurisdictional transfer a total net increase of \$1.5 million.

Noncourt costs for the hiring of additional prosecutors, deputy marshals, and public defender personnel—necessary for the reduction of the criminal backlog and for stepped-up law enforcement—may increase moreover by as much as \$1.5 million. To be compared, however, is the relative size of the District of Columbia budget, projected to be approximately \$737 million for fiscal year 1970, whereby the total increased expenditures for the reorganized court system represent four-tenths of 1 percent of the overall District of Columbia budget. It is noteworthy that this increase, like the costs of the court system in the aggregate and the District of Columbia budget generally, is to be funded to an approximate extent of 83 percent out of local District of Columbia revenues. More particularly, in the case of the local courts it should be noted that the Court of General Sessions, even in the absence of reorganization or other expansion, can be expected to generate revenues of at least \$6 million in the current fiscal year (compared with an expected court budget for the same period of also approximately \$6 million).

The Senate District Committee is advised that the first phase of court reorganization can be expected to occasion a \$1 million increase in direct Federal expenses, related to the maintenance of the Federal courts in the District of Columbia, as the District's share of such expenses declines from 60 percent to 40 percent, and then 20 percent (under section 573 of S. 2601).

The further sum of \$0.4 million in Federal funds required for additional Government attorneys and personnel for the Office of the U.S. Marshal would possibly be required either under the District of Columbia Court Reorganization Act of 1969, or in the alternate event of the expansion of the U.S. District Court and District of Columbia court of general sessions in the implementation of the recommendations, apart from the proposed court reorganization, of the Judicial Conference of the United States and of the chief judge of the general sessions court. Under the amended bill S. 2601 the percentage shares of the costs of additional U.S. attorneys and deputy marshals are to be continued at the present levels of 75 percent to be paid by the District of Columbia and 25 percent to be paid by the Federal Government.

According to estimates supplied to this committee, the second and remaining phases of jurisdictional transfer, and other proposed incidents of reorganization may occasion net increased expenditures (annual) of as much as \$0.6 million. It is to be recalled, however, that it is intended that the need for additional judicial personnel be reviewed prior to phase 2 with a view toward a possible downward adjustment in authorized expansion, depending upon the extent of such then-existing need. Additional U.S. attorneys, U.S. marshals, and staff for public defender services—principally to expedite the processing of criminal indictment, trial, and punishment—might require in the meantime a further \$1.2 million, to be paid by the District of Columbia, along with a continued Federal share in the aforementioned percentage. It should be noted finally that the Federal Government under the second and remaining phases of transfer may be required to increase its contribution to the ongoing expenses of the Federal courts within the District by, ultimately, \$2 million.

With respect to capital outlay and other expenditures related to the expansion and improvement of court facilities, the current administration, like its predecessor, has supported a request for the construction of a new local court complex, estimated to cost a total of \$20 million to be paid over an extended term of years. The District of Columbia budget in recent years has contained a reserve in fact established to bide the event of the authorization of such con-

struction. In the meantime, it is expected that the new court system can be accommodated in the existing facility, along with available space in the Pension Building, to be remodeled, at an as yet undetermined but considerably lesser cost, as temporary court quarters.

The amendment was agreed to.

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

EXEMPTION OF PUBLIC INTERNATIONAL ORGANIZATIONS FROM THE DISTRICT OF COLUMBIA UNEMPLOYMENT COMPENSATION ACT

The bill (H.R. 9526) to amend the District of Columbia Unemployment Compensation Act to provide that employers' contributions do not have to be made under that act with respect to service performed in the employ of certain public international organizations was considered, ordered to a third reading, read the third time, and passed.

Mr. MANSFIELD. Mr. President, I ask unanimous consent to have printed in the RECORD an excerpt from the report (No. 91-403), explaining the purposes of the measure.

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

PURPOSE OF BILL

The purpose of the bill, H.R. 9526, which was requested by the State Department, is to exempt certain public international organizations, which have headquarters or regional offices in the District of Columbia, from registering with the District of Columbia Unemployment Compensation Board and from the payment of the unemployment compensation tax required by the District of Columbia Unemployment Compensation Act (D.C. Code, title 46, sec. 301).

The international organizations exempted by the bill would be those designated by Executive order of the President as entitled to enjoy the privileges, exemptions, and immunities provided under the International Organizations Immunities Act (22 U.S.C. 288-288f-1).

Section 288 of that act defines an "international organization" as "a public international organization in which the United States participates pursuant to any treaty or under the authority of any act of Congress authorizing such participation or making an appropriation for such participation, and which shall have been designated by the President through appropriate Executive order as being entitled to enjoy the privileges, exemptions, and immunities provided" in the United States Code.

Under the International Organizations Immunities Act, it is further provided that where the United States participates in a public international organization either by treaty or by act of Congress authorizing an appropriation therefor, the President may designate that organization as being entitled to certain privileges and immunities, such as exemption from payment of taxes, inviolability of its records and property, and exemption of its non-American employees from U.S. income taxes, and from process as to their official actions.

Similar legislation passed the House in the last Congress.

PRESENT SITUATION

The State Department has advised your committee that with the exception of the United Nations organization, located in New York City, and the Pan American Union,

located in Washington, most public international organizations have their headquarters abroad, in Geneva, Switzerland, or other locations. However, some of these organizations do have small regional offices in Washington, which act as clearinghouses for information channeled to their main offices abroad.

Many such public international organizations with regional offices in the District, such as the International Bank for Construction and Development, are already exempt by treaty from local taxes.

There are only a few very small regional offices in the District not so exempt, such as the United Nations Information Center, the International Labor Organization, and the Food and Agriculture Organization. The exact number of employees affected has not been determined although it is thought to be quite small.

H.R. 9526 would give these remaining public international organizations the same exempt status as others now enjoy, and your committee recommends the bill be approved by the Senate.

THE INTERSTATE OF JUVENILES

The Senate proceeded to consider the bill (S. 2335) to authorize the District of Columbia to enter into the Interstate Compact on Juveniles which had been reported from the Committee on the District of Columbia with an amendment on page 5, line 19, after the word "juvenile" strike out the period and "The" and insert a comma and "the"; so as to make the bill read:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) the Congress finds that (1) juveniles who are not under proper supervision and control, or who have absconded, escaped, or run away, are likely to endanger their own health, morals, and welfare, and the health, morals, and welfare of others, and (2) the cooperation of the District of Columbia with the States is necessary to provide for the welfare and protection of juveniles and other persons in the District of Columbia.

(b) The Congress intends, in authorizing the District of Columbia to adopt the Interstate Compact on Juveniles, to have the District of Columbia cooperate fully with the States (1) in returning juveniles to those States requesting their return, and (2) in accepting and providing for the return of juveniles who are residents of the District of Columbia and who are found or apprehended in a State.

Sec. 2. (a) The Commissioner of the District of Columbia (hereafter in this Act referred to as the "Commissioner") is authorized to enter into and execute on behalf of the District of Columbia a compact with any State or States legally joining therein in the form substantially as follows:

"THE INTERSTATE COMPACT ON JUVENILES

"The contracting states solemnly agree:

"ARTICLE I—Findings and Purposes

"That juveniles who are not under proper supervision and control, or who have absconded, escaped or run away, are likely to endanger their own health, morals and welfare, and the health, morals and welfare of others. The cooperation of the states party to this compact is therefore necessary to provide for the welfare and protection of juveniles and of the public with respect to (1) cooperative supervision of delinquent juveniles on probation or parole; (2) the return, from one state to another, of delinquent juveniles who have escaped or absconded; (3) the return, from one state to another, of non-delinquent juveniles who have run away from home; and (4) additional measures for

the protection of juveniles and of the public, which any two or more of the party states may find desirable to undertake cooperatively. In carrying out the provisions of this compact the party states shall be guided by the non-criminal, reformatory and protective policies which guide their laws concerning delinquent, neglected or dependent juveniles generally. It shall be the policy of the states party to this compact to cooperate and observe their respective responsibilities for the prompt return and acceptance of juveniles and delinquent juveniles who become subject to the provisions of this compact. The provisions of this compact shall be reasonably and liberally construed to accomplish the foregoing purposes.

"ARTICLE II—Existing Rights and Remedies

"That all remedies and procedures provided by this compact shall be in addition to and not in substitution for other rights, remedies and procedures, and shall not be in derogation of parental rights and responsibilities.

"ARTICLE III—Definitions

"That, for the purposes of this compact, 'delinquent juvenile' means any juvenile who has been adjudged delinquent and who, at the time the provisions of this compact are invoked, is still subject to the jurisdiction of the court that has made such adjudication or to the jurisdiction or supervision of any agency or institution pursuant to an order of such court; 'probation or parole' means any kind of conditional release of juveniles authorized under the laws of the states party hereto; 'court' means any court having jurisdiction over delinquent, neglected or dependent children; 'state' means any state, territory or possessions of the United States, the District of Columbia, and the Commonwealth of Puerto Rico; and 'residence' or any variant thereof means a place at which a home or regular place of abode is maintained.

"ARTICLE IV—Return of Runaways

"(a) That the parent, guardian, person or agency entitled to legal custody of a juvenile who has not been adjudged delinquent but who has run away without the consent of such parent, guardian, person or agency may petition the appropriate court in the demanding state for the issuance of a requisition for his return. The petition shall state the name and age of the juvenile, the name of the petitioner and the basis of entitlement to the juvenile's custody, the circumstances of his running away, his location if known at the time application is made, and such other facts as may tend to show that the juvenile who has run away is endangering his own welfare or the welfare of others and is not an emancipated minor. The petition shall be verified by affidavit, shall be executed in duplicate, and shall be accompanied by two certified copies of the document or documents on which the petitioner's entitlement to the juvenile's custody is based, such as birth certificates, letters of guardianship, or custody decrees. Such further affidavits and other documents as may be deemed proper may be submitted with such petition. The judge of the court to which this application is made may hold a hearing thereon to determine whether for the purposes of this compact the petitioner is entitled to the legal custody of the juvenile, whether or not it appears that the juvenile has in fact run away without consent, whether or not he is an emancipated minor, and whether or not it is in the best interest of the juvenile to compel his return to the state. If the judge determines, either with or without a hearing, that the juvenile should be returned, he shall present the appropriate court or to the executive authority of the state where the juvenile is alleged to be located a written requisition for the return of such juvenile. Such requisition shall set forth the name and age of the juvenile, the determination of the court that the juvenile has run away

without the consent of a parent, guardian, person or agency entitled to his legal custody, and that it is in the best interest and for the protection of such juvenile that he be returned. In the event that a proceeding for the adjudication of the juvenile as a delinquent, neglected or dependent juvenile is pending in the court at the time when such juvenile runs away, the court may issue a requisition for the return of such juvenile upon its own motion, regardless of the consent of the parent, guardian, person or agency entitled to legal custody, reciting therein the nature and circumstances of the pending proceeding. The requisition shall in every case be executed in duplicate and shall be signed by the judge. One copy of the requisition shall be filed with the compact administrator of the demanding state, there to remain on file subject to the provisions of law governing records of such court. Upon the receipt of a requisition demanding the return of a juvenile who has run away, the court or the executive authority to whom the requisition is addressed shall issue an order to any peace officer or other appropriate person directing him to take into custody and detain such juvenile. Such detention order must substantially recite the facts necessary to the validity of its issuance hereunder. No juvenile detained upon such order shall be delivered over to the officer whom the court demanding him shall have appointed to receive him, unless he shall first be taken forthwith before a judge of a court in the state, who shall inform him of the demand made for his return, and who may appoint counsel or guardian ad litem for him. If the judge of such court shall find that the requisitioner is in order, he shall deliver such juvenile over to the officer whom the court demanding him shall have appointed to receive him. The judge, however, may fix a reasonable time to be allowed for the purpose of testing the legality of the proceeding.

"Upon reasonable information that a person is a juvenile who has run away from another state party to this compact without the consent of a parent, guardian, person or agency entitled to his legal custody, such juvenile may be taken into custody without a requisition and brought forthwith before a judge of the appropriate court who may appoint counsel or guardian ad litem for such juvenile and who shall determine after a hearing whether sufficient cause exists to hold the person, subject to the order of the court, for his own protection and welfare, for such a time not exceeding 90 days as will enable his return to another state party to this compact pursuant to a requisition for his return from a court of that state. If, at the time when a state seeks the return of a juvenile who has run away, there is pending in the state wherein he is found any criminal charge, or any proceeding to have him adjudicated a delinquent juvenile for an act committed in such State, or if he is suspected of having committed within such state a criminal offense or an act of juvenile delinquency, he shall not be returned without the consent of such state until discharged from prosecution or other form of proceeding, imprisonment, detention or supervision for such offense or juvenile delinquency. The duly accredited officers of any state party to this compact, upon the establishment of their authority and the identity of the juvenile being returned, shall be permitted to transport such juvenile through any and all states party to this compact, without interference. Upon his return to the state from which he ran away, the juvenile shall be subject to such further proceedings as may be appropriate under the laws of that state.

"(b) That the state to which a juvenile is returned under this Article shall be responsible for payment of the transportation costs of such return.

"(c) That 'juvenile' as used in this Article means any person who is a minor under the law of the state of residence of the parent, guardian, person or agency entitled to the legal custody of such minor.

"ARTICLE V—Return of Escapees and Absconders

"(a) That the appropriate person or authority from whose probation or parole supervision a delinquent juvenile has absconded or from whose institutional custody he has escaped shall present to the appropriate court or to the executive authority of the state where the delinquent juvenile is alleged to be located a written requisition for the return of such delinquent juvenile. Such requisition shall state the name and age of the delinquent juvenile, the particulars of his adjudication as a delinquent juvenile, the circumstances of the breach of the terms of his probation or parole or of his escape from an institution or agency vested with his legal custody or supervision, and the location of such delinquent juvenile, if known, at the time the requisition is made. The requisition shall be verified by affidavit, shall be executed in duplicate, and shall be accompanied by two certified copies of the judgment, formal adjudication, or order of commitment which subjects such delinquent juvenile to probation or parole or to the legal custody of the institution or agency concerned. Such further affidavits and other documents as may be deemed proper may be submitted with such requisition. One copy of the requisition shall be filed with the compact administrator of the demanding state, there to remain on file subject to the provisions of law governing records of the appropriate court. Upon the receipt of a requisition demanding the return of a delinquent juvenile who has absconded or escaped, the court or the executive authority to whom the requisition is addressed shall issue an order to any peace officer or other appropriate person directing him to take into custody and detain such delinquent juvenile. Such detention order must substantially recite the facts necessary to the validity of its issuance hereunder. No delinquent juvenile detained upon such order shall be delivered over to the officer whom the appropriate person or authority demanding him shall have appointed to receive him, unless he shall first be taken forthwith before a judge of an appropriate court in the state, who shall inform him of the demand made for his return and who may appoint counsel or guardian ad litem for him. If the judge of such court shall find that the requisitioner is in order, he shall deliver such delinquent juvenile over to the officer whom the appropriate person or authority demanding him shall have appointed to receive him. The judge, however, may fix a reasonable time to be allowed for the purpose of testing the legality of the proceeding.

Upon reasonable information that a person is a delinquent juvenile who has absconded while on probation or parole, or escaped from an institution or agency vested with his legal custody or supervision in any state party to this compact, such person may be taken into custody in any other state party to this compact without a requisition. But in such event, he must be taken forthwith before a judge of the appropriate court, who may appoint counsel or guardian ad litem for such person and who shall determine, after a hearing, whether sufficient cause exists to hold the person subject to the order of the court for such a time, not exceeding 90 days, as will enable his detention under a detention order issued on a requisition pursuant to this Article. If, at the time when a state seeks the return of a delinquent juvenile who has either absconded while on probation or parole or escaped from an institution or agency vested with his legal custody or supervision, there is pending in the state wherein he is detained any criminal

charge or any proceeding to have him adjudicated a delinquent juvenile for an act committed in such state, or if he is suspected of having committed within such state a criminal offense or an act of juvenile delinquency, he shall not be returned without the consent of such state until discharged from prosecution or other form of proceeding, imprisonment, detention or supervision for such offense or juvenile delinquency. The duly accredited officers of any state party to this compact, upon the establishment of their authority and the identity of the delinquent juvenile being returned, shall be permitted to transport such delinquent juvenile through any and all states party to this compact, without interference. Upon his return to the state from which he escaped or absconded, the delinquent juvenile shall be subject to such further proceedings as may be appropriate under the laws of that state.

"(b) That the state to which a delinquent juvenile is returned under this Article shall be responsible for the payment of the transportation costs of such return.

"ARTICLE VI—Voluntary Return Procedures

"That any delinquent juvenile who has absconded while on probation or parole, or escaped from an institution or agency vested with his legal custody or supervision in any state party to this compact, and any juvenile who has run away from any state party to this compact, who is taken into custody without a requisition in another state party to this compact under the provisions of Article IV(a) or of Article V(a), may consent to his immediate return to the state from which he absconded, escaped or ran away. Such consent shall be given by the juvenile or delinquent juvenile and his counsel or guardian ad litem if any, by executing or subscribing a writing, in the presence of a judge of the appropriate court, which states that the juvenile or delinquent juvenile and his counsel or guardian ad litem, if any, consent to his return to the demanding state. Before such consent shall be executed or subscribed, however, the judge, in the presence of counsel or guardian ad litem, if any, shall inform the juvenile or delinquent juvenile of his rights under this compact. When the consent has been duly executed, it shall be forwarded to and filed with the compact administrator of the state in which the court is located and the judge shall direct the officer having the juvenile or delinquent juvenile in custody to deliver him to the duly accredited officer or officers of the state demanding his return, and shall cause to be delivered to such officer or officers a copy of the consent. The court may, however, upon the request of the state to which the juvenile or delinquent juvenile is being returned, order him to return unaccompanied to such state and shall provide him with a copy of such court order; in such event a copy of the consent shall be forwarded to the compact administrator of the state to which said juvenile or delinquent juvenile is ordered to return.

"ARTICLE VII—Cooperative Supervision of Probationers and Parolees

"(a) That the duly constituted judicial and administrative authorities of a state party to this compact (herein called 'sending state') may permit any delinquent juvenile within such state, placed on probation or parole, to reside in any other state party to this compact (herein called 'receiving state') while on probation or parole, and the receiving state shall accept such delinquent juvenile, if the parent, guardian or person entitled to the legal custody of such delinquent juvenile is residing or undertakes to reside within the receiving state. Before granting such permission, opportunity shall be given to the receiving state to make such investigations as it deems necessary. The authorities of the sending state shall send to the authorities of the receiving state copies of pertinent court

orders, social case studies and all other available information which may be of value to and assist the receiving state in supervising a probationer or parolee under this compact. A receiving state, in its discretion, may agree to accept supervision of a probationer or parolee in cases where the parent, guardian or person entitled to the legal custody of the delinquent juvenile is not a resident of the receiving state, and if so accepted the sending state may transfer supervision accordingly.

"(b) That each receiving state will assume the duties of visitation and of supervision over any such delinquent juvenile and in the exercise of those duties will be governed by the same standards of visitation and supervision that prevail for its own delinquent juveniles released on probation or parole.

"(c) That, after consultation between the appropriate authorities of the sending state and of the receiving state as to the desirability and necessity of returning such a delinquent juvenile, the duly accredited officers of a sending state may enter a receiving state and there apprehend and retake any such delinquent juvenile on probation or parole. For that purpose, no formalities will be required, other than establishing the authority of the officer and the identity of the delinquent juvenile to be retaken and returned. The decision of the sending state to retake a delinquent juvenile on probation or parole shall be conclusive upon and not reviewable within the receiving state, but if, at the time the sending state seeks to retake a delinquent juvenile on probation or parole, there is pending against him within the receiving state any criminal charge or any proceeding to have him adjudicated a delinquent juvenile for any act committed in such state or if he is suspected of having committed within such state a criminal offense or an act of juvenile delinquency, he shall not be returned without the consent of the receiving state until discharged from prosecution or other form of proceeding, imprisonment, detention or supervision for such offense or juvenile delinquency. The duly accredited officers of the sending state shall be permitted to transport delinquent juveniles being so returned through any and all states party to this compact, without interference.

"(d) That the sending state shall be responsible under this Article for paying the costs of transporting any delinquent juvenile to the receiving state or of returning any delinquent juvenile to the sending state.

"ARTICLE VIII—Responsibility for Costs

"(a) That the provisions of Articles IV(b), V(b), and VII(d) of this compact shall not be construed to alter or affect any internal relationship among the departments, agencies and officers of and in the government of a party state, or between a party state and its subdivisions, as to the payment of costs, or responsibilities therefor.

"(b) That nothing in this compact shall be construed to prevent any party state or subdivision thereof from asserting any right against any person, agency or other entity in regard to costs for which such party state or subdivision thereof may be responsible pursuant to Articles IV(b), V(b) or VII(d) of this compact.

"ARTICLE IX—Detention Practices

"That, to every extent possible, it shall be the policy of states party to this compact that no juvenile or delinquent juvenile shall be placed or detained in any prison, jail or lockup nor be detained or transported in association with criminal, vicious or dissolute persons.

"ARTICLE X—Supplementary Agreements

"That the duly constituted administrative authorities of a state party to this compact may enter into supplementary agreements with any other state or states party hereto for the cooperative care, treatment and re-

habilitation of delinquent juveniles whenever they shall find that such agreements will improve the facilities or programs available for such care, treatment, and rehabilitation. Such care, treatment and rehabilitation may be provided in an institution located within any state entering into such supplementary agreement. Such supplementary agreements shall (1) provide the rates to be paid for the care, treatment and custody of such delinquent juveniles, taking into consideration the character of facilities, services and subsistence furnished; (2) provide that the delinquent juvenile shall be given a court hearing prior to his being sent to another state for care, treatment and custody; (3) provide that the state receiving such a delinquent juvenile in one of its institutions shall act solely as agent for the state sending such delinquent juvenile; (4) provide that the sending state shall at all times retain jurisdiction over delinquent juveniles sent to an institution in another state; (5) provide for reasonable inspection of such institutions by the sending state; (6) provide that the consent of the parent, guardian, person or agency entitled to the legal custody of said delinquent juvenile shall be secured prior to his being sent to another state; and (7) make provision for such other matters and details as shall be necessary to protect the rights and equities of such delinquent juveniles and of the cooperating states.

"ARTICLE XI—Acceptance of Federal and Other Aid

"That any state party to this compact may accept any and all donations, gifts and grants of money, equipment and services from the federal or any local government, or any agency thereof and from any person, firm or corporation, for any of the purposes and functions of this compact, and may receive and utilize, the same subject to the terms, conditions and regulations governing such donations, gifts and grants.

"ARTICLE XII—Compact Administrators

"That the governor of each state party to this compact shall designate an officer who, acting jointly with like officers of other party states, shall promulgate rules and regulations to carry out more effectively the terms and provisions of this compact.

"ARTICLE XIII—Execution of Compact

"That this compact shall become operative immediately upon its execution by any state as between it and any other state or states so executing. When executed it shall have the full force and effect of law within such state, the form or execution to be in accordance with the laws of the executing state.

"ARTICLE XIV—Renunciation

"That this compact shall continue in force and remain binding upon each executing state until renounced by it. Renunciation of this compact shall be by the same authority which executed it, by sending six months' notice in writing of its intention to withdraw from the compact to the other states party hereto. The duties and obligations of a renouncing state under Article VII hereof shall continue as to parolees and probationers residing therein at the time of withdrawal until retaken or finally discharged. Supplementary agreements entered into under Article X hereof shall be subject to renunciation as provided by such supplementary agreements, and shall not be subject to the six months' renunciation notice of the present Article.

"ARTICLE XV—Severability

"That the provisions of this compact shall be severable and if any phrase, clause, sentence or provision of this compact is declared to be contrary to the constitution of any participating state or of the United States or the applicability thereof to any government, agency, person or circumstance is held in-

valid, the validity of the remainder of this compact and the applicability thereof to any government, agency, person or circumstances shall not be affected thereby. If this compact shall be held contrary to the constitution of any state participating therein, the compact shall remain in full force and effect as to the remaining states and in full force and effect as to the state affected as to all severable matters."

(b) The Commissioner may enter into and execute on behalf of the District of Columbia the following additional articles to the Interstate Compact on Juveniles:

"ARTICLE XVI—Additional Provision Relating to Return of Minor Children

"This article shall provide additional remedies, and shall be binding only as among and between those party states which specifically execute the same.

"For the purposes of this article, 'child', as used herein, means any minor within the jurisdictional age limits of any court in the home state.

"When any child is brought before a court of a state of which such child is not a resident, and such state is willing to permit such child's return to the home state of such child, such home state, upon being so advised by the state in which such proceeding is pending, shall immediately institute proceedings to determine the residence and jurisdictional facts as to such child in such home state, and upon finding that such child is in fact a resident of said state and subject to the jurisdiction of the court thereof, shall within five days authorize the return of such child to the home state, and to the parent or custodial agency legally authorized to accept such custody in such home state, and at the expense of such home state, to be paid from such funds as such home state may procure, designate, or provide, prompt action being of the essence.

"ARTICLE XVII—Additional Provision Concerning Interstate Rendition of Juveniles Alleged to be Delinquent

"This article shall provide additional remedies, and shall be binding only as among and between those party states which specifically execute the same.

"All provisions and procedures of Articles V and VI of the Interstate Compact on Juveniles shall be construed to apply to any juvenile charged with being a delinquent by reason of a violation of any criminal law. Any juvenile, charged with being a delinquent by reason of violating any criminal law shall be returned to the requesting state upon a requisition to the state where the juvenile may be found. A petition in such case shall be filed in a court of competent jurisdiction in the requesting state where the violation of criminal law is alleged to have been committed. The petition may be filed regardless of whether the juvenile has left the state before or after the filing of the petition. The requisition described in Article V of the compact shall be forwarded by the judge of the court in which the petition has been filed."

Sec. 3. (a) The Commissioner shall appoint or designate an officer of the government of the District of Columbia (hereafter in this Act referred to as the "compact administrator") to administer the compact. The compact administrator shall serve at the pleasure of the Commissioner.

(b) The compact administrator, acting jointly with like officers of party States, shall promulgate rules and regulations to carry out more effectively the terms of the compact. The compact administrator shall cooperate with all departments, agencies, and officers of the government of the District of Columbia in facilitating the proper administration of the compact or of any supplementary agreement entered into by the compact administrator under subsection (c) of this section.

(c) Subject to the approval of the Commissioner, the compact administrator may enter into supplementary agreements with appropriate State officials for the purpose of administering the compact.

(d) Subject to the approval of the Commissioner, the compact administrator may make or arrange for any payments necessary to discharge any financial obligations imposed upon the District of Columbia by the compact or by any supplementary agreement entered into under subsection (c) of this section.

Sec. 4. The courts, departments, agencies, and officers of the District of Columbia shall enforce the compact and shall take such action as may be necessary to carry out the purposes and intent of the compact which may be within their respective jurisdictions.

Sec. 5. The compact shall not be construed to prohibit the adoption of any other plan or procedure for the District of Columbia for the return of any runaway juvenile.

Sec. 6. The right to alter, amend, or repeal this Act is hereby expressly reserved by the Congress.

The amendment was agreed to.

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

Mr. MANSFIELD. Mr. President, I ask unanimous consent to have printed in the RECORD an excerpt from the report (No. 91-404), explaining the purposes of the measure.

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

PURPOSE OF THE BILL

The purpose of S. 2335 is to authorize the Commissioner of the District of Columbia to enter into the interstate compact on juveniles, under which the District would cooperate fully with the various States in two ways, namely (1) in returning juveniles from the District to those States requesting their return; and (2) in accepting and providing for the return of juveniles who are residents of the District of Columbia and who are found or apprehended in other States.

The bill provides further that the compact will be administered in the District by an official designated by the Commissioner. This will assure the advantages of localizing responsibility and centralizing information.

In the early 1950's, financial and legal problems involving the transportation, supervision, and control of juvenile delinquents between State jurisdictions reached the stage where a need for some form of interstate agreement on the handling of juveniles was apparent.

Virtually all leading spokesmen in the field of juvenile delinquency concurred in the belief that the States should adopt legislation similar to that which already had proved successful for the supervision of adult parolees and probationers—namely, uniform procedures to expedite the return of delinquent and runaway juveniles from other States and to assure proper supervision of a juvenile whose offense was committed and adjudicated in one State but who subsequently was authorized to reside in another State.

In 1954, the National Council of Juvenile Court Judges drafted a preliminary interstate compact on juveniles. Later that same year, the Council of State Governments, assisted by such organizations as the National Probation & Parole Association, the American Public Welfare Association, and the Special Committee on Juvenile Delinquency of the U.S. Senate, drafted the present interstate compact on juveniles.

Final action on this interstate compact was

taken by these and other groups in January of 1955. That same year, 10 State legislatures adopted this compact, and today the compact is law in all but three States. These are New Mexico, Georgia, and South Carolina.

PROVISIONS OF THE COMPACT

This interstate compact, which is now law in 47 States, has provided a uniform nationwide agreement for the disposition of juveniles who leave the State in which they have been found delinquent, and also for the return of runaway youths to their home States. The importance of this is the fact that while the movement of an adult criminal may be controlled by extradition or by the interstate compact for the supervision of parolees and probationers, juvenile delinquents and runaways are subject to neither.

It should be emphasized at this point that this compact neither limits existing legislation for the handling of juveniles nor restricts parental authority in any way.

The four major provisions of the interstate compact on juveniles are as follows:

1. Provision for the return of juvenile absconders and escapees. This corrects the most obvious problem, since as has been mentioned above, extradition applies only to those charged with and convicted of a crime, and not to those found merely to be delinquent. The compact thus remedies this situation by establishing a judicial procedure for the return of delinquent juveniles.

2. Permission for the movement to another member State of a juvenile found delinquent in his home State. The wisdom of this flexible and reciprocal disposition is evident, since a youth found delinquent in one State may be more effectively rehabilitated by returning him to his family or to a job in another State. In this provision, the compact stipulates that the juveniles shall be supervised by parents or guardians, or if agreed upon, by the State receiving the delinquent youth. This provides the member States with much more flexibility in their efforts to rehabilitate juvenile offenders.

3. Provision for the return to their homes in other member States of runaway children who have not been adjudged delinquent. Before the creation and adoption of the compact, this interstate problem of returning runaway children was met by various measures of questionable legality. This provision in the compact, however, establishes a judicial proceeding to determine the status of the youth in question, and provides for the orderly return of the juvenile to his parents appropriate.

4. Authorization of supplementary agreements among the member States for the cooperative treatment and rehabilitation of delinquents. Some juvenile delinquents are faced with particularly difficult problems requiring intensive correctional efforts. By allowing the member States to share their institutions, the compact affords many such juveniles the opportunity to receive more effective care at specialized institutions which can in effect allow for the regional allocation of resources in this effort to provide better rehabilitation of juveniles. Although the committee understands that this provision is not widely utilized, it is our opinion that it does create an important flexibility for correctional authorities.

NEED FOR LEGISLATION

The committee notes that the FBI uniform crime reports continue to indicate an increase in crime throughout the country especially among juveniles. Serious crime increased by 10 percent nationally during the first 3 months of 1969, as compared to the same period in 1968. Any effort to reduce the incidence of crime must include in the opinion of your committee, programs to provide effective control and correction of juvenile offenders.

This view is adequately supported by the ugly facts concerning juvenile crime in the Nation's Capital. Statistics released last April by the District of Columbia juvenile court reveal an increase during the first 3 months of this year in juveniles charged with serious crimes. These included 12 juveniles, three of whom were less than 16 years of age, who were charged with homicide. Seventy-nine were charged with armed robbery during this period. Further, a national report indicates that youths today are committing about one-half of all the serious crimes in the United States.

This situation emphasizes the need for speedy apprehension and swift justice in dealing with these youthful offenders, since the certainty of apprehension is probably the most effective deterrent to crime. During the first 3 months of this year, for example, a total of 305 repeater juveniles were arrested in the District of Columbia while awaiting final disposition of their previous offenses.

Certainly one important step in achieving more effective treatment of juvenile delinquents in the District would be to equip the city's law-enforcement officials with the tools to pursue and arrest juveniles who seek refuge behind jurisdictional boundaries to escape apprehension. This vitally important authority will be provided by the enactment of H.R. 8868, which will result in the District's entering into the interstate compact on juveniles.

The committee is informed that at the present time, the District of Columbia juvenile authorities have little difficulty in having delinquents and runaway juveniles returned from the neighboring States of Virginia and Maryland, because of an informal pact existing among these jurisdictions. However, the District of Columbia does have a serious problem in regard to runaway juveniles. The committee is advised that this city is presently a haven for such runaways, and there is great need for authority to return these juveniles to their homes in New York, New Jersey, North Carolina, and many other States. It is estimated that this use of the compact would involve approximately 50 to 100 juveniles per year in the District of Columbia. This committee was advised also that the compact administrators in other States are highly in favor of the enactment of H.R. 8868, as it will enable them for the first time to deal effectively with the District of Columbia with respect to juvenile refugees, as they can presently do with the other 46 member States.

BILL PASSED OVER

The bill (H.R. 7066) to provide for the establishment of the William Howard Taft National Historical Site, was announced as next in order.

Mr. MANSFIELD. Over, Mr. President. The PRESIDING OFFICER. The bill will be passed over.

RIOTS, CIVIL AND CRIMINAL DISORDERS

The resolution (S. Res. 246) authorizing the printing of additional copies of Senate hearings on "Riots, Civil and Criminal Documents" was considered and agreed to, as follows:

S. RES. 246

Resolved, That there be printed for the use of the Committee on Government Operations two thousand additional copies of part 21 of the hearings before its Permanent Subcommittee on Investigations during the Ninety-first Congress, first session, entitled "Riots, Civil and Criminal Disorders."

Mr. MANSFIELD. Mr. President, I ask unanimous consent to have printed in the RECORD an excerpt from the report (No. 91-407), explaining the purposes of the measure.

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

Senate Resolution 246 would authorize the printing for the use of the Committee on Government Operations of 2,000 additional copies of part 21 of the hearings before its Permanent Subcommittee on Investigations during the 91st Congress, first session, entitled "Riots, Civil and Criminal Disorders."

The printing-cost estimate, supplied by the Public Printer, is as follows:

Printing-cost estimate
2,000 additional copies, at \$469.47
per 1,000..... \$938.94

RIOTS, CIVIL AND CRIMINAL DISORDERS

The resolution (S. Res. 247) authorizing the printing of additional copies of Senate hearings on "Riots, Civil and Criminal Documents" was considered and agreed to, as follows:

S. RES. 247

Resolved, That there be printed for the use of the Committee on Government Operations two thousand additional copies of part 22 of the hearings before its Permanent Subcommittee on Investigations during the Ninety-first Congress, first session, entitled "Riots, Civil and Criminal Disorders."

Mr. MANSFIELD. Mr. President, I ask unanimous consent to have printed in the RECORD an excerpt from the report (No. 91-408), explaining the purposes of the measure.

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

Senate Resolution 247 would authorize the printing for the use of the Committee on Government Operations of 2,000 additional copies of part 22 of the hearings before its Permanent Subcommittee on Investigations during the 91st Congress, first session, entitled "Riots, Civil and Criminal Disorders."

The printing-cost estimate, supplied by the Public Printer, is as follows:

Printing-cost estimate
2,000 additional copies, at \$582.92
per 1,000..... \$1,165.84

RIOTS, CIVIL AND CRIMINAL DISORDERS

The resolution (S. Res. 248) authorizing the printing of additional copies of Senate hearings on "Riots, Civil and Criminal Documents" was considered and agreed to, as follows:

S. RES. 248

Resolved, That there be printed for the use of the Committee on Government Operations two thousand additional copies of part 23 of the hearings before its Permanent Subcommittee on Investigations during the Ninety-first Congress, first session, entitled "Riots, Civil and Criminal Disorders."

Mr. MANSFIELD. Mr. President, I ask unanimous consent to have printed in the RECORD an excerpt from the report (No. 91-409), explaining the purposes of the measure.

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

Senate Resolution 248 would authorize the printing for the use of the Committee on Government Operations of 2,000 additional copies of part 23 of the hearings before its Permanent Subcommittee on Investigations during the 91st Congress, first session, entitled "Riots, Civil and Criminal Disorders."

The printing-cost estimate, supplied by the Public Printer, is as follows:

Printing-cost estimate
2,000 additional copies, at \$316.84
per 1,000..... \$633.68

ECONOMICS OF AGING

The resolution (S. Res. 250) authorizing the printing of additional copies of part 1 of the hearings entitled "Economics of Aging" was considered and agreed to, as follows:

S. RES. 250

Resolved, That there be printed for the use of the Special Committee on Aging two thousand five hundred additional copies of part 1 of its hearings of the current Congress entitled "Economics of Aging."

Mr. MANSFIELD. Mr. President, I ask unanimous consent to have printed in the RECORD an excerpt from the report (No. 91-410), explaining the purposes of the measure.

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

Senate Resolution 250 would authorize the printing for the use of the Special Committee on Aging 2,500 additional copies of part 1 of its hearings of the current Congress entitled "Economics of Aging."

The printing-cost estimate, supplied by the Public Printer, is as follows:

Printing-cost estimate
2,500 additional copies, at \$474.00
per 1,000..... \$1,185.00

THE CAPITOL

The Senate proceeded to consider the concurrent resolution (H. Con. Res. 193) authorizing the printing as a House document of a revised edition of "The Capitol," and providing additional copies which had been reported from the Committee on Rules and Administration, with amendments, in line 5, after the word "that", strike out "four hundred and sixty-nine" and insert "five hundred and seventy-two"; and in line 8, after the word "of", where it appears the second time, strike out "Representatives" and insert "Representatives, one hundred and three thousand shall be for the use of the Senate,"; so as to make the concurrent resolution read:

Resolved by the House of Representatives (the Senate concurring), That there be printed as a House document with illustrations, a revised edition of "The Capitol", compiled under the direction of the Joint Committee on Printing; and that five hundred and seventy-two thousand additional copies shall be printed, of which four hundred and thirty-nine thousand copies shall be for the use of the House of Representatives, one hundred and three thousand shall be for the use of the Senate, and thirty thou-

sand copies shall be for the use of the Joint Committee on Printing.

The amendments were agreed to.

The concurrent resolution (H. Con. Res. 193), as amended, was agreed to.

FEDERAL ASSISTANCE PROGRAMS

The Senate proceeded to consider the concurrent resolution (H. Con. Res. 309) second listing of operating Federal assistance programs compiled during the Roth study which had been reported from the Committee on Rules and Administration, with amendments on page 1, at the beginning of line 7, strike out "ten" and insert "seven"; and, in line 8, after the word "Administration" insert a comma and "three thousand copies shall be for the use of the Senate Committee on Rules and Administration,"; so as to make the concurrent resolution read:

Resolved by the House of Representatives (the Senate concurring), That there shall be printed as a House document a catalog of Federal assistance programs entitled "1969 Listing of Operating Federal Assistance Programs Compiled During the Roth Study", and that twenty thousand eight hundred and forty additional copies shall be printed of which seven thousand copies shall be for the use of the Committee on House Administration, three thousand copies shall be for the use of the Senate Committee on Rules and Administration, eight thousand seven hundred and eighty copies shall be for use of the House of Representatives, and two thousand and sixty copies shall be for the use of the Senate.

SEC. 2. Copies of such document shall be prorated to Members of the House of Representatives and the Senate for a period of sixty days, after which the unused balance shall revert to the respective House and Senate document rooms.

The amendments were agreed to.

The concurrent resolution (H. Con. Res. 309), as amended, was agreed to.

DOROTHY S. ANDERSON

The resolution (S. Res. 258) to pay a gratuity to Dorothy S. Anderson was considered and agreed to, as follows:

S. RES. 258

Resolved, That the Secretary of the Senate hereby is authorized and directed to pay, from the contingent fund of the Senate, to Dorothy S. Anderson, widow of Leeman Anderson, an employee of the Senate at the time of his death, a sum equal to one year's compensation at the rate he was receiving by law at the time of his death, said sum to be considered inclusive of funeral expenses and all other allowances.

LUCIE C. DOWNER AND JANE C. OSTERLOH

The resolution (S. Res. 259) to pay a gratuity to Lucie C. Downer and Jane C. Osterloh was considered and agreed to, as follows:

S. RES. 259

Resolved, That the Secretary of the Senate hereby is authorized and directed to pay, from the contingent fund of the Senate, to Lucie C. Downer and Jane C. Osterloh, sisters of Hugh A. Cunningham, an employee of the Architect of the Capitol assigned to duty in the Senate Office Buildings at the time of his

death, a sum to each equal to three months' compensation at the rate he was receiving by law at the time of his death, said sum to be considered inclusive of funeral expenses and all other allowances.

AN INTERVIEW WITH GEN. F. J. CHESAREK

Mr. MANSFIELD. Mr. President, I have just read the transcript of an interesting interview with Gen. F. J. Chesarek, new commander of the Army Materiel Command and chief of all the Army's research, development, procurement, distribution, and maintenance programs. In this capacity, he is responsible for supervising the annual expenditure of more than \$14 billion. The interview, appearing in the September 6 issue of the *Armed Forces Journal*, is especially timely, coming as it does during the current debate on military procurement.

A principal concern of all Senators in this debate, regardless of their views on specific amendments, has been to insure that full value is received for each defense dollar spent. When asked of his reaction to his new assignment, General Chesarek replied, and I quote:

I accept the challenge to manage better with less; to disprove the criticisms of the press and Congress that we are inept in the management of our affairs.

Concerning his command's relationship with defense contractors, he said:

When they produce for us what we have specified on the schedule agreed upon, and of the quality that we have prescribed, no problems. Whenever quality or the schedule or performance characteristics start to slip, we get pretty hardheaded about it, and that's the way it will continue to be.

Mr. President, I applaud the goal outlined by General Chesarek and wish him every success in achieving it. I also commend the reading of the article to my colleagues and ask unanimous consent that it be printed at this point in the RECORD.

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

A VISIT WITH AMC'S COMMANDER

GEN. F. J. CHESAREK TALKS ABOUT HIS GIANT COMMAND; HOW IT FITS MATERIEL NEEDS TO AVAILABLE FUNDS

JOURNAL. Our first question deals with a recent speech you gave concerning the so-called "military industrial complex." We know how concerned you are about improving the image of AMC as it's seen by the public, by Congress, and within the Army itself. From your remarks we would assume you are also concerned about the image of the military industrial complex as well—there are some who call it the military-industrial-union-university complex . . .

CHESAREK. Formerly known as the arsenal for democracy.

JOURNAL. Right. Here are the questions: (1) Have you in all of your service in the Army ever had occasion to be concerned about the integrity of the dialogue between industry and the Army? (2) What in your view should be done to improve the image of the military industrial complex?

CHESAREK. There is no question in my mind that industry is out to get business. Industry, as a whole, is anxious to fulfill their contractual obligations. They are concerned with their image, too. On the other hand, of course, there is a lot of real competition in

business and so, as the pressures of competition grow, the reaction of industry varies.

I wouldn't say in the vast majority of cases that it's a matter of integrity. I don't question the integrity of our relationship. I think the dialogue between ourselves and our suppliers has been and is a proper dialogue—it's purely professional, purely business—and that's the way it's going to stay.

When they produce for us what we have specified on the schedule agreed upon, and of the quality that we have prescribed, no problems. Whenever quality or the schedule or performance characteristics start to slip, we get pretty hardheaded about it, and that's the way it will continue to be.

JOURNAL. The Cheyenne production cancellation is a good example of that hardheaded attitude. We understand that you have advised Lockheed that they may be in default now on the R&D contract. Could you tell us something more about the background behind the Cheyenne cancellation and something about your own review of the situation as it developed since you assumed command of the Army Materiel Command?

CHESAREK. Well, it's a matter of technical review. In the judgment of the experts in AMC, the likelihood of the contractor meeting the production contract on time with bids meeting the specifications was quite remote, in view of stability and other problems they were encountering. This matter was thoroughly analyzed. First it was reviewed within AMC; then by a special task force set up by the Department of the Army. The Secretary made his decision, giving full consideration to the advice he received.

With respect to the R&D aspect, we are currently negotiating with Lockheed on the contract and I will be frank to admit we have not reached a point where we are ready to sign papers. I could not say at this time that we contemplate a default action. I wouldn't say that this won't happen, but at this time that is not the case.

JOURNAL. Shifting to another subject—budgets and defense costs: Your Command spends over \$14-billion, we believe. There's been an awful big push to cut the defense budget as much as possible. Could you comment on the requirement to build up the depleted inventory after Vietnam—and we might note that Senators Russell (Senator Richard B. Russell (D-Ga.), Chairman of the Senate Appropriations Committee) and Stennis (Senator John C. Stennis (D-Miss), Chairman of the Senate Armed Services Committee) have gone on record that there will be a continuing need for very high defense budgets in the next few years, if only to replace the inventory. Could you give us some specifics on the stock items that are depleted, where we would want to build up the inventory? And could you tell us if you see any possibility of making the further cuts in defense spending some people are talking about?

CHESAREK. Well, you must remember that I have to look at this problem from the level of AMC—the overall problems that Senators Russell and Stennis and others are talking about are beyond my scope of authority. I think the important thing you have to keep in mind with respect to future budgets in the Army is that there is an absolute need to continue to support the modernization and levels of equipment of the forces. We're like car owners: when you've been driving a car around for ten years, it's pretty much a heap of junk. The same thing is true with Army equipment, but worse. When tanks and other vehicles have been around for ten years, they've been driven by innumerable soldiers, many of whom may not have the motivation of keeping those vehicles up in a way that a car owner would maintain his car. So we have a wearout rate which is reasonably predictable, and which must be funded.

In addition to that, you have new systems

which are coming down the R&D pike—and some of these are very important. We have, of course, as has been well advertised, the Main Battle Tank coming in sometime in the '70s—an Armored Scout Vehicle with a new automatic cannon, things which according to the best intelligence we have will be necessary for our forces in the field during the decade of the '70s if we are to stay abreast of our opponents. These are some of the things which should be funded. The biggest chunk of money which the Army expends now is for ammunition. If the level of intensity of combat declines, then obviously the level of ammunition consumption declines. Therefore, ammunition is a barometer of the level of procurement of the Army, but the rest of it relates to our needs—surely we must improve body armor, surely we have to continue our research and development in everything from foodstuffs to gunships. I'm sure the American people wouldn't want to have an army ten years from now equipped with the same material that we fought the Vietnam war with, while our opponents continue to improve their systems.

JOURNAL. What do you consider to be the two or three highest priority developmental items now underway? In terms of new programs about to be launched? For instance, there has been a great amount of interest in the HLH (Heavy Lift Helicopter). Now Congress—at least the Armed Services Committees—seems to strongly disagree with the Army's rationale behind that program. How does the HLH rank against, for instance, the UTTAS (Utility Tactical Transport Aircraft System) or with some of your ground vehicle developmental programs?

CHESAREK. As you know, we in AMC don't set priorities. Priorities are recommended by DA and then go on up the pike. They're reviewed by OSD. I think the importance of fielding an improved gunship is still very much with us. I see nothing that detracts from this requirement. There is also a tremendous interest throughout the Army in the area of surveillance, target acquisition and night observation. This is going to be a big thing in the decade ahead. We've got much work to do with respect to the upgrading of our armored fleet, some of which is pretty old, and we're spending considerable sums in new anti-tank devices and communications. We have, of course, the improved Hawk missile system coming along to replace the old system. We are engaged in product improvements in most of our missile systems that have been with us since the late '50s. This is as you would expect as the state-of-the-art progresses. But all of this takes money, and it takes a setting of priorities.

Also, from a very parochial point of view, I hope to see more money expended on some rather mundane things: depot mechanization, numerically controlled machine tools—this sort of thing—to help reduce the manpower requirements in AMC and make us more efficient.

JOURNAL. That suggests a very heavy and new emphasis on getting hold of the operating costs which to a large extent are the tail that wags the dog in terms of efficiency.

CHESAREK. My big problem is manpower. We are controlled not only by fund constraints but by personnel ceilings. What we have to do is figure out how we can manage better with less, which means we must find out ways to reduce our manpower requirements and still do the job. This means turning to mechanization and automation to a much greater extent. Numerically controlled machine tools give us additional capability to permit the fabrication of parts that we are now buying from vendors and to determine what the actual cost is or should be.

JOURNAL. Is your objective simply to get more with the manpower you have available, or do you have some tentative goal to reduce AMC manpower requirements?

CHESAREK. Let me answer that rather obliquely. The AMC manpower level today is less than it was in 1962 when AMC was established. In the meantime, the tonnage handled, if you want to use a rough measure, has doubled. Now obviously there isn't a lot of room for maneuver in a situation like that unless you can inject a major mechanization program or unless your work processing procedures can be automated to a considerable extent. We hope to hold the line at our present manpower levels. We would naturally like to have more people to take some of the pressure off the great problems in manpower adjustment which are acute throughout a command as diverse as this one. I'm not looking forward to any additional arbitrary manpower cuts, although these may well come to pass.

JOURNAL. General Chesarek, can you tell us a bit about your philosophy in reorganizing the Project Manager organization since you assumed command? I understand you've reduced the number of Project Managers from 69 to 49.

CHESAREK. 67 to 49.

JOURNAL. One of the things about this that is of very great interest is that there has been much vocal criticism within Congress about the Project Manager system. For instance, the Stratton subcommittee, a House Armed Services Subcommittee headed by Representative Samuel S. Stratton (D-NY) had some criticism about the Project Managers having perhaps too much authority. They said this in a report they recently issued on one of your programs, the M-551 Sheridan. And yet we sense from the Office of the Secretary of Defense the very real concern that it is time to give the Project Managers more authority and to keep them in their jobs for a longer period of time so there won't be this tremendous turnover problem.

CHESAREK. I think you realize that in discussing Project Managers there are certain rules to which we must adhere. OSD has specified that any project whose R&D costs exceed \$25-million and whose PEMA cost exceeds \$100-million will be project-managed.

I believe in Project Management. I think it is a helluva good way of doing business in handling my major systems. But it's intended to be a special form of management to treat things of special importance, either dollarwise or operationswise. Obviously, if everything is project-managed, in effect nothing is project-managed and it becomes a routine operation. Now, what's happened over the past has been that, because of the impetus of Vietnam and the urgencies that were created by a combat theater, we have projects which were continued under special management but which, according to the book and according to management doctrine, could have been discontinued and placed under functional management or product management. So what we are doing now is looking at the whole gamut. The first cut in project managers was quite simple. There were a number of such systems that have been around for four or five years or longer. Now that we've entered an era of consolidation within AMC, since the pressures of the war have leveled off, somewhat, we have an opportunity to take a new reading. We consolidated a number of project managers, and cut out others. I have just received a study from AMETA (Army Management Engineering Training Agency) at Rock Island which proposes that we decentralize most project managers by having them report to the commodity commanders.

This is, I think, in line with the general trend toward decentralization. Certainly it's in line with my thinking. It reduces my span of control and makes most project managers responsible to the commodity managers, who control the technical base.

JOURNAL. Was the AMETA study the Phase II of the project managers study?

CHESAREK. That's right. We are now study-

ing the report. But I want to repeat again that project management is a very important thing, a very important tool. What we would like to have would be considerably fewer project managers—but on the real key programs—to give those project managers the tools they need to manage their projects adequately. We are developing a good management information system to help them. We will standardize this management information system to the extent possible and then, very importantly, the review authorities should live on the data which is considered sufficient for the project manager rather than have all kinds of data requirements pouring in on the project manager from on top—stuff which he really doesn't need but which somebody else thinks would be nice to have, but which adds substantially to his workload.

JOURNAL. Could you give us an example of some recent programs—if your studies show it—which indicate how much time some of the project managers have had to invest in answering questions from higher authorities on items which aren't all that important to the program being managed?

CHESAREK. We probably have some data, but I don't believe the figures would stand up to your form of analysis, or to mine either. They just indicate there's a considerable amount of paperwork imposed on project managers by every echelon right up and down the line.

JOURNAL. Do you think you can get your ideas cleared—or have you already obtained—the approval of the Army Secretariat, the Army Staff, and the Office of the Secretary of Defense to let project managers manage their programs along the lines you suggested?

CHESAREK. This has been a topic of discussion with the top defense people, and I believe this is the way they see things, quite apart from my own viewpoint.

JOURNAL. All of the Services are in on that?

CHESAREK. All the Services. This is a joint problem, and OSD's treating it as such.

JOURNAL. How does a project manager assignment impact on an officer's normal career pattern? In other words, to manage a project most efficiently you want to have an officer in the job as long as possible, and yet this doesn't always look too good on an officer's record. How do you handle this problem?

CHESAREK. I'm glad you asked that question—it's a real key point. There is a need to develop a training base for people who are considered to be potential top logisticians. That training base is the corps of project managers, plus the depot commanders. Now, the project manager gets the most varied logistical training that anyone could hope for. He's involved in research, development, production, procurement, training, distribution, support—the whole bit. He's got the program, he's responsible for it. Furthermore, he has an integrative responsibility to tie all these things together. What better training can a logistician receive? The people appointed to those jobs should be the best people in the Army who have evidenced a desire to be in the logistics career program.

I would say a three-year tour for a project manager is sufficient. In most instances he will not see his project through in that time, but on the other hand, you can't keep a man there forever. As a project manager an officer stands in an excellent position to move to the next echelon—preferably to be promoted into the general officer corps, where he could become a deputy commodity commander or a principal staff officer on the higher staffs, and so forth, and from those jobs he can move to a commodity command. Those people also should be in their jobs for about three years, and should be young enough when they assume their positions to have enough longevity to be competitors for the top jobs, top logistics jobs.

JOURNAL. Does DCSPER agree with that approach? Don't they want to move officers

about more often, rotate them into other jobs?

CHESAREK. I think DCSPER is very sympathetic. Their problem is to meet high priority requirements worldwide, and this poses a real difficulty when you consider all the constraints DCSPER has in respect to the movement of people.

JOURNAL. Your philosophy apparently is very much like Admiral Rickover's (VAdm H. G. Rickover, Director of the Navy's Nuclear Propulsion Program). He wants to keep his technically qualified people in their jobs a lot longer than the overall Navy career pattern permits . . .

CHESAREK. I might add to this dissertation on project managers that this also applies to the key depot commands. There's longevity problem there too because those people are running a big maintenance program. They're running a supply operation, and an installation. They are involved in professional management and many other things. They too form a part of this corps at the base of the senior logistics development program.

JOURNAL. Could you address the topic of maintenance in a little more detail? You said in a recent speech that maintenance is getting to be more and more important, but maintenance doesn't seem to be looked upon by most officers as a really good job to get into. As a matter of fact, you're quoted as saying that the Army has to get more people interested in a maintenance career. If we're not misquoting you, what is being done to make a maintenance career more attractive? Take a Corps of Engineers MOS 3880, for example: If a chap really goes into it, what are his chances of going up the ladder? How many career officers do you have in maintenance MOSs today? Do you really think that you can bring more officers into that field?

CHESAREK. Maintenance is not a function within the Army which is looked upon as an entity unto itself. An officer doesn't say, "I am a maintainer or my functional thrust is maintenance, period." We attempt through practical application and through our school systems to train officers and NCOs in maintenance, and I think we have been reasonably successful. The big problem is that the nature of modern equipment is such that it requires an unusual amount of complex maintenance, and the training time required to train people to take care of this equipment continues to grow. This means that the payback, especially in the enlisted ranks—the average fellow we have is a short-termer—is not great.

I think the Army could do more to strengthen the desirability of maintenance as an element in the career ladder for combat arms as well as technical people, rather than as a separate career unto itself.

JOURNAL. Now could we ask a few questions about four of your command's agencies and arsenals? What is the status of the Frankford Arsenal closing? Where do you stand on it? Is it true that the Army now considers the closing as a dead issue?

CHESAREK. I should review a little history before giving you a definitive answer. As you may recall, Secretary Laird commented, with the concurrence of the Service Secretaries, that he was closing and consolidating a number of facilities and activities. One of those he spoke about was the R&D facility at Frankford. The Pennsylvania Congressional Delegation then had a meeting with Dr. Foster. This resulted in the delegation's promise to submit an alternate proposal. The order from Secretary Laird stated that the R&D facilities in question would be closed over a time span stretching to 1973. That order still stands.

I went to Frankford—for two reasons: (1) I had never been there before and it's an important element of my command; and (2) I wanted to review the status of the Frankford plans. The people in Frankford are proceeding to plan for the execution of the

Secretary's orders, but they have been directed to take no action to implement any aspect of the plan until they receive specific orders to do so. I do not know, at this time, whether the Pennsylvania delegation has provided Dr. Foster with an alternate plan. I assume that the ball is in their court. I don't know what they may propose—I wouldn't even venture a guess. So that's where the matter stands.

JOURNAL. Is it AMC's view that the R&D activity at Frankford should be closed?

CHESAREK. About 3 or 4 years ago AMC submitted its 10-year laboratory plan, which looked at all of its laboratories. The plan called for the establishment of laboratory centers, centers of excellence. In order to do that, it was proposed that the elements of the labs at Frankford be transferred to other locations and consolidated with appropriate functions. One of these elements—fire control—was not provided a specific location. That study—the 10-year laboratory plan—is currently being updated. In view of projected Congressional cuts in research and development appropriation and associated construction, we may have to seek an alternative solution to the center concept; one which would achieve the same ends as the center concept, namely efficiency of operations and economy of personnel and facilities.

JOURNAL. Could you tell us when you expect the update to be finished, sir?

CHESAREK. The study is still in progress. It should be integrated with the Army's long-range installation planning.

JOURNAL. If, as you say, fire control still is apparently without a home, might that be a possible means to help to salvage Frankford?

CHESAREK. I didn't say it is without a home. We have Rock Island, Redstone and Monmouth which could be its home. We have other laboratories which qualify. The only thing I said was the plan didn't specifically dictate its new home.

JOURNAL. Can we talk about the Aviation Research Center in St. Louis for just a few minutes? A few weeks ago General Jack Norton (AVSCOM Commander), said that it was his view that if the Army had better in-house aviation R&D capability there would have been earlier visibility on the Cheyenne rotor stability problems, and you might have been a step ahead of the problem. What is the status of bringing that center into being, and what do you propose to do with the AVLABS facility at Fort Eustis?

CHESAREK. The plan for an air mobility center, along with several attractive alternatives, is currently receiving a great deal of attention.

We are looking at a number of alternatives, because the cost of creating this sort of thing is substantial. As this is obviously of considerable interest to members of the Congress and to others, it would be inappropriate to describe the alternatives to the press at this point in time, before they have been presented to my superiors.

JOURNAL. Could you tell us how long you expect it will be before AMC will have a specific proposal for review by the Chief of Staff and the Secretary of the Army?

CHESAREK. Everything is tied to the budget cycle, as you well know. If you want something funded in Fiscal '71 it's got to be proposed and have an opportunity to be reviewed by the various echelons so it can be inserted in the budget. That gives you a good clue on the time element.

JOURNAL. Could we talk about the Gateway plant in St. Louis for a bit? Has it really produced anything significant yet? Could you comment on press reports that the union there is controlled by the Mafia? Is it true that the problems there are costing Chrysler \$800,000 a month?

CHESAREK. We contracted with Chrysler to run the plant. The Army's job was to fix up the plant so that it could produce, and that was handled by the Corps of Engineers. The

plant was turned over to Chrysler some months ago. Since then it has not met production schedules. Just recently the Army issued a cure notice to Chrysler indicating our dissatisfaction with the rate of production and asking them to tell us how they propose to get well and fulfill the contract. I am not cognizant of Chrysler's problems with their union. The plant is operating. I might add that this is a difficult shell to produce, technically speaking.

JOURNAL. I think that's something that really has not been brought out to the press before they made it sound pretty much like a total default.

CHESAREK. We have a contractual arrangement with the producer on an item. At this time it isn't being produced on schedule. As I mentioned earlier in this interview, we intend to do something about it, and have done so.

JOURNAL. We have a question about TECOM (Test and Evaluation Command): Do you feel it proper that the Test and Evaluation Command should report to the Commanding General of the agency responsible for producing the equipment to user specifications?

CHESAREK. This subject has been studied many times. Each time the decision was made it should stay with AMC. The vast bulk of the testing that TECOM does is for the commodity commands, for their own internal purposes. The tests which are conducted to determine whether an item is or is not suitable for issue to troops are treated completely objectively. The test plan is checked out by the user, checked out by the developer, and it proceeds on that basis. Whatever the conclusions reached, the TECOM commander sends his report to me. I have no authority to change it. I can comment on it, but not change it. It goes to DA without modification. As far as I am concerned the system works very well, and I have not heard of any complaints on TECOM's objectivity. As the vast bulk of the work that TECOM does is under me, the present management accommodates all concerned. You can't have two TECOMs. How many test ranges can you afford? It's an expensive business. The fact that we do sometimes have differences of opinion between developer and user attests to the fact that the present system is working here.

JOURNAL. Lieutenant General Miley said in recent testimony before Congress that it would cost \$6.2-billion over the next several years to arm the South Vietnamese military. Reportedly there may be a requirement to speed up the arming of South Vietnam. How could you speed up the process if the order is given? Could you get us some specifics on the various types of weapons and the quantities of each we'd be supplying to South Vietnam?

CHESAREK. It's difficult to address the dollar value of any requirement to arm the ARVN. First of all, you have to lay down a definition of the requirement. Is this just equipment in the hands of troops, or does it include depot stocks to support the force for x years; does it include pipelines? There are all kinds of elements to be decided. How much ammunition will be included in the requirement and for what period of time? That determination alone might take up a big chunk of this dollar value.

We have been engaged for the past year in a major effort to speed up the flow of materials to the ARVN and have done so. Goals have been established in conjunction with General Abrams, CINCPAC, the Joint Chiefs of Staff. We are knocking ourselves out to meet the schedules. If we can't make an item available by procurement acceleration, overhaul, redistribution, or any other means, we then recommend to the Army staff the next best schedule, and this is negotiated with the staff at MACV. To date, I think, our performance has been very good. I can't give you any numbers on the equipment which has been sent over there, or which

will be sent—the info is classified. But I can say that the totals are substantial and that the program, if any, is ahead of schedule. I might note that the program covers a wide variety of equipment, and very good equipment.

JOURNAL. General Chesarek, what are you enjoying most about your new job?

CHESAREK. This is a very challenging job. I have reorganized the headquarters to reduce and streamline my span of control. This gives me more time to think. I have established deputies oriented toward the various aspects of work with which we deal. The deputy for laboratories, for example, is my principal point of contact with the scientific community. The deputy for materiel acquisition is oriented toward industry. The deputy for logistics support faces the Army in the field. My principal deputy acts as my resource manager. The reorganization at the top has been in effect for about a month and a half, now, and I think it is showing great promise. It has made possible an effective means of operation.

What have I enjoyed most? I guess it's just the challenge of the whole thing. I accept the challenge to manage better with less; to disprove the criticisms of the press and Congress that we are inept in the management of our affairs. I believe that quite the contrary is true. Of course we make mistakes. We deal in situations that are usually crisis-oriented. We have to respond to circumstances outside our control. In my opinion, over 90% or more of what goes on with respect to our research program, engineering, procurement, distribution, support of the forces, is better than anything that has ever been done before in the history of this country. Unfortunately, our achievements are seldom advertised in the headlines. What I would like to see is a balanced appraisal, and in this I have full confidence.

JOURNAL. Can we ask the converse of the last question: what part of the job do you enjoy least? In other words, what's the most difficult and the most frustrating part of the job?

CHESAREK. I wouldn't like to classify anything about the job as something I enjoy least. I think the most difficult part of the job is to get at the procedures and controls necessary to make this machine work right, because to do this you've really got to go into the nuts and bolts and get some dirt under your fingernails and understand all the ramifications of the life cycle of material management.

JOURNAL. There's been so much in the press, and so much said in Congress, about the things that go wrong in the Army, about DOD's management of the military, about cost overruns especially. But you've talked about getting tough with contractors, and I think you could put some real meat behind that powerful statement by giving us some information that's not always been played up in the press, and perhaps not always noticed by the Congress. For example, I'm sure that within AMC you have a number of major programs as well as some small programs in which the contractor, in effect, hasn't racked you with cost overruns but has taken a bath, so to speak, to live up to his commitment.

CHESAREK. A good example? The Hughes Tool Co. and the LOH (Light Observation Helicopter). Hughes gave us an extremely favorable price, produced the quantity of aircraft in the contract, reasonably on time, in accordance with specifications, and at a price that we'll never see again. No doubt at considerable loss to the company.

Coming back to your point on overruns: what the public really doesn't understand, nor have we explained it properly, is how many overruns occur. Many of them are changes in scope as we move along the R&D cycle. We start off with the QMR (Qualitative Material Requirement). In the process of

inventing various things, however, opportunities develop where we can get a helluva lot more capability if we add this or change that. So changes in scope are approved. You end up with a better product. This, then, is charged, insofar as the public is concerned, as a cost overrun. Actually, what we've done is created something different than that which we initially contracted for, and naturally this has to be paid for.

Getting back again to your point. There's a lot that can be done. Yes, you're right. What we should do in instances such as those where we change scope is to make known the fact that we have changed the scope and either rename it or designate it in some fashion to indicate that it isn't the same product we started out with.

AMC'S COST UNDERRUNS

Over the past several years AMC cites several instances in which contractors recorded substantial savings to the government. One is the Redeye Weapons System developed by General Dynamics, Pomona, California. During the period October 1963 to January 1969, the contractor recorded savings to the government of \$314,208 on a \$22,588,979 operational systems development contract for Redeye and a savings of \$593,452 on a \$21.9-million engineering services contract for the same system.

Others recording cost underruns include: Hughes Aircraft Company, Communications Division, Fullerton, Calif., with a savings of \$118,512 on a \$10,151,024 limited production contract for Satellite Communications Link Terminal AN/MS-46 running from February 1966 to March 1968.

Raytheon Company, Missile Systems Division, Bedford, Mass., with an underrun of \$16,146 on a \$4.4-million operational systems development contract for the Self-Propelled Hawk Missile System over the period August 1965 to September 1967.

Sperry Rand Corp., UNIVAC, Salt Lake City saved the government \$74,310 on a \$3,992,819 operational systems development contract running from March 1966 to September 1968 for the Sergeant Guided Missile System, Artillery.

International Telephone and Telegraph Corporation, ITT Electron Tube Division, Easton, Pa., recorded an underrun of \$70,712 on a \$9,643,398 production contract running from May 1966 to June 1968 for the Night Vision—Image Intensifier Assembly 25mm.

S. 2919, S. 2920, AND S. 2921—GOODELL CRIME CONTROL PROGRAM: INTRODUCTION OF BILLS ON CORRECTIONS REFORM, PREVENTIVE DETENTION, AND DRUG ABUSE PREVENTION AND TREATMENT

Mr. GOODELL. Mr. President, the political battle cry of "law and order" still sounds throughout the Nation. The complexities and the mighty delusions inherent to this issue have confused and blinded many of us. While the public mood reflects a brooding concern over disorder and violence, our public leadership has not responded with the courage, the commitment and the insight demanded by the profound gravity of this problem.

We still hear incessantly that we must get tougher on criminals, that our response to the offender must be in terms of longer sentences and repressive measures, that the priority answer to the problem is more nightsticks and less coddling.

Mr. President, the fact is that the integrity of the entire criminal justice system in this country has been called

into question. The system is archaic and in chaos.

The fact is that our system is not committed to an enlightened administration of justice. It is more repressive and yet less effective than that of any other Western nation.

The fact is that correctional institutions do not "correct," and our prisons are a disgrace to any civilized society. Their most consistent achievement is the tempering and shaping of inmates into finely honed weapons, which one day will be turned against society.

The fact is that our public response to the problem of narcotics and drug abuse has been misguided, inhumane, and ineffectual. Despite the crime and human wreckage that grow out of the limitless appetite of the narcotic addict, our laws and rehabilitation services are unrealistic and totally inadequate.

The fact is that our courts are paralyzed. Our police are overextended. The vital collateral services which are at the heart of the criminal justice system—prosecution, legal aid, probation, parole, corrections—are virtually bankrupt in terms of manpower and financial resources.

What do we know about crime in the United States in 1969? We know that we are in a period of sharply increasing crime.

We know that the alarming increase in juvenile delinquency and youth crime has caused financial and social costs which are incalculable.

We know that recidivism stands at 60 to 70 percent and that the longer a man spends in prison, the less likely he is to rejoin peacefully and productively our highly diverse and demanding society.

We know that it costs less than \$1,500 a year to keep a man vegetating in a penal institution, while it may cost more than \$6,000 a year to keep him in a comprehensive rehabilitation program.

We know that our cities have grown out of control and that the people of the city are compressed and set upon. Their sick, indigent, deviants, socially deprived and aged make demands; their slums spread; their frustration breeds disrespect for the law; their pursuit of happiness is frustrated in a rapidly shrinking labor market. Here are concrete problems of law enforcement related to population density, city size, and the complex of work and living facilities within the city. Here, unmistakably, are violence and fearplugging and shaping the way of life of a victim community.

While recognizing that crime is justifiably a matter of national concern, we must also recognize that it is not a cause for panic.

While recognizing that there are violence prone, hardened criminals from whom society must be insulated and protected, we must also recognize that it is much too simple to talk about being "tough" and being "soft" on criminals. We must discriminate in terms of the possibility of meaningful correctional and rehabilitation efforts.

The enactment by Congress last year of the Omnibus Crime Control and Safe Streets Act and the Juvenile Delinquency Prevention and Control Act marked the first step in the reform of our criminal

justice system. Unfortunately, however, neither effort is comprehensive in its approach to the problem, and neither is adequately funded. Nowhere is the crucial problem of narcotic addiction even addressed.

The initial efforts under the Omnibus Crime Act have placed disproportionate emphasis on aid to the police component of criminal justice and on programs for the prevention and control of riots. While these needs are important, we must now turn decisively to the question of causes and the complexities of prevention and rehabilitation.

We must act to commit the governments and the people of this country in a new effort to establish priorities for this undertaking. We must act to start the process of genuine reform.

I am today introducing three bills designed to promote and facilitate that reform. These bills address the most urgent aspects of our multifaceted crime problem—corrections reforms, the reduction of the level of violent crime in the streets of the Nation, and narcotic addiction.

The first, in summary, commits us to the proposition that correctional rehabilitation really ought to be tried after all. It provides for innovative programs of vocational training and job placement for criminal and youth offenders. It also provides for modernization and construction of corrections facilities, correctional education services, and the development of trained manpower for our corrections systems. It establishes regional crime and delinquency centers and a national criminal justice professions recruitment program.

The second provides, with tightly drawn procedural safeguards, for the preventive detention of certain recidivist offenders who commit crimes of violence while free on bail, probation, or parole.

The third seeks to commit the resources of the Federal Government to treatment and prevention of narcotic addiction. Particular emphasis is given to the need for community based after care services. The need for comprehensive drug abuse education and prevention programs is also recognized.

S. 2919. THE CRIMINAL OFFENDER REHABILITATION AND CRIME PREVENTION ACT OF 1969

"The Criminal Offender Rehabilitation and Crime Prevention Act of 1969," would authorize broad assistance to State and local criminal justice systems, by creating a new corrections reform program in the Department of Health, Education, and Welfare, with particular emphasis upon the problems of juvenile delinquents and youth offenders. New authorities are given to the Attorney General and the Law Enforcement Assistance Administration. Specific provisions for consultation and broad coordination of all Federal programs in this area are spelled out in detail.

Title I of the bill would provide a \$315 million 4-year program for the improvement of State and local corrections services. Although the need for a wide variety of effective vocational training and job placement programs to break the cycle of poverty is well known, there is a particular urgency for action involving such programs for criminal offenders.

Title I would mobilize public and private resources to insure that convicted offenders and juvenile delinquents leaving correctional institutions, who want employment above the dishwasher level, as mechanics, key punchers, or clerk typists could qualify for, find, and keep such jobs.

Comprehensive corrections rehabilitation boards would be created in each State to prepare and administer a comprehensive coordinated, statewide program for the improvement of State and local corrections systems. Priority programs to be funded under this bill are established as follows:

First, programs directed toward the rehabilitation of adjudicated juvenile delinquents and youth offenders, and adult offenders who have been convicted of not more than one serious criminal offense;

Second, institutional and on-the-job occupational training; placement, where feasible, in governmental public service agencies, including the State corrections system; and placement in private non-profit public service organizations and in private industry;

Third, incentives to public and private employers who hire adjudicated delinquents and offenders, including reimbursement for a limited period when such newly hired employees might not be fully productive;

Fourth, on-the-job counseling, testing, work evaluation and adjustment, and followup services;

Fifth, programs in State departments of education and in public and private institutions of higher learning to develop and expand teacher preparation programs and curricula for the instruction in basic and secondary education of juvenile delinquents, and youth and adult offenders;

Sixth, recruitment and training of professional and subprofessional diagnostic and treatment staff personnel for corrections systems.

The bill authorizes the utilization of private, profitmaking organizations to provide such services, provided that such organizations determine the need in the community for particular job skills, provide an approved course of training in a job area for which there is a demonstrated demand, and provide for the job placement of such individuals.

Title II seeks to alleviate the critical manpower shortage in American corrections and encourage the use of rehabilitated offenders in subprofessional capacities within the system. The concept of using the products of a problem to help solve the problem is not a new one. Innovative programs of narcotic and alcoholic rehabilitation, using ex addicts and ex alcoholics, have effectively demonstrated the value of this approach.

This title would also establish and support a national network of regional crime and delinquency centers which would serve as training institutions for students and practitioners of criminal justice, centralized channels for recruitment of criminal justice personnel, consultation centers for criminal justice agencies and relevant professional schools, and research centers for basic and applied studies of criminal justice.

The professional staff of such centers would be composed of persons drawn both from the academic community—primarily in the fields of law, clinical psychology, psychiatry, social work, and public administration—and from the practicing agencies of criminal justice.

The bill would provide increased academic assistance for corrections systems professional personnel by amending the Omnibus Crime Act. It proposes a 5-year, \$105 million authorization to provide such assistance. Not less than 25 percent of the funds would be required to be utilized for study in subjects related to professional diagnostic and treatment services.

Title II would also provide for the creation of a Presidential Advisory Council on Criminal Justice Professions Development. It would require an annual assessment of criminal justice manpower needs by the Attorney General. And it would authorize a national criminal justice professions recruitment program.

Corrections education is another area which is in dire need of new initiatives as a tactical necessity in achieving the longer range strategic objectives of correctional rehabilitation. Title III of my bill would provide for the training and utilization of specially trained teachers for use in correctional institutions and in delinquency intervention programs in the local community.

The Education Professions Development Act of 1967 would be amended to allow the Teacher Corps to carry on, on a fully funded basis, a program in this area which it is successfully conducting on a demonstration basis at the present time. The title also provides for research and demonstration projects in corrections education services.

Title IV provides for coordination by the chief executive of the State of all activities of State planning agencies working in the area of crime control, offender rehabilitation and juvenile delinquency control under and pursuant to various Federal laws. Provisions for extensive coordination at the Federal level are also set forth.

In addition, it provides for the creation of an Office of Technical Assistance for Crime and Delinquency Prevention in the Department of Health, Education, and Welfare, which would aid and advise States in establishing and organizing planning agencies, prepare model State plans, and propose comprehensive goals.

Title V provides a 4-year \$280 million program of assistance to the States for the renovation and construction of modern correctional rehabilitation facilities. Criteria would be established by the Attorney General after consultation with the Secretary of Health, Education, and Welfare. The planning agencies operating in each State pursuant to the Omnibus Crime Act would prepare and execute a plan for the modernization of existing facilities and the construction of new corrections and detention facilities throughout the State.

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

The bill (S. 2919) to assist State and local criminal justice systems in the rehabilitation of criminal and youth offenders, and the prevention of juvenile

delinquency and criminal recidivism, by providing for innovative programs of vocational training, job placement, counseling, correctional education services, corrections systems manpower acquisition, the establishment of regional Crime and Delinquency Centers, a national criminal justice professions recruitment program, and for other purposes, introduced by Mr. GOODELL, was received, read twice by its title, and referred to the Committee on the Judiciary.

S. 2920. PREVENTIVE DETENTION ACT

Mr. GOODELL. Mr. President, the Preventive Detention Act seeks to lower the level of violent crime by authorizing the pretrial detention in Federal court of certain repeat criminal offenders, who may be considered to be dangerous to the community-at-large.

Like so many issues in the administration of criminal justice, the subject of preventive detention is charged with emotion. There is wide disagreement as to its advisability as a matter of policy and as to its constitutionality.

My proposal is both constitutional and advisable, in view of a demonstrated challenge to the public safety by many repeat offenders who commit violent crimes while on bail, probation or parole. In this situation the law should be broad enough, and sensible enough to protect the larger and quite legitimate interest of society as a whole.

It has been stated that any preventive detention provision cannot be reconciled with the defendant's right to the presumption of innocence. In fact, the presumption of innocence of an accused accrues in the courtroom at the time of trial. This is not to say that the presumption is only a presumption of going forward with the evidence. If the presumption remains inviolate at trial, its full purpose is served. There is not presumption of innocence during the pretrial process of bringing a defendant to trial. The very fact that we have always permitted pretrial detention to prevent escape of a defendant pending trial indicates that the presumption of innocence accrues at the time of trial and is not necessarily violated by pretrial detention.

The public is properly outraged that today the law cannot operate to detain this category of repeat offenders who, by any standard of common sense, poses a very serious danger to the community in which he lives. And of course, that community is usually a ghetto community where most crime goes unreported. My bill would accomplish these purposes without violating the rights of an accused.

The bill would authorize, with carefully drawn safeguards, the preventive detention of persons who have been admitted to bail or placed on probation or parole, and charged or convicted as the case may be, with a particular kind of felony and who, during such period, are charged with a second felony of the same kind.

Both charges must be felony offenses "involving the use of a dangerous weapon or deadly physical force resulting in serious bodily injury to another." The operative elements of this key phrase are statutorily defined.

In my bill, the issue of pretrial detention must be resolved, by a three-judge panel of the U.S. District Court. Also, the bill gives the court authority, in lieu of imposing detention, to impose conditions upon the release of the defendant, including a condition requiring him to return to custody after hours.

My bill also deals with the first offender who is charged with a felony offense "involving the use of a dangerous weapon or deadly physical force resulting in bodily injury to another." While pretrial detention is not authorized in the bill in this situation, there are conditions which may be imposed upon the release of the person charged, including a requirement that he report to a probation or parole officer or a U.S. marshal not more than once every 24 hours, disclosing his activities, whereabouts, associations, conduct, travel, and place of abode during the pretrial period.

The bill sets out appellate procedures, mandatory penalties for bail jumping and creates an additional offense for committing an offense while on release.

The bill specifically requires civil commitment of persons detained pursuant to this statute, and provides that the detention order expires within 30 days, with authority for a 10-day extension, for good cause shown. It recognizes the principle that such persons must be guaranteed an expedited preference for trial.

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

The bill (S. 2920) to amend the Bail Reform Act of 1966 to authorize consideration of danger to the community in setting conditions of release, to provide for pretrial detention of dangerous persons, and for other purposes, introduced by Mr. GOODELL, was received, read twice by its title, and referred to the Committee on the Judiciary.

S. 2921. DRUG ABUSE SERVICES AND MARIHUANA STUDY ACT OF 1969

Mr. GOODELL. Mr. President, recognizing that there is a clear and demonstrable relationship between narcotics addiction and the high incidence of crime, I am also introducing legislation today designed to require the Federal Government to assume the responsibilities in this area which it has for so long evaded.

My third bill, "The Drug Abuse Services and Marihuana Study Act of 1969," would provide a 5-year \$350 million program to assist States, units of local government, and nonprofit, private organizations in the prevention and treatment of drug abuse and the rehabilitation of drug addicts.

It would provide for a comprehensive program within each State designed to meet the costs of constructing, equipping, and operating treatment and rehabilitation facilities, including post-hospitalization and after care neighborhood rehabilitation centers for narcotic addicts.

Provision is made for the recruitment, training, and utilization of "community narcotic prevention and rehabilitation officers" to serve with and under the di-

rection of professional medical, psychiatric and social welfare personnel in narcotic addiction treatment and rehabilitation programs. I believe that it has been demonstrated beyond question that former addicts can and must play a major role in narcotic rehabilitation programs of all kinds.

The bill will also authorize the funding of programs for the prevention and treatment of drug abuse and the rehabilitation of narcotic addicts in correctional and penal institutions. In cooperation with schools, law-enforcement agencies, courts, and other public and private agencies, special efforts should be made to assist such programs aimed at juveniles, youth offenders, and young adults.

A comprehensive program of this type would also provide services for outpatient counseling of former narcotic addicts—including employment, welfare, legal, education, and referral assistance—in cooperation and coordination with the welfare and rehabilitation departments of local political subdivisions within the State.

It would, in addition, establish enlightened, comprehensive programs of public education about the prevention of drug abuse and narcotic addiction. My bill would commit the Federal Government to a major role in meeting these pressing needs.

The use and abuse of marihuana and the stringent criminal penalties applicable to violations of laws governing its possession and use present a special problem.

Some authorities say that 50 percent of college students have tried marihuana at least once. Dr. James L. Goddard, former head of the Food and Drug Administration, has stated that 400,000 Americans may be using it regularly. We must clear away the haze of misconception and establish, once and for all, the facts about the dangers inherent to marihuana use and abuse.

My bill creates a Marihuana Study Commission for this purpose. The Commission would be composed only of persons with experience in the medical, mental health, and social problems attendant to marihuana use. It would be located in the Office of the Assistant Secretary of Health, Education, and Welfare for Health and Scientific Affairs. It would make a full study and report in 18 months of marihuana use and especially on the physiological and psychological effects of infrequent, temporary, and long-term marihuana use.

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

The bill (S. 2921) to assist State and municipal governments and nonprofit, private organizations in providing for the development of programs and the construction, maintenance, operation, and staffing of facilities for the prevention, treatment, and rehabilitation of drug addicts, and in reducing the incidence of crime and delinquency related to narcotic drug addiction and drug abuse, and for other purposes, introduced by Mr. GOODELL (for himself, Mr. Case, Mr. GRAVEL, Mr. HOLLINGS, Mr. INOUE, Mr.

JAVITS, Mr. METCALF, Mr. MILLER, Mr. NELSON, and Mr. PERCY) was received, read twice by its title, and referred to the Committee on Labor and Public Welfare.

Mr. GOODELL. Mr. President, the choice before the American people on the issue of crime, is to make either sound, reasoned judgments; or decisions based on emotion, misinformation, and slogan. The first course is difficult and frustrating, but the second is dangerous and dishonest.

These three bills or any other legislation are not the whole answer. These issues are the logical outgrowth of dramatic change in our society which must be confronted in a larger sense, by the Congress, the States, our local communities, and the people themselves.

A poet once wrote, "there are a thousand hacking at the branches of evil to one who is striking at the root."

The root of the crime problem is growing through the foundation of our society. I call upon the Congress today to strike at it, to cut it back, and to help build a new, more rational, and more civilized social order by seriously committing us to the rebuilding and reorienting of our criminal justice institutions in America.

ROCKY MARCIANO

Mr. DODD. Mr. President, earlier this month Rocky Marciano was laid to rest after a tragic plane crash in Iowa claimed his life.

I am deeply saddened by the loss of this man, who was a hero to millions throughout the world.

Rocky Marciano was a fighter whose success was nonpareil. He climbed through the ropes 49 times and emerged each time wearing the victor's laurel, having won in a style that was never elegant or classic, but always courageous.

He was a gentle man and an acutely sensitive one. His opponents were amazed at his gentleness outside the ring. He was respected by all of them and loved by many of them.

On the night of the most important victory of his young life, Rocky Marciano was heartbroken because the man he had defeated was his boyhood idol, Joe Louis. Joe Louis never forgot Rocky's apology for having defeated him.

In a time of antiheroes, Rocky was truly a great American hero. As the son of an Italian immigrant, his life was a model for those Americans who believe that a man, by dint of hard work, can achieve his goals. Throughout his life he remained a devoted son, husband, and father. One of the reasons he gave for his ring retirement was so that he could spend more time with his parents, wife, and children.

Many retired champions have been deluded by the quick glory and easy adulation received in sport. They have confused easy success in sport with easy success in life.

Unfortunately, some have been unable to stand up to the challenges of life.

Rocky Marciano was never confused in making the transition. He brought to his retirement the best qualities of his ring career: courage, perseverance, and

dedication. He succeeded beyond all expectations.

As he began his retirement years he knew that success in life would be measured not by foes vanquished but by friendships gained. And Rocky Marciano had thousands of friends.

His hometown newspaper, the Brockton Enterprise made the most appropriate assessment of the loss of this great man. It said:

The Golden age of boxing died twice. Once in April, 1956, when Rocky Marciano retired and for the second time in a plane crash in Newton, Iowa.

Rocky Marciano exemplified all that is best about sports.

He translated all the painfully learned lessons of courage, respect, and perseverance to a code of conduct which made him admired and honored among men.

USE OF U.S. FORCES IN SUPPORT OF LOCAL FORCES OF LAOS AND THAILAND.

Mr. COOPER. Mr. President, yesterday, by a vote of 86 to 0, the Senate approved an amendment to section 401 of the Defense procurement bill, whose purpose, as I explained during the debate, was to prohibit the use of any funds authorized by this bill, or under any other act, to support U.S. forces in combat in support of local forces of Laos and Thailand. This is our constitutional right. Although the distinguished manager of the bill, Senator STENNIS, would not agree with my interpretation, I do not see how anyone could have failed to recognize its purpose—which is, as Senator MANSFIELD stated succinctly—to keep the United States from backing into other wars without the authority of Congress.

In today's New York Times, there is a report of "a series of secret military operations in the last 3 weeks where American-backed troops have seized two strategic areas of Laos long held by pro-Communist forces." The report from Vientiane went on to say:

American participation in both the Plaine des Jarres and Ho Chi Minh Trail campaign now extends to the field level, the sources said. They confirmed that United States planes of Air America, Continental Air Services and the United States Air Force—were flying reinforcements, supplies and arms to advanced areas, while American Army officers and agents of the CIA were advising local commanders. So far, there has been at least one confirmed American battle death in Laos. It occurred last week when an American CIA agent was killed by gunfire at an advanced post.

Mr. President, it is ironic that on the very day following the Senate vote we should have a report of the use of American forces in combat in support of local forces in Laos.

I do not know personally that the report is correct, but the pattern of events as indicated by this morning's article from the New York Times shows a very striking similarity to the way we became involved in the war in Vietnam.

In view of this report, and in view of the Senate's action of yesterday, I would hope that the distinguished chairman of the Armed Services Committee and the

distinguished chairman of the Foreign Relations Committee would look into the situation and report to the Senate their findings. This is a matter of the most serious concern. During the debate, I asked several times whether our forces are engaged in combat in Laos or Thailand, but no clear answer was given. I think the situation calls for full hearings, a reply from the executive branch, and a full discussion by the Senate.

I ask unanimous consent that the article from the New York Times be placed in the RECORD at the conclusion of my remarks.

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

U.S.-BACKED LAOS TROOPS CAPTURE TWO REBEL AREAS

THAI FORCE ALSO USED

(By T. D. Allman)

VIENTIANE, LAOS, September 17—In a series of secret military operations in the last three weeks, American-backed troops have seized two strategic areas of Laos long held by pro-Communist forces.

In northeast Laos, rightist forces, stiffened by Thai soldiers and officers, have seized the Plaine des Jarres, a strategic area 105 miles north of here. The plain had been held by the Communist since 1964. In central Laos, similar forces have pushed east along Route 9.

INTEGRATED PLANNING REPORTED

Reliable sources confirmed today that Laotian Government troops, with heavy United States air and logistic support, had taken Khang Khai, until recently the site of a Chinese Communist diplomatic mission, and Sepone.

In addition, Laotian troops have seized the town of Muong Phine, also in central Laos, and the towns of Muong Phan, Xieng Khouangville, Ban Ban, Ban Lat Sene and Phong Savan—all in the Plaine des Jarres area.

Well-informed sources today said that the successes were the result of fully integrated American-Laotian military planning and the most intense American bombing ever seen in Laos. So far, the advances have met little resistance, leading military observers to believe that the offensives caught the Communist-led Pathet Lao and their North Vietnamese allies by surprise.

The sources said Laotian units, some made up largely of Royal Thai soldiers in Laotian uniforms, had moved onto the plain and west along Route 9 after round-the-clock bombing had leveled several towns and scattered small defending forces.

The offensives, planned late last month at conferences in Long Cheng in northeast Laos and at Savannakhet in central Laos, appear designed to deal the Communists a serious blow as United States troops are withdrawn from Vietnam.

The thrust into northeast Laos—where during the last years the Government position had steadily deteriorated—counteracts rebel military victories that seemed to discredit the neutralist Laotian Premier, Prince Souvanna Phouma.

In June, North Vietnamese and Pathet Lao troops seized Muong Soui, a neutralist base, northwest of the plain.

GOAL IS HO CHI MINH TRAIL

The thrust across central Laos, according to well-informed sources is an attempt to use Laotian and Thai troops to cut the Ho Chi Minh Trail and reduce North Vietnamese infiltration into South Vietnam.

"In a very real sense, the war in Vietnam is now being fought in Laos," said one diplomatic source today. He said the American-Laotian thrust toward the South Vietnamese

border might provide the Nixon Administration with reduction in infiltration to justify large-scale troop withdrawals from South Vietnam.

United States B-52 strikes along the Laotian sections of the trail have increased greatly in the last two weeks, the sources said. They said as many as 500 sorties a day were being flown over Laos and that the increase in bombing in Laos was part of the reason for the lull in the air war in South Vietnam.

American participation in both the Plaine des Jarres and Ho Chi Minh Trail campaigns now extends to the field level, the sources said. They confirmed that United States planes—of Air America, Continental Air Services and the United States Air Force—were flying reinforcements, supplies and arms to advanced areas, while American Army officers and agents of the Central Intelligence Agency were advising local commanders. So far, there has been at least one confirmed American battle death in Laos. It occurred last week when an American CIA agent was killed by gunfire at an advanced post.

SENATE VOTES A CURB

(By John W. Finney)

WASHINGTON, September 17.—The Senate unanimously adopted an amendment today ostensibly designed to prevent American troops from being committed to combat in Thailand or Laos.

Whether the amendment would have such effect was disputed by the Defense Department and Senator John Stennis of Mississippi, chairman of the Senate Armed Services Committee.

The amendment was offered by Senator John Sherman Cooper, Republican of Kentucky, and approved by an 86-to-0 vote after a confused debate that left the amendment open to widely different interpretations.

The amendment, to a \$20-billion military authorization bill, specified that none of the funds could be used for American combat support of "local forces" in Thailand or Laos. His purpose, Senator Cooper declared, was to "prevent, if from moving step by step into war in Laos or Thailand, as it did in Vietnam."

Senator Stennis argued that the Cooper Amendment would apply to only \$2.5-billion in military aid for Thailand and Laos, as well as South Vietnam. Thus, he contended, the amendment would impose no restriction on the use of other military funds to support combat operations in Laos or Thailand.

In this contention Mr. Stennis was supported by a Defense Department memorandum that he read to the Senate. The memorandum said that under the amendment the current military aid to local forces in Laos and Thailand could be continued and the amendment would "have no impact on the use of funds for support of U.S. forces in Laos or Thailand."

Throughout the debate ran an element of uncertainty over whether American forces might already be committed in Thailand and Laos without any official acknowledgment by the Administration and without any specific approval by Congress.

At one point, Senator Cooper questioned whether "the President and the Secretary of Defense don't want it [the amendment] because we already have forces fighting in Laos or Thailand."

The Senate action came as dispatches from Laos reported important military gains by Laotian Government forces, with United States air and logistical support, against the Pathet Lao, Communist-led guerrillas.

Senator Cooper—without any specific contradiction by Senator Stennis—said "I think we are fighting there." But he noted that neither the Pentagon nor the State Department had ever told Congressional committees that American troops were engaged in combat in Laos or Thailand.

45,000 TROOPS IN THAILAND

The United States has 45,000 troops in Thailand, with American bases there used for bombing operations in South Vietnam. Except for an incident a few years ago in which American "pilots" were flying helicopters carrying Thai troops, there has been no public indication that American troops were assisting Thai forces in operations against insurgents.

In Laos, the United States conducts bombing operations against enemy supply lines leading into South Vietnam. The Central Intelligence Agency is known to provide logistic support to the neutralist Government, but again there has been no official confirmation that American troops are providing combat support.

Under a recently disclosed contingency plan signed in 1946, the United States agreed to supply combat troops to help Thailand resist attack through Laos.

The Nixon Administration, however, has made clear that it is not necessarily bound by the plan, and the effect of the Senate adoption of the Cooper Amendment could be to further vitiate the effectiveness of the controversial agreement by the Johnson Administration.

For all the confusion today, it seemed apparent that Senator Cooper had taken the Senate one step toward using its control over funds to prevent the Administration from committing the nation to war in Laos or Thailand without approval by Congress.

As the majority leader, Senator Mike Mansfield, summed it up at the conclusion of the debate:

"The purpose is well known—to see that we do not back into another Vietnam in Laos or Thailand."

Senator Stennis said he supported the purpose of the Cooper amendment, although he believed it ineffective as phrased. Thus a more restrictive amendment may be offered to the appropriations bill when it reaches the Senate floor this fall.

A national commitments resolution voted by the Senate in June called on the Administration not to commit American troops to foreign hostilities without "affirmative action" by Congress. The Cooper amendment was seen as a further manifestation of the rising demand in the Senate for a check on the foreign policy powers of the executive branch, particularly on the war-making powers.

OUTRAGE

Mr. YOUNG of Ohio. Mr. President, Army Sp5c. Michael Maxwell of Columbus, Ohio, has been fired as war news editor of the American Forces Vietnam Network in a dispute over military censorship of war news. Maxwell was relieved of duty last night after he informed his superiors he had been interviewed by CBS news about censorship. During the interview a reporter asked Maxwell whether there was censorship of the news he broadcasts to American GI's.

My answer to that would be an unequivocal yes. There is censorship of the news. It comes from two levels—the United States Command Office of Information and also from the administration of our station here in Saigon. Some examples recently: The statement of Vice President Ky, Vice President of Vietnam that there would be an American troop withdrawal. He stated the figure of 40,500 men. This story was not aired on AFVN radio for 24 hours.

Lt. Col. James Adams, the officer in charge of the Vietnam network of the American forces of South Vietnam, ap-

parently took a dim view of Specialist Maxwell's industry and enterprise in insisting upon factually reporting to our officers and men in Vietnam important news even if it involved statements of Vice President Ky regarding pending withdrawal of American forces from South Vietnam.

Specialist Maxwell, who is 21 years old and has had previous professional experience as a news reporter, is now cleaning M-16 rifles at network headquarters. This, because he complained of censorship of the news that he is permitted to broadcast to our Armed Forces. His superior officer ordered this honest, experienced reporter, Specialist Maxwell, relieved of his position and assigned to the labor of cleaning M-16 rifles.

Our GI's in Vietnam are entitled to hear the news without censorship from some officious Pentagon propagandist. Here is another example of Army brass dealing unjustly with an American enlisted man.

CALIFORNIA DISASTER RELIEF ACT OF 1969—CONFERENCE REPORT

Mr. BAYH. Mr. President, I submit a report of the committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 6508) to provide assistance to the State of California for the reconstruction of areas damaged by recent storms, floods, and high waters. I ask unanimous consent for the present consideration of the report.

The PRESIDING OFFICER. The report will be read for the information of the Senate.

The legislative clerk read the report.

(For conference report, see House proceedings of September 17, 1969, pp. 25838-25840, CONGRESSIONAL RECORD.)

The PRESIDING OFFICER. Is there objection to the present consideration of the report?

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

Mr. BAYH. Mr. President, I ask unanimous consent that such legislative and staff assistants as may be needed be granted the privilege of the floor during the consideration of this conference report.

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

Mr. BAYH. Mr. President, I am pleased to report that the conferees appointed to consider H.R. 6508, a bill to provide assistance for the State of California, have agreed upon the terms of a conference report which adjusts the differences in the bills previously adopted by the House and the Senate. On July 10, when the Senate passed H.R. 6508 in amended form, it substituted for the text of the bill the language of S. 1685. The latter is a bill the Senate had adopted on July 8 to provide additional disaster assistance for areas suffering a major disaster.

I might add that S. 1685 was a part of the results of a continuing 4-year study which the Senate, through its Committee on Public Works, has been

conducting to try to find a way to make the disaster relief laws of this country more equitable. It has been my good fortune to sit on more than one conference committee since I came to the Senate; but I can honestly say that I have never been a member of a conference which did more to resolve major differences between the two Houses, or whose efforts will have a more constructive impact upon the people of our country. The chairman of the Senate Committee on Public Works, the Senator from West Virginia (Mr. RANDOLPH), though not a member of the conference committee, was hovering in the background, actively helping the conferees resolve their differences. The Senator from Virginia (Mr. SPONG), whose State was flooded in the most recent Camille catastrophe; the Senators from Mississippi (Mr. EASTLAND and Mr. STENNIS), whose State was also greatly affected; the present Presiding Officer of the Senate (Mr. ALLEN) and his colleague from Alabama (Mr. SPARKMAN), were all extremely helpful in compiling data to be of assistance, not only to their States and their citizens, but also to those throughout the country who may be similarly affected. The ranking Republican member of our committee, the Senator from Kentucky (Mr. COOPER), who sat on the conference, as did the Senator from Ohio (Mr. YOUNG) and others, were extremely helpful to the conference, and I should say to this body that when the final hour came for filing our decision, we had tremendous cooperation from the conferees for the House of Representatives, who put aside the differences they had with the original Senate bill, as we tried to do with our differences with their legislation, and we proceeded constructively.

The House bill was concerned solely with the California disaster of last winter. The Senate bill would have created a permanent general disaster relief program, such as we have been working on for 3 or 4 years. The conferees compromised these differences by placing a time limit on the applicability of the legislation and incorporating much of the Senate bill's overall approach to disaster relief. As agreed upon, the bill now would apply to any major disaster occurring during the period June 30, 1967 through December 31, 1970.

I should also point out that there was general agreement on the overall philosophy that we wanted not only a national bill, applicable to any part of the Nation that might be confronted with a disaster, but also that this should be a bill that had no terminal point; so that as soon as the Senate and the House of Representatives committees are able to do so, they can hold hearings, hopefully joint hearings. At that time it is hoped that the terminal date agreed upon can be removed, so the States will not have to come to the Senate and the House of Representatives after each disaster, but rather, when disaster strikes, there will be legislation already on the books to deal with it.

No funds are specifically authorized by this bill because there is no way of estimating what the cost might be. The

final estimates from Hurricane Camille are not in, and, since the bill will be in force for the next 16 months, we rely on the Appropriations Committees, Congress, and the President to assure that the necessary funds will be supplied as they are required.

As approved by the conferees, the bill contains 11 operative sections which would provide the following—and I might say I recognize the tediousness of enumerating some of these facts in a conference report, but because there were significant changes and significant reconciliations between differences that existed in the two bills, and because we are now, this afternoon, writing legislative history which may be looked to at some future time, which is not recorded anywhere else, I hope my fellow Senators will bear with me for this repetition:

First, 50-50 matching grants to States for the permanent repair and reconstruction of non-Federal streets, roads, and highways;

Second, readjustment of timber sale contracts and grants for removal of timber from private land;

Third, additional time for public land entrants to comply with legal requirements;

Fourth, Federal loan adjustments;

Fifth, grants to States for disaster planning;

Sixth, appointment of Federal coordinating officers for major disaster areas;

Seventh, temporary shelter for disaster victims;

Eighth, food stamp program to be made available during and after disasters;

Ninth, assistance to individuals unemployed as a result of a major disaster;

Tenth, fire control on publicly or privately owned forest or grasslands; and

Eleventh, grants for removal of debris from private lands.

The first conference session was held on August 12, 1 day before Congress recessed for 3 weeks. Within a few days thereafter Hurricane Camille wreaked great loss of life and property upon the gulf coast of Mississippi and other States, especially Virginia. Shortly after the Congress reconvened on September 3, S. 2853 and S. 2854, bills to provide special relief for the victims of this terrible catastrophe, were introduced by Senators EASTLAND, STENNIS, RANDOLPH, ALLEN, BYRD of Virginia, BYRD of West Virginia, ELLENDER, LONG, SPARKMAN, SPONG, and THURMOND.

Although these bills were not specifically before the conference for consideration, they further emphasized the need for additional legislation to aid the many communities and thousands of people who incurred losses in this major disaster.

Graphic portrayals of the destruction and suffering were provided by those Members and staff who visited the afflicted areas to see on the scene what had happened. In addition the conferees invited the representatives of several Government departments and agencies which are directly concerned with relief work to report on their activities in this most recent disaster.

I think it is fair to say that we really had a hearing—and a detailed hearing—before the conferees of the House of Representatives and the Senate. This does not happen very often, but the conferees were really seeking information that would help them. Officials of the Office of Emergency Preparedness; the Small Business Administration; the Department of Agriculture; the Army Corps of Engineers; the Department of Housing and Urban Development; the Department of Labor; the Department of Health, Education, and Welfare; the Federal Highway Administration; and the Economic Development Administration briefed the conferees on the impact of the legislation as well as of the disaster.

Although the conference committee did not have the authority to consider all the proposals for assistance which were submitted, it was able to include in the report which we now have before us provisions which the Members believe will be of substantial help.

The report which we are recommending represents an important milestone in a search for meaningful disaster relief which began more than 4 years ago. A brief summary of previous action may be helpful in understanding the legislative history of this measure. Following a rash of tornadoes and floods in the Midwest during the spring of 1965, nearly 40 other Senators joined me in introducing a bill (S. 1861) to provide assistance for private citizens and businesses incurring extensive losses in major disasters. An amended version of this bill, in which several important sections were deleted—deleted, I might add, by our worthy colleagues in the House of Representatives—was approved by the Congress and signed by the President on November 6, 1966. It became Public Law 89-769.

Because the task had been only partially completed, 36 cosponsors joined me in offering a second bill, S. 438, on January 17, 1967. After hearings demonstrated the need for additional legislation, the bill was reported to the Senate on April 2, but no further action was taken during the 90th Congress. Consequently, on March 26 of this year I again introduced a third major disaster relief bill, S. 1685, which 26 other Senators cosponsored. After thorough consideration by the Senate Public Works Committee, it was reported out with several amendments on June 25 and was subsequently passed by the Senate on July 8.

Before examining in detail specific sections of the conference report, let me comment briefly on the primary goals which this proposed legislation is designed to achieve and call attention to a few of its major provisions.

Our study of the problem in 1965 convinced us of the need for permanent legislation which would help alleviate the severe losses inflicted on people by major disasters. Although the Congress in the basic disaster relief law of 1950 and in subsequent amendments had provided fairly adequate emergency assistance to States and local communities to restore governmental services and facilities, comparatively little provision for direct

assistance to individuals, families or businesses had been made. Moreover, the common practice of Congress to consider special and separate relief bills following specific disasters, such as the Alaska earthquake, Northwest floods, or Hurricane Betsy, was not the most satisfactory or effective method of meeting the problem. Such legislation took 6 months or more to enact, so that often relief was too long delayed to be really meaningful, when it was needed the most.

Thus, our efforts have been directed toward legislation which would provide full statutory authority enabling the Federal Government to extend help of all kinds to disaster victims immediately after a Presidential declaration, without waiting for further specific congressional action.

Two questions confronted the conferees at the outset: The scope of the coverage and the time period to be encompassed in the legislation. It was agreed that the provisions of the conference report should not be limited to one or a few States, but should extend to any area within the United States or its territories and possessions which had been declared by the President to be a major disaster area.

The time factor was settled by providing that four sections—5, 8, 9, and 13—which by their nature required continuity would be permanent, but that the remainder of the act would terminate on December 31, 1970. This decision was based on the intention of the Members, as I said a moment ago, to urge that hearings be held by the proper committees in both the House and the Senate within the next few months for the purpose of adopting permanent, comprehensive disaster assistance legislation. It was believed that a careful scrutiny by Congress of the effectiveness and adequacy of the help authorized in this bill and of the need for any further measures should be made before some of its provisions were made permanent law.

Four or five sections of the report deserve special mention at this time. Aid for homeowners and businessmen who have incurred losses in major disasters would be expanded substantially by sections 6 and 7. Interest and principal payments for those eligible for 3 percent disaster loans made by the Small Business Administration and the Farmers Home Administration would be canceled up to \$1,800 on the part of the loan in excess of \$500.

In addition the SBA and FHA would be authorized to make disaster loans to property owners, without regard to whether the financial assistance is otherwise available from private sources, at an interest rate equal to the average interest rate on all interest-bearing obligations of the United States with maturities of 20 years or more.

Although such borrowers would not be entitled to the \$1,800 forgiveness feature available to those who receive 3-percent disaster funds, it would enable those disaster sufferers who have other private credit resources to obtain loans at a rate lower than that charged by commercial institutions but would be at a minimum cost to the Federal Government. More-

over, the SBA and FHA would be authorized to refinance mortgages and liens on homes or business property severely damaged in a major disaster, with the rate of the loan—3 percent or Government-average interest rate, whichever it might be, depending on the financial need of the borrower.

Mr. President, there is one highly important matter respecting small business disaster loans about which the conferees were unable to make a statutory determination. I refer to the administrative limitation on loan amounts imposed by the SBA—and this amount has been administratively set; it is not in the law—\$30,000 on a home; \$100,000 on a business. The conferees regard these limitations as utterly unrealistic under today's conditions as viewed by those who were actually on the scene of the disaster. They should be removed by action of the SBA. They should not be replaced with any other dollar limits of general applicability. The amount of each loan should be determined individually and on the basis of each individual case. If the SBA does not itself make this change, the conferees believe that the Congress should do it through an amendment of the law to be considered shortly.

In order to assist persons and families whose places of residence have become uninhabitable because of a major disaster, the President would be authorized under this bill to provide temporary housing through use of any dwelling accommodations owned by the United States or by leasing existing dwellings, mobile homes or other readily fabricated homes. Rentals could be established for such accommodations which would take into consideration the financial ability of the occupants, but in case of financial hardships the charges could be compromised, adjusted, or waived for a period of up to 1 year.

In no case, however, would an individual or family be required to spend more than 25 percent of his or his family's monthly income for housing expense, including debt payments on his destroyed or damaged home. Such temporary housing for disaster victims would be available only to those who had been certified by proper authority that their accommodations had been destroyed or damaged to such an extent that they were uninhabitable.

In most disasters, especially those resulting from floods, tornadoes and hurricanes, large amounts of debris are often deposited on private property. To help bring relief from this problem, section 14 of the bill would authorize the President, when he determines it to be in the public interest, to make grants to States or political subdivisions for removing such debris from private lands and waters. Payments could be made to reimburse actual expenses incurred for such removal, but the amount would be only that which would be in excess of the salvage value, if any, of the debris.

In times of disaster it is clear that emergency assistance must be extended both rapidly and with as little confusion as possible. In order to coordinate governmental operations in major disaster areas, section 9 of the bill would direct

the President, as soon as he has designated a major disaster area, to appoint a Federal coordinating officer to be responsible for coordination of all Federal disaster assistance in that area. It is believed this would help speed up assistance and would reduce delays and confusion confronting disaster sufferers who often must deal with a variety of programs and different agencies. Similarly, comprehensive State disaster plans contemplated by the bill would require that a State coordinating officer would also have to be appointed to act in conjunction with the Federal coordinator.

A serious problem often faced by States and local governments has been the huge outlay necessitated by the cost of repairing and rebuilding highways, roads, streets, and bridges damaged or destroyed in major disasters. Those highways which are now within the Federal-aid system are entitled to receive payments from the National Government equivalent to those which are granted during construction, but there are thousands of miles of roads in every State which are not eligible for permanent disaster assistance. Often these are so-called farm-to-market or other county roads which are so vital to the livelihood of rural and small town residents. The conference report includes the provision adopted in the House bill which would authorize the President to allocate funds to States equal to 50 percent of the cost for the permanent repair and reconstruction of highways not on the Federal-aid system which are destroyed or damaged in a major disaster.

Finally, let me call attention to section 8, which would authorize the President to make grants not to exceed \$250,000 to States for the purpose of preparing comprehensive disaster relief plans and practicable programs to assist individuals suffering losses in major disasters. In order to qualify for such a grant, a State, territory, or other possession of the United States would have to agree to match the funds made available to establish an agency specially able to plan and administer a comprehensive relief program, and to report to the President not later than the end of next year a State disaster plan. The President in turn would be authorized to report and to recommend to Congress ways in which the Federal Government could implement and help finance State plans and to make other recommendations on Federal participation in disaster relief.

Other sections of the bill, as noted in the detailed analysis which follows, would provide assistance in major disasters for damage to roads involved in existing timber sales contracts, for removal of fallen or damaged timber from privately owned lands, to give additional time for entry on public lands, to provide free food stamps, and to authorize assistance to unemployed who are not eligible for unemployment compensation or private income protection insurance.

Mr. President, I ask unanimous consent that a detailed summary of each section and the full text of the bill as reported by the conference be printed in the RECORD.

There being no objection, the mate-

rial was ordered to be printed in the RECORD, as follows:

MAJOR PROVISIONS OF THE LEGISLATION HIGHWAY REPAIRS

Section 2 authorizes the President to allocate funds to States for the permanent repair and reconstruction of permanent street, road and highway facilities not on any Federal-aid system that were destroyed or damaged as a result of the disaster. The section requires 50% participation by the State.

This is a new departure in the field of Federal responsibility for highway repair. Hitherto assistance has been granted only for repair and reconstruction of Federal-aid highways. Language granting 100% Federal assistance for such repairs was contained in the Disaster Relief bill passed by the Senate in 1965.

TIMBER SALES CONTRACTS

In Section 3 relief would be provided for those timber contractors in Federal forests whose contracts were entered into prior to 1965 so that adjustments may be made in their contracts to facilitate reconstruction of timber roads destroyed in a major disaster.

We have also provided authority and guidelines for assistance in the removal of downed or damaged timber from privately owned land when such assistance is deemed by the President to be in the public interest. However, the salvage value of the timber is to be deducted from the amount of the payment for removal.

ENTRY ON PUBLIC LANDS

In Section 4 the period for entry on to public timber lands has been lengthened in order to salvage timber which is subject to infestation and deterioration because of climatic conditions.

BUREAU OF RECLAMATION OVERHEAD COSTS

Section 5 repeals a provision of the Fiscal 1967 Public Works Appropriation Act now requiring that funds spent by the Bureau of Reclamation in connection with disaster relief under Public Law 81-875 shall be reimbursed in full by the Office of Emergency Planning to the Bureau.

DISASTER RELIEF LOANS

Section 6 provides that the Small Business Administration, on 3% disaster loans to those who cannot establish bank credit, shall, at the borrower's option, cancel up to \$1,800 of interest, principal or any combination thereof on a disaster loan. SBA also is authorized to defer interest or principal payments during the first three years of the term of the loan regardless of the borrower's financial situation.

In addition, in order to assist those who are severely affected by a disaster but who have some capability of assisting their own recovery because of the availability of private credit, the conferees make the following recommendation: that the SBA make loans for the repair, rehabilitation or replacement of lost or damaged property without regard to whether financial assistance is otherwise available, provided that such a loan will carry interest charges at a rate equal to the cost of the money to the United States. This aspect of the loan program would therefore not burden the Federal Treasury. Further, no such loan would be eligible for forgiveness or deferral of payments.

Finally, the SBA is authorized to refinance mortgages or liens outstanding on destroyed or damaged properties. However, this is not intended to permit cancellation or deferral if the loan being financed was originally made under the first paragraph of this section and part of such loan was already cancelled. This means that no borrower could receive two cancellations on the same loan. He would not be barred from two such cancellations, how-

ever, if each resulted from damage or destruction in a different disaster.

Section 7 grants the Consolidated Farmers Home Administration the same loan authority as is given to SBA by section 6.

STATE DISASTER PLANNING

Section 8 authorizes a 50-50 matching grant not to exceed \$250,000 to any State for development of a plan for assistance to individuals who suffer losses in a major disaster. It requires designation or creation of a State planning agency and submission of a State plan to the President not later than December 31, 1970.

Each participating State is to appoint a State coordinating officer to act in cooperation with the Federal coordinating officer required by the next section of the bill.

Thereafter, from time to time, the President is authorized to report and recommend to Congress programs for the Federal role in implementing and funding comprehensive disaster relief plans and activities.

FEDERAL COORDINATING OFFICER

Section 9 requires the President to appoint a Federal coordinating officer immediately upon his having designated a major disaster area. This officer will operate under the Office of Emergency Preparedness in the area. He will have responsibility for coordinating all Federal disaster relief and assistance, establish field offices for rapid and efficient administration of this assistance and aid local officials and citizens to obtain promptly the assistance to which they are entitled.

SHELTER FOR DISASTER VICTIMS

Section 10 of the conference substitute authorizes the President to provide necessary shelter for individuals and families who are certified as having been displaced from their dwellings by a major disaster and who are unable to find suitable accommodations. The bill authorizes use of unoccupied housing owned by the United States or of unoccupied public housing, leasing of existing dwellings or acquisition of mobile homes or other readily fabricated dwellings through leasing and placing them on sites furnished by the State or local government or by the owner-occupant, provided no charge is made for the site.

Rentals for this emergency shelter will take into consideration the financial ability of the occupant, and may be adjusted or even waived entirely for a period not to exceed 12 months. In no case can an individual or family be charged a monthly housing expense (including debt charges on a house destroyed or damaged in the disaster) in excess of one quarter of the monthly income.

FOOD STAMPS AND SURPLUS COMMODITIES

Section 11 authorizes the President to distribute food stamp coupons and surplus commodities to low-income households which are unable to purchase adequate nutritious food because of a major disaster. The President will be able to use existing legislation for so long as he deems necessary and to take into account such factors as the consequences of the disaster upon the earning power of the recipients.

ASSISTANCE TO UNEMPLOYED INDIVIDUALS

Section 12 of the conference bill recognizes that, while large numbers of workers and businessmen are covered by unemployment compensation and private income protection programs, when disaster strikes, especially in rural and coastal areas, a significant number of individuals find themselves suddenly with no means of support. The bill authorizes the President to provide financial assistance to such individuals not to exceed the maximum amount and the maximum duration of payments under the State unemployment compensation program. Any amount paid to an individual will be reduced by the actual amount of unemployment compensation or private income protection received by him during his unemployment.

FIRE CONTROL

Section 13 authorizes the President to make grants and loans to States for suppression of any fire on publicly or privately owned forest or grasslands which threatens to become a major conflagration. This section grew out of a study conducted by the Office of Emergency Preparedness pursuant to Public Law 89-769, the Disaster Relief Act of 1966.

DEBRIS REMOVAL

Section 14 provides that when it is determined to be in the public interest the President is authorized to make grants to States and localities for reimbursement of expenses of removing debris from privately owned lands and waters as the result of a major disaster, but only to the extent such expenses exceed the salvage value of the debris. The conferees intend that a major consideration in making these grants shall be the degree to which debris removal will assist in the economic recovery of the area.

EFFECTIVE DATES

Section 15 provides that, except for Sections 5, 8, 9 and 13 which are given permanent status, the act would apply to any major disaster declared by the President between July 1, 1967 and December 31, 1970.

DISASTER RELIEF ACT OF 1969

SECTION 1. That Congress hereby recognizes that a number of States have experienced extensive property loss and damage as a result of recent major disasters including, but not limited to, hurricanes, storms, floods, and high waters and wind-driven waters and that there is a need for special measures designed to aid and accelerate the efforts of these affected States to reconstruct and rehabilitate the devastated areas.

Sec. 2. The President is authorized to allocate funds hereafter appropriated to carry out this section to those States affected by a major disaster for the permanent repair and reconstruction of those permanent street, road, and highway facilities not on any of the Federal-aid systems which were destroyed or damaged as a result of such a major disaster. No funds shall be allocated under this section for repair or reconstruction of such a street, road, or highway facility unless the affected State agrees to pay not less than 50 per centum of all costs of such repair or reconstruction.

Sec. 3. (a) Where an existing timber sale contract between the Secretary of Agriculture or the Secretary of the Interior and a timber purchaser does not provide relief from major physical change not due to negligence of the purchaser prior to approval of construction of any section of specified road or other specified development facility and, as a result of a major disaster in an affected State a major physical change results in additional construction work in connection with such road or facility by such purchaser with an estimated cost as determined by the appropriate Secretary (1) of more than \$1,000 for sales under one million board feet, or (2) of more than \$1 per thousand board feet for sales of one to three million board feet, or (3) of more than \$3,000 for sales over three million board feet, such increased-construction cost shall be borne by the United States.

(b) Where the Secretary determines that damages are so great that restoration, reconstruction, or construction is not practical under the cost-sharing arrangements authorized by subsection (a) of this section, the Secretary may allow cancellation of the contract notwithstanding provisions therein.

(c) The Secretary of Agriculture is authorized to reduce to seven days the minimum period of advance public notice required by the first section of the Act of June 4, 1897 (16 U.S.C. 476), in connection with the sale of timber from national forests, whenever the Secretary determines that (1) the sale of such timber will assist in the

construction of any area of an affected State damaged by a major disaster, (2) the sale of such timber will assist in sustaining the economy of such affected area, or (3) the sale of such timber is necessary to salvage the value of timber damaged in such major disaster or to protect undamaged timber.

(d) The President, whenever he determines it to be in the public interest, and acting through the Director of the Office of Emergency Preparedness, is authorized to make grants to any State or political subdivision thereof, for the purpose of removing from privately owned lands timber damaged as a result of a major disaster and such State or political subdivision is authorized upon application, to make payments to any person for reimbursement of expenses actually incurred by such person in the removal of damaged timber, but not to exceed the amount that such expenses exceed the salvage value of such timber.

Sec. 4. The Secretary of the Interior is authorized to give any public land entryman such additional time in which to comply with any requirement of law in connection with any public land entry for lands in any State affected by a major disaster as the Secretary finds appropriate because of interference with the entryman's ability to comply with such requirement as a result of such major disaster.

Sec. 5. The last paragraph under the center heading "Administrative Provisions" in title II of the Public Works Appropriation Act, 1967 (Public Law 89-689), is hereby repealed.

Sec. 6. In the administration of the disaster loan program under section 7(b) (1) of the Small Business Act, as amended (15 U.S.C. 636(b)), in the case of property loss or damage in any affected State resulting from a major disaster the Small Business Administration—

(1) to the extent such loss or damage is not compensated for by insurance or otherwise, (A) shall at the borrower's option on that part of any loan in excess of \$500 cancel (i) the interest due on the loan, or (ii) the principal of the loan, or (iii) any combination of such interest or principal except that the total amount so canceled shall not exceed \$1,800, and (B) may defer interest payments or principal payments, or both, in whole or in part, on such loan during the first three years of the term of the loan without regard to the ability of the borrower to make such payments.

(2) may grant any loan for the repair, rehabilitation, or replacement of property damaged or destroyed, without regard to whether the required financial assistance is otherwise available from private sources, except that (A) any loan made under authority of this paragraph shall bear interest at a rate equal to the average annual interest rate in all interest-bearing obligations of the United States having maturities of 20 years or more and forming a part of the public debt as computed at the end of the fiscal year next preceding the date of the loan, adjusted to the nearest one-eighth of one per centum, and (B) no part of any loan made under authority of this paragraph shall be eligible for cancellation or deferral as authorized in paragraph (1) of this section.

(3) may in the case of the total destruction or substantial property damage of a home or business concern refinance any mortgage or other liens outstanding against the destroyed or damaged property if such financing is for the repair, rehabilitation, or replacement of property damaged or destroyed as a result of such disaster and any such refinancing shall be subject to the provisions of paragraphs (1) and (2) of this section.

Sec. 7. In the administration of the emergency loan program under subtitle C of the Consolidated Farmers Home Administration Act of 1961, as amended (7 U.S.C. 1961-1967),

in the case of property loss or damage in any affected State resulting from a major disaster the Secretary of Agriculture—

(1) to the extent such loss or damage is not compensated for by insurance or otherwise, (A) shall at the borrower's option on that part of any loan in excess of \$500 cancel (i) the interest due on the loan, or (ii) the principal of the loan, or (iii) any combination of such interest or principal except that the total amount so cancelled shall not exceed \$1,800, and (B) may defer interest payments or principal payments, or both, in whole or in part, on such loan during the first three years of the term of the loan without regard to the ability of the borrower to make such payments.

(2) may grant any loan for the repair, rehabilitation, or replacement of property damaged or destroyed, without regard to whether the required financial assistance is otherwise available from private sources, except that (A) any loan made under authority of this paragraph shall bear interest at a rate equal to the average annual interest rate on all interest-bearing obligations of the United States having maturities of 20 years or more and forming a part of the public debt as computed at the end of the fiscal year next preceding the date of the loan, adjusted to the nearest one-eighth of one per centum, and (B) no part of any loan made under authority of this paragraph shall be eligible for cancellation or deferral as authorized in paragraph (1) of this section.

(3) may in the case of the total destruction or substantial property damage of a home or business concern refinance any mortgage or other liens outstanding against the destroyed or damaged property if such financing is for the repair, rehabilitation, or replacement of property damaged or destroyed as a result of such disaster and any such refinancing shall be subject to the provisions of paragraphs (1) and (2) of this section.

SEC. 8. (a) The President is authorized to provide assistance to the States in developing comprehensive plans and practicable programs for assisting individuals suffering losses as the result of a major disaster. For the purposes of this section, the term "State" includes the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, the territory of Guam, American Samoa, and the Trust Territory of the Pacific Islands.

(b) The President is authorized to make grants not to exceed \$250,000 to any State, upon application therefor, in an amount not to exceed 50 per centum of the cost of developing the plans and programs referred to in subsection (a).

(c) Any State desiring assistance under this section shall designate or create an agency which is specially qualified to plan and administer such a disaster relief program, and shall, through such agency, submit a State plan to the President not later than December 31, 1970, which shall (1) set forth a comprehensive and detailed State program for assistance to individuals suffering losses as a result of a major disaster and (2) include provision for the appointment of a State coordinating officer to act in cooperation with the Federal coordinating officer required by section 9 of this Act.

(d) The President shall prescribe such rules and regulations as he deems necessary for the effective coordination and administration of this section.

(e) Upon the submission of such plans the President is authorized to report and recommend to the Congress, from time to time, programs for the Federal role in the implementation and funding of comprehensive disaster relief plans, and such other recommendations relating to the Federal role in disaster relief activities as he deems warranted.

SEC. 9. The President shall, immediately upon his designation of an area as a major disaster area, appoint a Federal coordinating officer to operate under the Office of Emergency Preparedness in such area. Such officer shall be responsible for the coordination of all Federal disaster relief and assistance, shall establish such field offices as may be necessary for the rapid and efficient administration of Federal disaster relief programs, and shall otherwise assist local citizens and public officials in promptly obtaining assistance to which they are entitled.

SEC. 10. (a) The President is authorized to provide on a temporary basis, as prescribed in this section, dwelling accommodations for individuals and families displaced by a major disaster.

(b) The President is authorized to provide such accommodations by (1) using any unoccupied housing owned by the United States under any program of the Federal Government, (2) arranging with a local public housing agency for using unoccupied public housing units, (3) acquiring existing dwellings through leasing, or (4) acquiring mobile homes or other readily fabricated dwellings, through leasing, to be placed on sites furnished by the State or local government or by the owner-occupant displaced by the major disaster, with no site charge being made. Rentals shall be established for such accommodations, under such rules and regulations as the President may prescribe and shall take into consideration the financial ability of the occupant. In cases of financial hardship, rentals may be compromised, adjusted, or waived for a period not to exceed twelve months, but in no case shall any such individual or family be required to incur a monthly housing expense (including any fixed expense relating to the amortization of debt owing on a house destroyed or damaged in a major disaster) which is in excess of 25 per centum of the individual's or family's monthly income.

(c) Dwelling accommodations may be made available under this section only to an individual who, or family which, as certified by such authority as may be designated by the President, had occupied a dwelling as owner or tenant, that had been destroyed, or damaged to such an extent as to make it uninhabitable, as a result of such major disaster.

SEC. 11. (a) Whenever, as the result of a major disaster, the President determines that low-income households are unable to purchase adequate amounts of nutritious food, he is authorized, under such terms and conditions as he may prescribe, to distribute through the Secretary of Agriculture coupon allotments to such households pursuant to provisions of the Food Stamp Act of 1964 and to make surplus commodities available pursuant to the provisions of section 3 of Public Law 875 of the Eighty-first Congress.

(b) The President is authorized to continue through the Secretary of Agriculture to make such coupon allotments and surplus commodities available to such households for so long as he determines necessary, taking into consideration such factors as he deems appropriate, including the consequences of the major disaster on the earning power of the households to which assistance is made available under this section.

(c) Nothing in this section shall be construed as amending or otherwise changing the provisions of the Food Stamp Act of 1964 except as it relates to a Presidential determination regarding availability of food stamps in a major disaster.

SEC. 12. The President is authorized to provide to any individual unemployed as a result of a major disaster, such assistance as he deems appropriate while such individual is unemployed. Such assistance as the President shall provide shall not exceed the maximum amount and the maximum duration of

payments under the unemployment compensation program of the State in which the disaster occurred and the amount of assistance under this section to any such individual shall be reduced by any amount of unemployment compensation or of private income protection insurance available to such individual for such period of unemployment.

SEC. 13. The President is authorized to make grants and loans to any State to assist such State in the suppression of any fire on publicly or privately owned forest or grass lands which threatens such destruction as to constitute a major disaster.

SEC. 14. The President, whenever he determines it to be in the public interest, and acting through the Director of the Office of Emergency Preparedness, is authorized to make grants to any State or political subdivision thereof for the purpose of removing debris deposited on privately owned lands and on or in privately owned waters as a result of a major disaster, and such State or political subdivision is authorized, upon application, to make payments to any person for reimbursement of expenses actually incurred by such person in the removal of such debris, but not to exceed the amount that such expenses exceed the salvage value of such debris.

SEC. 15. (a) As used in this Act the term "major disaster" means a major disaster as determined by the President pursuant to the Act entitled "An Act to authorize Federal assistance to States and local governments in major disasters, and for other purposes", approved September 30, 1950, as amended (42 U.S.C. 1855-1855g), which disaster occurred after June 30, 1967, and on or before December 31, 1970.

(b) This Act, other than sections 5, 8, 9, and 13, shall not be in effect after December 31, 1970, except as it applies to major disasters occurring before such date.

SEC. 16. This Act may be cited as the "Disaster Relief Act of 1969".

And the Senate agree to the same.

That the title of the bill be amended to read as follows: "An Act to provide additional assistance for the reconstruction of areas damaged by major disasters."

Mr. RANDOLPH, Mr. President, I am not a member of the Senate conferees on H.R. 6508, the disaster aid bill. However, I do feel it appropriate for the Public Works Committee as a whole to express its thanks to the Senator from Indiana and our conferees on the part of the Senate on the diligence and the effectiveness that they brought into the conference with the members of the House conference committee.

I think it is also important to underscore the fact that the ranking minority member of the Committee on Public Works, the able Senator from Kentucky (Mr. COOPER) joined with me, and we sat in some of the sessions of the conference. We did this not simply because we wanted to be present, but because we wanted to have all those who were serving as conferees from the Senate and the House to know that in a sense we were representing not only the Committee on Public Works, but also all our colleagues in the Senate. It was not only to act on behalf of the States involved in the most recent catastrophe, the havoc wrought by Camille, but to indicate to the Members of Congress the widespread nature of the disasters with which we are dealing in this report, not in the State of Mississippi alone, with its terrific problems of rehabilitation, or in the other States involved in Camille.

In the past 3 years, in the United

States, we have had catastrophes, major in degree, that have swept across at least 25 States. We almost forgot about Beulah, in the State of Texas, with its havoc, in 1967; and Indiana, Iowa, Minnesota, Hawaii, Florida, California, Arkansas, North Dakota, South Dakota, Nevada, Vermont, Wisconsin, Colorado, Illinois, Tennessee, Kentucky, Ohio, Kansas, Mississippi, Louisiana, Alabama, Pennsylvania, Virginia, West Virginia.

I have enumerated 25 States; perhaps others could be listed. But by hurricane, by tornado, and by flood and havoc has been wrought across America; and I think Members of Congress must realize that we must attempt to cope with this problem in a long-range manner in the future. Ofttimes, it is easy to come in after the fact and try, through the application of the retroactive provisions, to take care of the disasters that occurred months, or, yes, years ago.

I should emphasize, also, that just in the last year, the private loss from disasters in the United States has exceeded \$355 million. This is only the private loss—to the residences and the businesses of the American people. Public facilities such as roads, schools, and hospitals are not included in the almost staggering figure of personal loss that I have given.

So, we realize the seriousness of this situation. The Senator from Mississippi (Mr. EASTLAND), who sits before me, knows, as do I and the Members of Congress who are knowledgeable of this problem in his State, that in one area 95 percent of all homes are gone. So, where is the tax base on which to build in order to do the job necessary? The people at the local level of government are hardy people and they are working on that level with other agencies of government in our country to rebuild their communities.

Mr. President, high praise is due the conferees on this bill H.R. 6508. They faced a most difficult and unusual task: how to reconcile a bill concerned with disaster in a single State, as passed by the House, with a bill for a permanent national disaster relief program as passed by the Senate. Such a reconciliation has been achieved, and it is a credit to the legislative skill and the willingness to compromise by all the conferees in the interest of the Nation as a whole.

Our colleague, Senator BAYH, who served as chairman of the conference, is especially to be complimented for his leadership. He was ably assisted by Senators YOUNG of Ohio, SPONG, EAGLETON, and Senators BAKER, DOLE and GURNEY. Senator JOHN SHERMAN COOPER, the ranking minority member of the full committee, also made valuable contributions.

Of course, Mr. President, the bill agreed on by the conference is not perfect, nor does it contain all the provisions that experience has shown need to be included in truly effective, national disaster relief legislation.

It is my intention, as chairman of the committee, to arrange for further hearings, this year, on a number of valuable suggestions for improving the Nation's readiness and capability to cope with major natural catastrophes. I expect

these hearings will elicit testimony on such questions as: first, how to accelerate emergency financial aid to local communities faced with the immediate necessity of restoring vital public services but stripped of available funds to pay for it; second, how the Federal Government can assist a local community whose tax base has been wiped out to meet upcoming interest and principal payments on outstanding public debts; 95 percent of the homes in one area of Mississippi are gone; there is no tax base. We must recognize that situation.

Mr. BAYH. Mr. President, will the Senator from West Virginia yield?

Mr. RANDOLPH. I yield.

Mr. BAYH. I am particularly grateful for the Senator's willingness to cooperate in that given area. This was a part of the first bill, as the Senator knows. With his help, assistance was recommended by the Committee on Public Works, and the bill passed the Senate, but it was not accepted by the House. Hurricane Camille again emphasizes the problem.

We found in 1965 and 1966 that we had been accustomed to provide assistance to restore public facilities when they were damaged, facilities such as sewer plants and water supply. But when utility plants were destroyed, as was the case in one small community in Indiana, the town was unable to meet its financial obligations.

I thank the chairman for his willingness to help us to deal with problems such as that, which are not covered in either of the bills at present.

Mr. RANDOLPH. No; we shall have to think of such payments in the forthcoming bill.

Mr. President, at this point I turn aside to say something I feel should be in the RECORD, although perhaps it is extraneous. Through the years we have responded to catastrophes that have befallen other people of the world. I think that was proper. I am not going to discuss it except to say that if we could give the aid of the United States to the peoples of other countries of the world during catastrophes that have come to them, we certainly can and we certainly must be able to crank the machinery into motion that will enable us to help the people of our own country in all the areas that are afflicted by natural disasters.

Mr. BAYH. Mr. President, will the Senator yield for just a moment?

Mr. RANDOLPH. I yield.

Mr. BAYH. I do not like to keep interrupting the distinguished Senator. However, I do wish to state that the Senator is precise and exact in recognizing the problem. He has touched on another area that has been at the base of this matter. We have dealt with disaster problems as they have occurred. We have tried to repair roads, school buildings, bridges, water plants, and many other projects.

But this bill more than any other in the history of our disaster relief program gets right down to helping the average man and woman, the small businessman, the entrepreneur, the farmer, the fisherman. For the first time we have said, as the chairman has pointed out, if we are going to provide the beneficence of this

country to other nations we are going to do it at least in kind to those in this country.

Mr. RANDOLPH. The Senator is correct. The Senator mentioned the small businessman. I want the RECORD to reflect that when the hearings I am discussing go forward the able Senator from New Hampshire (Mr. MCINTYRE), who is the chairman of the Subcommittee on Small Business of the Committee on Banking and Currency, is going to be not just listening in but is going to be helpful to us as we attempt to answer some of these questions.

Mr. President, I shall hurry along because there is a third question that is going to be asked. Should certain legal requirements and regulations that may impede swift restoration of devastated areas be suspended or waived during the emergency; and fourth, what other instruments should be provided in Federal law that will enable us better to restore destroyed and damaged areas to the fullest extent possible.

The committee will welcome proposals from all Members of the Senate concerned with the menace to life and property of such terrible natural disasters as hurricanes, tornadoes, tidal waves, floods, landslides and earthquakes.

This is another major step which our continuing experience with disaster relief has proved to be essential. While the Federal, State, and private response to the emergency immediately following a disaster is well conceived and directed, additional work must be done by Federal agencies better to coordinate the restoration phase following the catastrophe.

We urge the agencies who have responsibility to review carefully their statutory authority and their administrative rules and procedures so that they may recommend to us at the earliest possible date perfecting legislation.

Again, I thank all Members of the Senate and, of course, Members of the House, led by Representative ROBERT JONES of Alabama, who have devoted themselves intelligently to solving this problem.

Mr. COOPER. Mr. President, will the Senator yield?

Mr. RANDOLPH. I yield.

Mr. COOPER. Mr. President, I rise to support the assessment made by the distinguished chairman of the Committee on Public Works of the problems which the country faces arising from major disasters. I believe the conference report goes as far as it could go within the confines of the legislation under consideration. On both sides, in the House and in the Senate, efforts were made to give the greatest relief possible.

I agree with the chairman that it will be necessary to hold further hearings and to design legislation to meet some of the problems which could not be faced. For example, I remember the Senator from Mississippi (Mr. STENNIS) told us that most of the schools in a certain area had been destroyed. We could not deal with that. Perhaps in the future, plans can be made to do so. Last year, I remember, to show how we can be wrong sometimes—at least, I can be wrong—I voted against the bill in committee, but this

year, perhaps spurred by the disasters, and also the fact that a much better bill has been developed, I must say, I was glad to support and do what I can.

I join the Senator from West Virginia (Mr. RANDOLPH) in paying tribute to all members of the committee from both parties who contributed so much to the development of the legislation as we discussed it in the Public Works Committee and also in the conference.

Special credit, of course, should go to the Senator from Indiana (Mr. BAYH) who initiated and fought for the bill in the Public Works Committee and through all its stages of development.

The Senator from West Virginia (Mr. RANDOLPH), as always, mobilized the forces behind us, to deal not only with the immediate problem but also with problems of the future. He is a great chairman for our committee.

The Senator from Virginia (Mr. SPONG), coming fresh from the disaster areas in Virginia, made a very important contribution in his report concerning the problems in those areas, which are similar to other areas in this country.

We were aided also by the Senators from Mississippi (Mr. EASTLAND and Mr. STENNIS); those from Alabama (Senators SPARKMAN and ALLEN), and others affected.

This act is a good start and will give aid to many people. I am sure that we will go further in the future.

Let me also pay tribute to a former member of the committee, the Senator from California (Mr. MURPHY) who, last year, discussed with us the problems of his State. I think that most of his proposals were contained in the House bill which came to us in connection with the conference.

I would also commend the members of the staff of the Committee on Public Works, on both the majority and minority sides for their contributions to the development of this legislation.

Mr. President, although I was not designated a member of the conference committee on this legislation, I did attend and participate in the Senate-House conference (for Senator BAKER), on the Disaster Relief Act of 1969. I did not support the legislation as introduced by my colleague from Indiana in the 90th session of Congress, because I had a number of questions about the sections which provided grants for private property losses, their relationship to the National Flood Insurance Act of 1967, and the opposition of the Bureau of the Budget to that proposal. I believed that the hearings conducted by the Committee on Public Works had not adequately determined that the States were willing to shoulder a portion of the burden of this type of assistance. These questions were substantially answered throughout the committee's consideration of Senator BAYH's bill, S. 1685, in this session of Congress, and I was happy to support to its unanimous reporting from committee and passage by the Senate. Its goals, to provide speedy and comprehensive assistance to those who have suffered because of a major natural disaster, are without question.

One of the major difficulties in ad-

ministering the disaster relief program is the proliferation of Federal programs of assistance. Different agencies and departments of the Federal Government provide aid to individuals, businesses, and governments, both local and State. This multitude of programs creates a problem for those needing assistance because information about them may not be coordinated. The individual agencies make information available about their programs, but the individual who needs help often does not know what agency can give him the assistance he needs. In order to meet this problem, I suggested an amendment which I am glad was adopted by the conference. It appears as section 9 of the final version of the act and provides that immediately upon designation of an area as a major disaster area, the President will appoint a Federal Coordinating Officer to coordinate "all Federal disaster relief and assistance, establish such field offices as may be necessary for the rapid and efficient administration of Federal disaster relief programs, and shall otherwise assist local citizens and public officials in promptly obtaining assistance to which they are entitled." I hope that the application of this provision will be helpful.

Section 8(c)(2) includes a similar provision for the appointment of a State coordinating officer to work with the Federal one as part of the State effort in developing plans for administering disaster relief and the establishment of a State agency to carry out those plans. This provision was also included at my suggestion and will, taken with the other, go a long way in assuring that the goals of the Disaster Relief Act as amended are more fully approached in the future.

At the present time the Senate Committee on Public Works is holding hearings on the Hurricane Camille damage in parts of Virginia and flooding problems in parts of the Midwest and in Arlandria, across the Potomac. The testimony reveals a number of things of importance to the Senate in its consideration of this act. Disaster assistance cannot come too quickly and in too great quantities to those whose homes and lives have been disrupted or destroyed by rampages of nature. More importantly, however, the hearings have revealed the need for strong action by local and State governments, as well as Federal consultation, in protecting people and resources from flood and storm damage through the adoption of sound policies of land use and resource management. Instead of applying band-aid like assistance post facto, we should increasingly consider techniques of prevention before damage is created. It is my belief that this is the direction in which we must turn in our future consideration of disaster relief. To a great extent much of the damage we seek to relieve in the passage of this act, as in the passage of past disaster relief acts, was avoidable, had local and State governments exercised their responsibilities in the land use and management arenas.

Mr. SPONG. Mr. President, initially, I should like to commend the Senator from Indiana (Mr. BAYH), who chaired the

conference. The report today, in large measure, reflects 4 years of work on the part of the Senator from Indiana in this particular area of legislation.

I should also like to commend the Senator from West Virginia (Mr. RANDOLPH), the Senator from Kentucky (Mr. COOPER), and my colleagues who participated in the conference. It is noteworthy that this matter is on the floor of the Senate just a month and a day after Hurricane Camille struck Virginia.

For those who have some question about the responsiveness of Government at this level, I think that this report is an example of where pending legislation in conference was developed in a minimum of time to provide a maximum of relief to meet the special circumstances involved.

Mr. President, there is provision in the report for the appointment of Federal and State coordinators in time of major disasters.

I think that the visits made by members of the staff of the Public Works Committees into areas of Mississippi, Louisiana, and Virginia provided evidence of the need for this kind of coordination among Members of Congress, State, and Federal officials in time of a national disaster.

The personal experiences reported to the Senate by the Senators from Mississippi (Mr. EASTLAND and Mr. STENNIS) reflect the need for this. I think the fact that it is included in this legislation is a salutary matter.

Mr. President, I ask unanimous consent to have printed in the RECORD my statement on the report in terms of its effect upon the State of Virginia.

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

STATEMENT BY SENATOR SPONG

The conference report before the Senate represents a start on the road to recovery for victims of Hurricane Camille, a disaster which in Virginia caused 109 known deaths, and resulted in property damage estimated by state officials at \$116,500,000.

The report agreed to by the conferees will be of substantial help to the individuals and communities affected. I am grateful that Senator Randolph, the distinguished chairman of the Public Works Committee, has announced that further hearings will be held this year. I am hopeful that the hearings will result in the enactment of permanent legislation which will include provision for additional needed relief.

The devastation in Virginia was brought on by torrential rains and landslides in the James River Basin. An estimated 27 inches of rain fell on parts of the Blue Ridge during a 12-hour period on the night of August 19. The Clifton Forge area received about 10 inches of rain. The same amount was recorded downstream at Scottsville.

As the waters roared down the hillsides into the basin, they swept everything before them. Forty-seven persons are still missing, probably buried under the massive amount of trees, rock and other debris that remain as grim evidence of the disaster.

Some provisions of the conference report are of special importance to Virginia. One of them authorizes 50-50 matching funds for the reconstruction of non-federal highways. Only this morning the Subcommittee on Flood Control-Rivers and Harbors received testimony that 175 miles of state-maintained secondary roads in Virginia were destroyed

or damaged so severely by Hurricane Camille that they must be totally rebuilt. One-third of the estimated total highway damage of \$19.1 million occurred on roads and bridges that are not on any federal-aid system.

Grants for debris removal also will be beneficial. Literally tons of mud, silt and rock, and thousands of trees were deposited on valuable private lands by the force of the floods. Houses were knocked off their foundations and, in some cases, carried hundreds of yards downstream. When the waters subsided the structures were left standing in the middle of cornfields and other farmlands. The same is true of automobiles, and indescribable amounts of other forms of debris. Unless these farmlands are returned to productive use, tax bases cannot be restored, and the communities involved cannot revive their economies.

The bill also provides for loan forgiveness and deferment of principal and interest payments on certain loans of the Small Business Administration and the Farmers Home Administration; unemployment and Food Stamp assistance to victims of major disasters; the appointment of federal coordinating officers and the establishment of field offices in major disaster areas and temporary shelter for disaster victims.

The conferees also are recommending in their report a provision to allow the Small Business Administration and the Farmers Home Administration to refinance any mortgage or other liens outstanding against property destroyed or damaged in a major disaster.

It is the intent of the conferees that the SBA review its present loan ceilings, with a view toward lifting the amounts which can be provided to rehabilitate businesses. As part of my preparation for today's hearings on the flooding in the James River Basin, I conferred with people from Nelson, Albemarle and Amherst Counties. Businessmen told me that the present \$100,000 ceiling is inadequate. A report I received late yesterday from the Richmond Regional Office of the SBA confirms that view. The SBA informed me that 15 per cent of the businesses who have applied as a consequence of damage from Hurricane Camille have sought loans in excess of the ceiling.

Such a revision could be accomplished administratively. There is no statutory prohibition against lifting the ceiling. Many of the businesses seeking higher loans are located in small communities, and employ substantial numbers of the local work force. It is essential that these companies be rehabilitated as promptly as possible.

There also is need for authority to extend financial aid to localities who have suffered such devastation that they cannot meet obligations from local tax revenues. As Senator Randolph has pointed out, this problem will be the subject of hearings this year.

The report of the conferees is an important step in a four-year effort led by Senator Bayh to enact a permanent national disaster relief program. He is to be commended for his tenacity. I am grateful to him, to Senator Randolph and to my other colleagues on the Public Works Committee and the Conference Committee for their diligence in the development of this report.

Mr. SPONG. Mr. President, in conclusion, let me say that I think the experience gained as a result of this report, and as a result of Hurricane Camille, will provide a foundation upon which permanent legislation might be enacted. I am very pleased that the able chairman, the Senator from West Virginia (Mr. RANDOLPH), has announced that hearings for the purpose of developing permanent legislation will take place at a time when we will have an opportunity to review the experience under this measure and to

assess the need for additional types of relief for disaster victims.

Mr. BAYH. Mr. President, I wish to thank the Senator from Virginia for his thoughtful remarks directed to me, as well as to thank the chairman for his kind remarks, and point out that the contribution which the Senator from Virginia made to the conference committee was, indeed, a great one.

As I said earlier, the Senator from Virginia and the two Senators from Mississippi, who are now in the Chamber, were on the scene investigating conditions, and immediately drafted legislation to be quickly introduced. Their persistence in pursuing members of the conference to bring the legislation into being, and to provide meaningful relief for their constituents, is an indispensable part of this program.

Let me say in passing—the Senator from Virginia raised the point, and it is an accurate one—that we should not overlook the great contribution made by the staffs of the Public Works Committees, not only in the normal procedure of business in drafting legislation but also in helping the conference by going into the area, as they did, and coming back with firsthand reports that were extremely helpful to us.

Mr. SPONG. I thank the Senator from Indiana very much for his gracious remarks.

Mr. EASTLAND. Mr. President, 1 month ago yesterday Hurricane Camille assaulted the southern shores and inland sections of America.

Her howling winds and raging tides laid waste our lands and brought death and destruction, privation and suffering to countless thousands of our citizens.

Lives were lost and other lives radically changed, businesses disappeared under debris, dwellings were demolished, economic systems smashed, cities and communities crushed, agriculture, commerce, industry, and tourism were shredded by winds in excess of 200 miles per hour; scattered by tides of more than 30 feet.

I saw the havoc wrought by Camille and I listened as our people attempted to articulate the horror which attended her and even after the passage of 30 days I find it difficult to accept the awesome extent of the damage inflicted on us by this terrible catastrophe.

However, it is a fact that this disaster struck at our States and in some sections left little behind her except rubble.

This giant storm blew away and washed away everything in her path. Brick and concrete and steel were no match for her unprecedented might.

Camille destroyed or damaged everything she touched—everything, that is, except that which is indestructible.

Her tornadic winds and her walls of water failed to break the spirit of our people and failed to drown the compassion of America for her citizens.

Thus, 1 month and 1 day after Camille struck, a record performance by any standard—a splendid effort—led by the Public Works Committees of the Senate and of the House has produced a legislative package which, in my judgment, is an excellent vehicle for the tremendous recovery task which confronts us.

This superstorm has been styled the worst natural disaster visited on the North American Continent in modern history. Cures for this calamity necessitated the most sweeping and comprehensive disaster relief legislation ever enacted.

In only 15 days after the reconvening of Congress, our Public Works Committees met that stern test.

For the people of my State, and of all States involved in this tragedy, I commend from my heart Senators, Members of Congress, and the competent and dedicated staff personnel who contributed to this outstanding achievement.

The tenacious campaign waged by the distinguished Senator from Indiana is the cornerstone of this conference report and I salute Senator BAYH for his brilliant service.

I shall say of my old friend, the accomplished chairman of the Senate Committee on Public Works, that America is fortunate to have as leader of that vital committee a wise and compassionate gentleman whose talent as a legislative craftsman is unsurpassed.

Mr. President, the far-reaching provisions of this legislation as outlined by Senator BAYH, Senator RANDOLPH and Senator SPONG are a credit to the Congress and to the country, and certainly create a broad foundation for the launching of our rebuilding and rehabilitation projects.

I am particularly pleased with those features which:

Authorize permanent repairs to roadways not included in the Federal-aid system;

Make available aid to combat timber losses;

Allow SBA and FHA to render generous and meaningful support to homeowners and business, industrial and agricultural interests, as well as victims of previous disasters such as Hurricane Betsy;

Provide food and housing for our people;

Furnish payments to those deprived of jobs by the disaster who are not covered by State unemployment compensation programs. Examples are migrant workers, fishermen ruled joint venturers rather than employees, and many who have not worked long enough to enjoy State coverage;

Make available grants to suppress further damage from fire on public or private lands; and

Authorize the removal of debris from privately owned lands and waters. Beyond the great benefits to the citizen and the businessman contained in this section is substantial help for our tung and pecan industries.

The provisions I have mentioned, along with others which complete the package, form a legislative proposal which merits our commendation and support.

Now, Mr. President, it is true that adoption of this report will not cure the myriad of ills which afflict some areas—nor will it solve all of the painful problems which beset those areas. I submit that additional legislative relief is necessary to the full and final recovery of the most heavily damaged sections.

As an example, for my own State, further steps will have to be taken to support local governmental entities—this is a pressing problem of overriding importance—and other adjustments will have to be made.

Some of our difficulties can and should be quickly resolved by administrative action. I cite the present unrealistic limits on SBA loans. These limits were imposed administratively, and, in the light of the very strong statement on this critical matter in the managers' report, I am confident that actual dollar losses will be considered rather than unrealistic and unworkable limitations. The same approach, of course, must be applied to extensive losses sustained by agriculture.

Further, President Nixon and Vice President Agnew have personally inspected the devastation and have stated the administration's desire to render maximum assistance to the rehabilitation mission. The sympathetic and understanding attitude and pronouncements of the leaders of our Nation assure expeditious and effective administrative action in all phases of the recovery effort.

I would conclude by offering a suggestion to Chairman RANDOLPH, Senator BAYH, and their able colleagues.

I submit that the magnitude of the catastrophe caused by Camille and the extensive area involved provides us with a great "school" to teach us much more about the science of reaction to and recovery from large-scale disasters.

I suggest a continuing review of the process of the rehabilitation of our citizenry and of the rebuilding of physical facilities. I am persuaded that we can ascertain from this study which programs and procedures operate swiftly and effectively and which are in need of modification.

Mr. President, as we meet here today, many thousands of our citizens are suffering and whole sections of our country are shattered. We have before us an innovative, imaginative, and comprehensive piece of legislation, perfected by experts, which will assist us in the great task of forming a promising future for all who have borne the burden of disaster.

I strongly urge the adoption of the conference report.

Mr. STENNIS. Mr. President, I shall not detain the Senate at length. It certainly warms my heart and makes me feel proud of my colleagues, as well as the people of the Nation, to have such a fine response to the distressing situation that we were confronted with, not only in my State, but in other areas. I have been most grateful all the way through for the fine response from the Members of this body.

I also want to especially thank the staff members. Chairman RANDOLPH authorized those gentlemen to go down to the gulf coast of Mississippi and Louisiana. They went there on short notice and did an excellent job. We are most grateful to them, as I am sure the Nation is.

I wish to mention Chairman RANDOLPH, Senator BAYH, Senator COOPER, and Senator SPONG. I do not want to leave out any other Senators. Members of the House conference also showed the utmost consideration.

I refer now to what the Senator from Kentucky (Mr. COOPER) said. One county that was hit by this hurricane had left just four schoolrooms—not buildings, but only four schoolrooms in the entire county that were habitable for classes, which is an indication of the devastation.

I have been interested in the long-term financing of the municipalities and counties whose tax base was destroyed.

If I may address this question to the Senator from West Virginia (Mr. RANDOLPH), the Senator said he would consider legislation that went to the matter of some relief in the form of help for financing outstanding obligations. Would the Senator contemplate in his thinking a bill that would be retroactive with respect to those places where the distressing situations to which I have just referred occurred?

Mr. RANDOLPH. Mr. President, in response to the Senator from Mississippi, we have always considered retroactive features applicable in past disaster legislation. As we go into a more permanent type of legislation, not legislation merely to take care of a particular crisis, but to lay out a broad plan of general assistance, I can assure the Senator that the retroactive feature will be very much a matter within the purview of the committee and the subcommittee.

Referring to the four classrooms that were all that were left in a particular county, as the Senator indicated, I recall that former Senator Morse, as chairman of our Subcommittee on Education, several years ago guided the Senate Labor Committee in writing a provision that authorizes the U.S. Commissioner of Education to give assistance to districts in which floods, tornadoes, or hurricanes have devastated school facilities used for primary and secondary education. That provision is contained in Public Law 89-313, as amended. So we have recognized that problem. The Senator certainly goes to the basic problem of the tax base which has been destroyed. We must, and we will, of course, consider the question the Senator has raised.

Mr. STENNIS. I thank the Senator. I had no doubt about his attitude. I raised the point in this way merely to give substance to the hope of the people there of receiving some help as they face the future. I had a report this morning of people out of work there. They are eager to be on the move.

I thank the Senator very much and commend him highly for the national legislation.

Mr. BAYH. Mr. President, will the Senator yield?

Mr. STENNIS. I yield to the Senator from Indiana. I have thanked him previously and am pleased to yield.

Mr. BAYH. I should like to reiterate what our distinguished committee chairman has said, that there is assistance available to the remains of that four-room school, or other schools that have been so devastated; but the issue to which the Senator from Mississippi addresses himself, and the one to which the Senator from West Virginia has addressed himself is: What do you do in those areas where the school is still standing, but the tax base to support bonds on the school is destroyed?

Mr. STENNIS. Yes.

Mr. BAYH. This is the area that we are determined, through the leadership of our chairman and the cooperation of the House of Representatives, to deal with.

Mr. STENNIS. Yes. I thank the chairman of the subcommittee. That was the basic issue I raised, not the school building itself, but the devastation with no tax base left.

I am extremely gratified that we have before us a bill which will provide much needed assistance to the areas of our country which suffered so greatly from Hurricane Camille.

I think that to have such a bill so quickly after the occurrence of this terrible storm is a testimonial to the dedication and sense of urgency of the Public Works Committee and the conferees. It demonstrates to me that the Congress has understood, with clarity and compassion, the pitiful conditions that exist in the disaster areas, with the economy destroyed and the marks of death and sorrow left indelibly behind. It shows that when these conditions exist, legislative action can be obtained quickly and effectively. I am deeply grateful to all who have worked toward providing this bill for our consideration. I ask that we act upon it quickly and affirmatively, so that many of the uncertainties that face so many families, businesses, and local and State governments in these areas can be resolved, and they will know what they can count on from the Federal Government in their efforts toward recovery.

In my opinion the bill will accomplish the majority of actions that are necessary. Understandably, considering the relatively short period of time taken by the conferees in reaching agreement on this emergency action, there are some issues that could not be fully explored and resolved. They are for the most part the financial problems that are created for individuals, business concerns, and political subdivisions in these incredibly devastated areas. They constitute the real key to a healthy rebirth of a normal way of life and a sound economy in extensive portions of our country. I will indicate these points more specifically later in my remarks.

It is my understanding that hearings are planned to further examine these matters, with a view to a permanent bill adaptable to all future major disasters. I understand further that when such matters have been thoroughly explored, it will be possible to make the permanent legislation retroactive to cover this disaster, and any others—and I prayerfully hope that there are none—that may occur in the interim.

This is a fine bill, and an effective one, in starting to do now what must be done. It recognizes the widespread, catastrophic damage to streets, roads, and highways in the non-Federal-aid system, and provides matching Federal funds on a 50-50 basis. It recognizes, and assists in dealing with the problem of millions of acres of damaged timberland.

The bill authorizes the President to take emergency action with respect to housing for shelterless families, and to make it available within the means of

those who so badly need it. It provides, when needed, a food program for low income families, and appropriate unemployment assistance. It provides grants for firefighting in forest conflagrations. It provides for removal of debris from privately owned lands and waters, when it is in the public interest.

With a view to the future, the bill would make matching funds available for preparation of State disaster plans. With other existing authorities it helps in agricultural recovery, such as in our tung and pecan groves.

In the matter of Small Business Administration and Farmers Home Administration loans, there is forgiveness, in relatively small amounts, for those in financial difficulties. Loans are provided at the going interest rate for Government money. I note that the bill does not address the question of upper limits on the amounts of loans. I would hope that no arbitrary loan limits will be established by the agencies administratively, and that dollar-loss figures will be the determining factor.

The bill authorizes SBA and FHA to refinance any mortgage or other lien outstanding against the destroyed or damaged property. The language, however, is permissive in nature. It appears to me possible that the agencies or the Bureau of the Budget might impose an administrative constraint on this action. I hope it will be clear that it is the intent of Congress that there not be imposed in this respect, or with regard to limits of loans, any arbitrary administrative actions that will prevent the legislation from being completely effective in its objective, which is to promote the economic recovery of these stricken areas.

My colleagues are aware that there are in the Camille area many communities, towns, cities, and counties so devastated that the tax base has literally been destroyed. Obviously, the financing of public indebtedness, by bonds or other means, is in a critical situation. This is a condition that is untenable as it stands, and it deserves and must receive our earliest consideration. Grants and loans are going to be necessary, and there must be a minimum delay if we are to prevent a chaotic financial situation at local levels of government. I trust this problem will be thoroughly explored, in hearings, as soon as possible, and appropriate legislative relief will be recommended.

I feel, too, that further review will indicate that there may be additional measures required with respect to educational facilities and agricultural recovery. The hearings will, I am sure, measure the degree with which we have addressed all of the problems in these terribly stricken areas.

I am convinced that this bill will be a first, long step down the road of recovery. It will leave us more steps to be taken, and these must be examined, but in this bill, together with other existing authorities, we have the framework for a reconstruction and rehabilitation plan.

I am proud and thankful that we have the chance to do so much, so quickly, for those who need it so badly. I urge your support of these necessary and constructive measures.

Mr. President, I do not care to take

further time of the Senate, except to say again, we thank you all, not only for what you have done to meet this emergency, but in behalf of the pending measure, which is nationwide legislation.

Mr. LONG. Mr. President, will the Senator yield?

Mr. STENNIS. I am happy to yield to the Senator from Louisiana, who I know is vitally interested in this matter.

Mr. LONG. Mr. President, I wish to associate myself with everything that has been said here by the two able Senators from Mississippi. I am proud to join them as a cosponsor of this measure.

I have always felt that Louisiana has had more than two Senators. We have had some wonderful friends from Mississippi with whom we have shared many common interests. We have had to fight from time to time, over who owned the shrimp in the Gulf of Mexico, and where the boundary line between our States was; but other than that, there has been no quarrel whatsoever between our two States. Mississippi has helped our State when relief was needed, and we have tried to be an equally good neighbor.

But I believe both our States have another Senator in the distinguished chairman of the committee, the Senator from West Virginia (Mr. RANDOLPH). He has visited us from time to time, looked at our problems, and treated us fairly. In fact, he has gone the extra mile. If he is half as good a Senator for West Virginia—and I suspect he is; I suspect he is at least five times as good a Senator for West Virginia as he is for us—then he has 10 or 20 Senators he can count on to help West Virginia any time that is needed. And I am sure the same is true for his colleague from West Virginia (Mr. BYRD).

We all suffered great devastation in the recent disaster. Mississippi was hit the hardest. The time before, it was Louisiana which was hit the hardest, with Hurricane Betsy. Much of what we are accomplishing in this fine legislation had a precedent in the Betsy bill, as we called it at that time. At that time the distinguished chairman of the committee gave us all the help that could be asked of anyone. So I think the entire Nation is fortunate to have this distinguished committee chairman to consider the plight of suffering people and depressed areas, and to provide the sort of generous help that has been accorded here.

The Senator from Indiana (Mr. BAYH) has given much thought to this matter. He has worked diligently, and tried to provide legislation that would take care of this sort of disasters when they occur. I think, meritorious as his efforts are, that he will find some of these things you cannot anticipate, but that you must, from time to time, tailor the bill to the facts. But I applaud the Senator from Indiana for his efforts to try to see that legislation will be available for all disasters. Certainly on any occasion such as this, there is every reason to see that the victims of the disaster should be given some help. We in Louisiana appreciate every bit of help given to us, and we appreciate the thoughtful way in which the chairman of the committee,

and every member of it, have tried to provide here a bill to help the victims in all disaster areas.

Mr. STENNIS. I thank the Senator from Louisiana. I am sure that the appreciation for the efforts of the subcommittee and its chairman is nationwide.

Mr. BYRD of Virginia obtained the floor.

Mr. BYRD of Virginia. Mr. President, I yield briefly to my colleague from Virginia (Mr. SPONG).

Mr. SPONG. Mr. President, I should like at this time, in order that we might further develop the legislative history of the report, to direct a question to the chairman of the conferees, if I may have his attention.

I ask him, in section 14 of the report, do the conferees intend debris removal grants to include, for example, such things as trees, houses, outbuildings, automobiles, mud, silt, rocks, boulders, household effects, and dead animals?

Mr. BAYH. Yes, they do; and we might add to that such items as ships and other instruments of normal navigation and industry that would be in the area.

Mr. EASTLAND. Would it include boats, launches, barges, and litter on the beaches, lakes, and bayous?

Mr. BAYH. Yes, it would. We have some rather interesting testimony as to what would be considered as debris, for which prior to this time no assistance to private property owners was available.

We have found a farmer faced with clearing his neighbor's barn from out of the middle of his wheat field. The same could be said for a fishing launch found on the front porch of a rest home in one of the Senator's areas. We intend for a broad interpretation to be placed on what constitutes debris.

Mr. SPONG. I thank the Senator from Indiana, and I thank my senior colleague for yielding to me.

Mr. BYRD of Virginia. Mr. President, I commend the committee which developed the pending legislation.

Experts report that Hurricane Camille is probably the strongest storm to strike the mainland of the United States. In the wake of her winds and floods, thousands of people from the gulf coast to my home State of Virginia, are beginning a long, slow road back to a normal existence.

When a natural disaster occurs, it places an unbearable financial burden on the individual victim, and on the localities which have been hit. It is only proper that all Americans acting through their elected representatives in the Congress should share in the relief of a national disaster.

In the States of Mississippi and Louisiana alone, 200 persons lost their lives and some 200,000 were left homeless. Damage estimates in those two States approximated \$1 billion.

The State of Virginia escaped the full force of Hurricane Camille. She did not, however, escape the rains which followed in the wake of the hurricane. On Tuesday, August 19, it is estimated that 27 inches of rain fell in one 8-hour period. This rain caused the worst flood in Virginia's history.

I personally visited the areas hardest hit by the flood. I followed by helicopter

the devastation left in the path of the flood waters down the Tye and Rockfish Rivers.

I was accompanied by top officials of the Office of Emergency Management, and I was very much impressed by their effective work, and how quickly they moved in to be helpful to the people of the stricken localities.

Nelson and Rockbridge Counties were two of the hardest hit. These are small counties, Nelson with a population of 13,000 and Rockbridge with 24,000.

The damage to private property in these two counties alone was over \$67 million. This accounts for more than half of the total damage to private property in the entire State.

I emphasize that these are two small rural counties, and it has been a terrible ordeal for the people in those areas.

The total value of property damaged in Virginia—private and public property such as roads and bridges—is estimated to be in excess of \$150 million.

It is easy to add up the dollar value of property damaged, but it is impossible to place a value on the lives that were lost. The latest count shows 109 people have died and 44 are still missing.

The initial response to the emergency created by Hurricane Camille is testimony to the way Americans react when their fellow citizens are in need. I found it encouraging to see private companies lowering their prices to ease the initial burden of rebuilding. It is this sort of private initiative that reaffirms my faith in the American spirit.

But no amount of private initiative can provide the necessary relief to the disaster victims. Entire towns have been washed away. People are homeless. Faced with this situation, people rightly turn to their government for help.

Once the President declared the State a major disaster area, the full effect of the Federal Government could be felt. On the day of this declaration, HEW opened a disaster hospital unit, HUD responded to requests for temporary housing, the Department of Agriculture provided enough food for 4,000 people and Small Business Administration Field representatives helped victims apply for emergency loans and established five emergency loan offices in the disaster areas. The Army Corps of Engineers immediately started to clear vital transportation routes.

But this is only the beginning. The difficult task of rebuilding lies ahead. It will not be accomplished in a matter of days, weeks, or even months. Many families will need assistance to survive through the winter months.

The long-range recovery will require a great deal of individual sacrifice. Special relief funds have already been established in many counties.

I am pleased to have cosponsored legislation with the distinguished senior Senator from Mississippi (Mr. EASTLAND), and another set of legislation introduced by the distinguished junior Senator from Mississippi (Mr. STENNIS), that would provide specific relief to victims of Hurricane Camille. There is a definite need for legislation to give relief to these people. I support the pending general disaster relief bill.

There is a need for general disaster relief legislation. It is impossible to predict natural disasters and, often, specific legislation comes too late.

An example of the swiftness and devastation with which flooding can come was afforded recently in northern Virginia. Three times this summer—on July 22, July 28, and August 2—the area around Four Mile Run was flooded as a result of heavy rains.

Although these floods were dwarfed by the extensive damage caused by the storm on the fringe of Hurricane Camille, the damage in northern Virginia was considerable. Preliminary estimates indicated losses of about \$3.5 million.

I visited the Arlandria area, one of the hardest hit in the Four Mile Run floods, shortly after the most recent damage was incurred. It was obvious that immediate relief was needed, and equally obvious that the flooding had caught residents and businessmen unaware.

Four Mile Run presents a complex flood control problem. It also is an excellent example of the need for general disaster relief legislation and for flood insurance which would ease the burden of those hit by unpredictable floods.

While we cannot predict specific disasters, we can anticipate that natural disasters will occur, and if general disaster relief legislation is passed, then Federal agencies will know that they can act with some authority and that their programs will be supported with the necessary appropriations. General legislation will help remove some of the confusion which arises in an emergency situation.

I cannot say that the present relief legislation is perfect, but I can say that it goes in the right direction.

I commend the committee which developed the pending legislation and specifically its distinguished chairman, the Senator from West Virginia (Mr. RANDOLPH), and my colleague from Virginia (Mr. SPONGE).

Mr. EASTLAND. Mr. President, I should like to ask the distinguished Senator from Indiana a question or two to make legislative history.

Is it correct that liberalized SBA loan procedures would definitely be extended to agriculture through the Farmers Home Administration?

Mr. BAYH. The Senator is correct. I appreciate, of course, the opportunity to answer any questions that the distinguished Senator from Mississippi addresses to me.

Mr. EASTLAND. Is it correct that SBA forgiveness provisions are extended to include victims of Betsy?

Mr. BAYH. The Senator is correct. The wording of this matter was so difficult to nail down officially that we tried to put it in the manager's report.

In my report and the report of Representative JONES the intention is to provide \$1,800 forgiveness provision for each disaster.

Thus someone who was affected by the disaster involved in Betsy and received \$1,800 forgiveness of his loan would also receive another \$1,800 forgiveness if he were affected further in the Camille disaster.

I want to make it specifically clear that the intention was to provide \$1,800 per disaster, but not to permit two \$1,800 writeoffs under various sections of the bill—only one.

Mr. EASTLAND. Is it correct that unemployment provisions can be made for persons such as fishermen who have been classified as joint venturers rather than employees?

Mr. BAYH. The Senator is correct. The President is also given authority to reassess those who should be qualified for food stamps and to take into consideration—I think is the exact wording—the impact of the disaster on the income and earning capability of the prospective recipient.

Mr. EASTLAND. Is there any money limitations on the assistance made available on a 50-50 basis to affect permanent repairs on roadways not included in the Federal aid system?

Mr. BAYH. There is not.

Mr. EASTLAND. I thank the Senator.

Mr. DOLE. Mr. President, as one of the conferees I join with my colleagues on the Public Works Committee in supporting the conference report on H.R. 6508.

It has been a privilege for me, a junior Member of the Senate, to work with Members of the House and Members of the Senate in drafting this legislation.

To the Senator from Indiana (Mr. BAYH), the originator of this legislation, let me state that I appreciate his tolerance and understanding.

There are five new members on the Public Works Committee of the Senate and we raised some questions earlier this year about the effect of the legislation. In tribute to our chairman, I point out that he was kind enough at that time to explain the matter very carefully to each of us. And as a result of our discussion, we have clarified certain provisions about which objections had been raised.

There is no doubt that when disaster strikes, it brings a great hardship to many individuals. We had testimony to this effect today on the floor of the Senate by the Senators from Mississippi, the Senators from Virginia, and the Senator from Louisiana.

I had some reservations about the original Senate bill. Specifically, I think they were with respect to sections 5, 6, and 7. However, they have been clarified and modified, not only on the Senate side but also in the Senate-House conference. So, I believe that any objections I had have been removed.

This legislation will hopefully correlate all the Federal law on emergency assistance. And there is no doubt in my mind because Kansas is one of the States mentioned by our chairman, that the State-Federal coordinating officer will make it possible for individuals and public officials to be promptly made aware of their responsibilities and the assistance an injured party is entitled to.

There have unquestionably been many leaders working for the passage of this legislation. I refer to the distinguished Senator from California (Mr. MURPHY), who has been deeply interested in bringing relief to California. In fact, he introduced S. 993 one of the earlier bills this year with reference to the California disaster late last year and early this year.

At any rate, the provisions of that bill by and large are incorporated in the Senate-House version.

This bill was also supported, I might add, by the distinguished junior Senator from California (Mr. CRANSTON), who is now in the Chamber.

I think the important thing here, as I view it, is the fact as pointed out by the Senator from Virginia (Mr. SPONG) that we are a responsive body and that within 30 days after the Camille disaster the Senate-House conferees—who were rather far apart when we recessed last month—were able to get together and work out some very major differences and were able to compromise these differences and bring the bill to function in a matter of days.

There are several provisions of the bill which require further study. However, these provisions of the bill will expire on December 31, 1970, giving us an opportunity to hold hearings next year on their effectiveness.

As indicated by the chairman of the committee and other Senators, we will have more hearings and more studies and more comprehensive planning. However, at least this is a step in the right direction.

I would state again to my friend the Senator from Indiana that he deserves much of the credit.

I am happy as a freshman Member of the Senate and of the committee to have had some small part in bringing about this legislation.

Mr. BAYH. Mr. President, will the Senator yield?

Mr. DOLE. I yield.

Mr. BAYH. Mr. President, I express my appreciation to the Senator from Kansas for his cooperation. I express also my appreciation to the Senator from Florida (Mr. GURNEY) who is at this moment the Presiding Officer, who served on the conference committee, and particularly in that initial meeting with our illustrious counterparts in the House, they were instrumental in insisting that we give attention to the need for a nationwide bill of significantly long duration and not confine our effort to one specific area of a disaster that has already happened.

If it had not been for the cooperation of the Senator from Kansas and the other members of the committee, I think it is interesting to point out that we could have cleared the House bill which dealt with California and then recessed. In that event, in less than a week we would have been confronted with the Camille disaster that did damage to the extent of approximately \$1¼ billion in a State that would not have been covered by that bill.

I am particularly appreciative of the assistance rendered by Senators in coming back and after the recess, in a fine spirit of cooperation among all members of the conference committee, coming up with what I think will be landmark legislation.

Mr. YOUNG of Ohio. Mr. President, as chairman of the Subcommittee on Flood Control—Rivers and Harbors, I wish to join the chairman of the full Committee on Public Works and the distinguished Senator from Indiana (Mr. BAYH) in praising the work accomplished by the Senate and House conferees on this dis-

aster relief bill. They have labored well and hard. I am naturally pleased that many of the provisions of this legislation will be of direct benefit to the people of Ohio who also have suffered severe storm damage in recent months.

I agree there is still much for us to do in strengthening the national disaster relief program, and I pledge my continued support of efforts to bring that about.

The PRESIDING OFFICER. The question is on agreeing to the conference report.

The report was agreed to.

EXECUTIVE COMMUNICATIONS, ETC.

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

REPORT ON SUPPORT COSTS FOR VIETNAM, LAOS, AND THAILAND

A letter from the Deputy Secretary of Defense, transmitting, pursuant to law, a confidential report on support costs for Vietnam, Laos, and Thailand (with an accompanying report); to the Committee on Appropriations.

REPORTS ON PURCHASES AND SALES OF GOLD AND STATE OF U.S. GOLD STOCK AND REPORT ON INTERNATIONAL MONETARY FUND DIS- CUSSIONS

A letter from the Secretary of the Treasury, transmitting, for the information of the Senate, two semiannual reports on (1) U.S. purchases and sales of gold and the state of the U.S. gold stock; and (2) International Monetary Fund discussions on the evolution of the international monetary system, for the period January 31–June 30, 1969 (with accompanying reports); to the Committee on Foreign Relations.

REPORTS OF COMPTROLLER GENERAL

A letter from the Comptroller General of the United States, transmitting, pursuant to law, a secret report on review of assistance to Laos as administered by the Agency for International Development (with an accompanying report); to the Committee on Government Operations.

A letter from the Comptroller General of the United States, transmitting, pursuant to law, a report on the effectiveness and administrative efficiency of the Neighborhood Youth Corps Program under title IB of the Economic Opportunity Act of 1964, Los Angeles County, California, Department of Labor, dated September 17, 1969; to the Committee on Government Operations.

REPORTS OF COMMITTEES

The following reports of committees were submitted:

By Mr. JORDAN of North Carolina, from the Committee on Agriculture and Forestry, without amendment:

S. 55. A bill for the relief of Leonard N. Rogers, John P. Corcoran, Mrs. Charles W. (Ethel J.) Pensinger, Marion M. Lee, and Arthur N. Lee (Rept. No. 91-415).

By Mr. HOLLAND, from the Committee on Agriculture and Forestry, with amendments:

S. 858. A bill to amend the Agricultural Adjustment Act of 1938 with respect to wheat (Rept. No. 81-417);

S. 1181. A bill to enable potato growers to finance a nationally coordinated research and promotion program to improve their competitive position and expand their markets for potatoes by increasing consumer acceptance of such potatoes and potato products and by improving the quality of potatoes and potato products that are made

available to the consumer (Rept. No. 91-416); and

S. 2214. A bill to amend section 602(c)(2) of the Agricultural Marketing Agreement Act of 1937, as amended (Rept. No. 91-418).

By Mr. BIBLE, from the Committee on Appropriations, with amendments:

H.R. 12781. An act making appropriations for the Department of the Interior and related agencies for the fiscal year ending June 30, 1970, and for other purposes (Rept. No. 91-420).

TEMPORARY EXTENSION OF RURAL HOUSING PROGRAMS AND FED- ERAL HOUSING ADMINISTRATION INSURANCE AUTHORITY—RE- PORT OF A COMMITTEE (S. REPT. NO. 91-419)

Mr. SPARKMAN. Mr. President, from the Committee on Banking and Currency, I report favorably an original joint resolution (S.J. Res. 152) to provide for the temporary extension of rural housing programs and Federal Housing Administration insurance authority, and to extend the period during which the Secretary of Housing and Urban Development may establish maximum interest rates on insured loans, and I submit a report thereon.

The PRESIDING OFFICER. The report will be received and the joint resolution will be placed on the calendar, and the report will be printed.

EXECUTIVE REPORTS OF COMMITTEES

As in executive session,

The following favorable reports of nominations were submitted:

By Mr. SPARKMAN, from the Committee on Banking and Currency:

A. Sydney Herlong, of Florida, to be a member of the Securities and Exchange Commission.

By Mr. LONG, from the Committee on Finance:

William H. Quealy, of Virginia, to be a judge of the Tax Court of the United States.

BILLS AND JOINT RESOLUTIONS INTRODUCED OR REPORTED

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

By Mr. CRANSTON:

S. 2918. A bill for the relief of Jose S. Cervantes; to the Committee on the Judiciary.

By Mr. GOODELL:

S. 2919. A bill to assist State and local criminal justice systems in the rehabilitation of criminal and youth offenders, and the prevention of juvenile delinquency and criminal recidivism, by providing for innovative programs of vocational training, job placement, counseling, correctional education services, corrections systems manpower acquisition, the establishment of regional Crime and Delinquency Centers, a national criminal justice professions recruitment program, and for other purposes; and

S. 2920. A bill to amend the Bail Reform Act of 1966 to authorize consideration of danger to the community in setting conditions of release, to provide for pretrial detention of dangerous persons, and for other purposes; to the Committee on the Judiciary.

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

By Mr. GOODELL (for himself, Mr. CASE, Mr. GRAVEL, Mr. HOLLINGS, Mr. INOUE, Mr. JAVITS, Mr. METCALF, Mr. MILLER, Mr. NELSON, and Mr. PERCY):

S. 2921. A bill to assist State and municipal governments and nonprofit, private organizations in providing for the development of programs and the construction, maintenance, operation and staffing of facilities for the prevention, treatment and rehabilitation of drug addicts, and in reducing the incidence of crime and delinquency related to narcotic drug addiction and drug abuse, and for other purposes; to the Committee on Labor and Public Welfare.

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

By Mr. HOLLINGS:

S. 2922. A bill to amend title 5, United States Code, to revise, clarify, and extend the provisions relating to court leave for employees of the United States and the District of Columbia; to the Committee on Post Office and Civil Service.

By Mr. TALMADGE:

S. 2923. A bill for the relief of Dimitrios Tzaras; to the Committee on the Judiciary.

By Mr. TYDINGS:

S. 2924. A bill to improve judicial machinery by amending provisions of law pertaining to jurisdiction of the district courts and for other purposes; to the Committee on the Judiciary.

By Mr. BAYH:

S. 2925. A bill for the relief of Alexander Mearis; to the Committee on the Judiciary.

By Mr. MCINTYRE:

S. 2926. A bill for the relief of Nunziante Leo; and

S. 2927. A bill for the relief of Giovanni Del Lucia; to the Committee on the Judiciary.

By Mr. GRAVEL:

S. 2928. A bill to amend the Communications Satellite Act of 1962 to permit State ownership of satellite terminal stations; to the Committee on Commerce.

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

By Mr. BYRD of West Virginia:

S. 2929. A bill to prohibit the use of interstate facilities, including the mails, for the transportation of certain materials to minors; and

S. 2930. A bill to prohibit the use of interstate facilities, including the mails, for the transportation of salacious advertising; to the Committee on the Judiciary.

By Mr. ANDERSON:

S.J. Res. 151. Joint resolution to authorize and request the President to proclaim the period October 6, 1969, through October 10, 1969, as "American Indian Week"; to the Committee on the Judiciary.

By Mr. SPARKMAN:

S.J. Res. 152. A joint resolution to provide for the temporary extension of rural housing programs and Federal Housing Administration insurance authority, and to extend the period during which the Secretary of Housing and Urban Development may establish maximum interest rates on insured loans; placed on the calendar.

(The remarks of Mr. SPARKMAN when he reported to joint resolution appear earlier in the RECORD under the appropriate heading.)

S. 2928—INTRODUCTION OF A BILL TO AMEND THE COMMUNICATIONS SATELLITE ACT OF 1962

Mr. GRAVEL. Mr. President, on several recent occasions I have discussed before this body the importance of using new technology to solve some of the

monumental development problems related to Alaska. In particular, I have discussed the immediate need to bring modern educational and cultural techniques into the truly isolated communities of Alaska. The only economically feasible way to do this is via satellite. This is a proven method of effective and reliable communications.

In addition, Mr. President, I have pointed out the need for both, I repeat, both types of communications—educational and cultural programming in all forms, such as radio and television. While public and commercial communications use similar techniques, the commercial methods must meet traditional profit criteria. On the other hand, the educational and cultural networks need not, and cannot, and should not, meet profit criteria.

The problem of generalized public communications is not unique to Alaska. A number of our States could benefit from the legislation that I am introducing today. Educational and cultural organizations in every one of our 50 States will benefit from this legislation.

My legislation is an amendment to the Communications Satellite Act of 1962. I propose that each State of this Union have the right to own or participate in the ownership of ground stations. There are cost savings factors to the States, to educational institutions, and to cultural public organizations that cannot be ignored if the general public is to effectively enjoy the fruits of their costly but worthwhile research in space technology.

Further, and extremely fundamental, is the right of the States to acquire satellite services for education and culture without being forced to go through a wholesaler. I stress that this provision in no way is to lessen or modify provisions related to this type of service in other recent acts of Congress. But it is extremely important, in my view, to affirm this fundamental right of the people to benefit directly from research paid for by public funds, in the domain of satellite communications.

A number of recent acts of Congress, such as those creating the Networks for Knowledge, and the Lister Hill National Center for Biomedical Communications, will benefit directly from my amendment. The two acts above give precedence to my legislation today.

The era of satellite communications has been stymied, let me qualify this to say, has been perverted by traditional use of formulas predicated on the amortization of terrestrial or submarine methods of transmission and distribution. This issue is complex.

But let us at least allow our educational institutions to benefit now from this American technology. No American school should go without the means to reach other banks of knowledge because of outdated standards or because of corporate in-fighting.

Mr. President, my amendment aims at only this issue. My first consideration is to allow educational and public cultural communications using satellites. Second, I propose that the participants be allowed to choose their most economical local solution related to ownership of

stations for educational and cultural applications. We must remove the barriers to scholarly and formative exchanges between similar institutions located in several States if we hope to avoid each State duplicating another's scarce educational dollars.

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

The bill (S. 2928) to amend the Communications Satellite Act of 1962 to permit State ownership of satellite terminal stations, introduced by Mr. GRAVEL, was received, read twice by its title, and referred to the Committee on Commerce.

ADDITIONAL COSPONSORS OF BILLS AND JOINT RESOLUTIONS

S. 2656

Mr. BYRD of West Virginia, Mr. President, on behalf of the Senator from California (Mr. CRANSTON), I ask unanimous consent that, at the next printing, the name of the Senator from Maryland (Mr. TYDINGS) be added as a cosponsor of the bill (S. 2656) to establish a Mass Transit Trust Fund.

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

S. 2667

Mr. DOMINICK. Mr. President, I ask unanimous consent that, at the next printing, the name of the Senator from Idaho (Mr. JORDAN), be added as a cosponsor of S. 2667, to provide additional penalties for the use of firearms in the commission of certain crimes of violence.

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

S. 2847

Mr. BYRD of West Virginia, Mr. President, on behalf of the Senator from Wisconsin (Mr. NELSON), I ask unanimous consent that, at the next printing, the names of the Senator from Oklahoma (Mr. HARRIS), the Senator from New Jersey (Mr. CASE), the Senator from Massachusetts (Mr. KENNEDY), the Senator from Wyoming (Mr. MCGEE), and the Senator from Washington (Mr. MAGNUSON) be added as cosponsors of S. 2847, to amend the Foreign Assistance Act, as amended, to authorize the Secretary of State to participate in the development of a large prototype desalting plant in Israel.

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

SENATE JOINT RESOLUTION 89

Mr. MUSKIE. Mr. President, I ask unanimous consent that, at the next printing, the name of the Senator from West Virginia (Mr. RANDOLPH) be added as a cosponsor of Senate Joint Resolution 89, expressing the support of the Congress, and urging the support of Federal Departments and Agencies as well as other persons and organizations, both public and private for the international biological program.

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

SENATE JOINT RESOLUTION 148

Mr. BYRD of West Virginia, Mr. President, on behalf of the Senator from New Mexico (Mr. MONTOYA), I ask unanimous

consent that, at the next printing, the name of the Senator from Alaska (Mr. GRAVEL) be added as a cosponsor of the joint resolution (S.J. Res. 148) to authorize the Department of Health, Education, and Welfare to make allocations to local educational agencies under Public Law 874 based on the full entitlements.

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

SENATE RESOLUTION 260—RESOLUTION MAKING COMMITTEE ASSIGNMENTS FOR THE SENATOR FROM ILLINOIS (MR. SMITH)

Mr. SCOTT submitted a resolution (S. Res. 260) making committee assignments for the Senator from Illinois (Mr. SMITH), which was considered and agreed to.

(The remarks of Mr. SCOTT when he submitted the resolution appear earlier in the RECORD under the appropriate heading.)

ADDITIONAL COSPONSORS OF RESOLUTIONS

SENATE RESOLUTION 179

Mr. MUSKIE. Mr. President, I ask unanimous consent that, at the next printing, the name of the Senator from West Virginia (Mr. RANDOLPH) be added as a cosponsor of Senate Resolution 179, expressing the sense of the Senate that the United States should actively participate in and offer to act as host to the 1972 United Nations Conference on Human Environment.

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

SENATE RESOLUTION 243

Mr. BYRD of West Virginia. Mr. President, on behalf of the Senator from Indiana (Mr. BAYH), I ask unanimous consent that, at the next printing, the names of the Senator from South Carolina (Mr. HOLLINGS), the Senator from Idaho (Mr. CHURCH), and the Senator from Washington (Mr. MAGNUSON) be added as cosponsors of the resolution (S. Res. 243) to make it the sense of the Senate that the President should request the United Nations to take such steps as may be appropriate to bring about compliance by the Government of North Vietnam with its obligations under the Geneva Convention of August 12, 1949, relative to the treatment of prisoners of war.

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

FOREIGN ASSISTANCE ACT OF 1969—AMENDMENT

AMENDMENT NO. 175

Mr. PERCY. Mr. President, I rise today to speak about a matter of utmost importance—yet one which, in comparison with our total Federal budget—calls for a comparatively small investment. I speak in support of more effective family planning programs at home and an increase in aid, where requested, for family planning abroad.

The frightening aspects of the world-

wide population explosion have been widely publicized during the past few years. Seventy million people are being added to the world population each year. The total population is projected to double in one generation.

But we have yet to realize the import of the increased demands that this rate of growth places on needs for food, for pure air, and water, and other natural resources, for housing, for jobs, and for educational facilities and opportunities. Nor have we fully realized the tragic consequences that will inevitably follow unless population growth rates are changed. And therefore we have not yet supported programs to check population growth at a level adequate to insure a humane solution of the population problem.

Here in the United States our productivity is so great that we do not need to worry about the availability of enough food for any foreseeable number of Americans in the years ahead. Hunger and malnutrition in the United States result—not from the lack of food—but through ignorance and poverty.

But even in our wealthy society there is overcrowding in our cities, in our classrooms, on our highways, and in our parks. With all of the vast open spaces in this country, most Americans are now threatened by air and water pollution. Too many unwanted births compound social and economic problems.

In the United States family planning information and services are generally available to those who can afford to pay for them. But to many of the poor—those who need that information and these services the most—they are yet to be made available. As a consequence, planned parenthood-world population estimates that 40 percent of births among the poor between 1960 and 1965 were unwanted or unplanned, as compared to 14 percent among the nonpoor. It is estimated that 5 million American women who would benefit from family planning services now lack access to such services.

A recent study prepared for the GAO by the Resource Management Corp. evaluates birth control programs in terms of their potential effects in the war on poverty. It highlights conditions that should command attention and action.

As the size of the family increases, poor families account for an increasing proportion of the total.

More than one-third of the families with five children, and one-half of the families with six or more children are poor.

In 1963, 15 million children under 18—about 20 percent of the total, or one in five of American children—lived in families below the poverty line.

The study shows that a deplorably large proportion of our children and youth live in poverty and suffer deprivations that give them a poor start in life, and dim their hopes.

The study further shows that although the poor of all races in the United States tend to have more children than the nonpoor, they seek to have no more children than other Americans. It is therefore fair to assume that a significant reduction in the proportion of children that must begin life with the disadvantages of poverty would occur if effective family plan-

ning information and services were available to all Americans regardless of their ability to pay. Experience shows this to be the case.

In one county in Louisiana a vigorous, free choice, family planning program succeeded, in 1 year, in producing a one-third decline both in the total number of indigent births and in the total number of illegitimate births.

In parts of Chicago where poor people live, after 5 years of widely available family planning services, there was a 22-percent decline in birth rates.

Family planning services are likewise credited with a decline in birth rates of 24 and 36 percent, respectively, in low-income areas in Washington, D.C., and in Baltimore.

The Resource Management Corp.'s study for the GAO concludes that widespread, effective birth control programs would have benefits for society, for the families involved, and especially for their children.

The ratio of benefits to costs to the public sector, the study points out, is very high. Such benefits accrue from the accompanying reduction in maternal and infant mortality rates, reduction in the incidence of mental retardation and other crippling diseases, reduction in welfare payments and reduction in illegitimacy. The report cites planned parenthood calculations that birth control services for 500,000 women in poor families, at a cost of \$20 per woman per year, would produce a saving of \$250 million in health care and AFDC expenditures.

The poor families involved would themselves gain substantial economic and social benefits, revolving around lower family expenses, increased family earning capacity, and greater family stability. Benefit-to-cost ratios were estimated to range from 14 to 1 to 26 to 1.

The study further points out that perhaps it is the children who are born into poverty that benefit most from smaller sized families. Recent studies show that children in smaller families have a higher average IQ than children in large families, and that this is true at all socioeconomic levels. Children in smaller families get more care and attention from their parents. They reach higher educational levels. Thus, they have a far better chance to good productive lives.

Poverty in America should be one of our highest priority problems. It must be attacked on all fronts. An effective program to make birth control information and services available to all Americans would, in itself, decrease the proportion of disadvantaged in the next generation. It would also add to the effectiveness of all other efforts to end poverty.

Therefore I wholeheartedly urge the enactment of S. 2108, which I am cosponsoring along with 22 other Senators. This legislation would enhance the effectiveness of our domestic family planning programs and insure them adequate administrative and financial support.

It would provide an administrative organization within the Department of Health, Education, and Welfare designed to insure that adequate priority be given to population matters.

It would stimulate and encourage other public and private efforts.

It would further give much-needed impetus to population-related biomedical and social science research, so that, through new knowledge, we will be able to develop more effective programs.

It would be a most constructive step toward carrying out the recommendations of the President's Committee on Population and Family Planning, which stated:

The Federal Government must undertake a much larger effort if this nation hopes to play its proper role in attaining a better life for its people and for the citizens of the developing nations. In working to avert a population crisis, this nation will at the same time help strengthen the voluntary exercise of a basic human right, the right of parents to have the number of children they want, when they want them.

We must, however, also face the consequences of the population explosion beyond our own borders. Among newly developing nations—in which two-thirds of the world's people live—this crisis is far more urgent, immediate, and threatening than it is at home.

In much of the heavily populated underdeveloped world, population is now growing at rates unprecedented in human history, often with tragic results.

Hunger and malnutrition cause untold human misery. Millions of infants and very young children suffer dietary deficiencies that impair—perhaps permanently—both their physical and mental development. Whole populations are trapped in the same kind of vicious circle that affects pockets of poverty in the United States.

Explosive population growth in many newly developing countries is making it all but impossible for them to build the schools and train the teachers they so desperately need—and to provide other services and institutions that are a part of modern civilization. It is thwarting their efforts to achieve the economic growth and development that would enable them to achieve the benefits of modern life and contribute to world stability and progress. Robert S. McNamara, President of the World Bank, has stated:

The greatest single obstacle to the economic and social advancement of the majority of the peoples in the underdeveloped world is rampant population growth.

The responsibility of the United States to provide appropriate assistance to help newly developing countries meet their population crises is based on three considerations.

One is the moral imperative that has always impelled American citizens to help relieve human suffering and despair.

Another is the recognition that our own continued progress in economic growth and development depends in no small measure on rising standards of living and expanding economies among our neighbors in this shrinking world.

And the third is our concern lest continued failure of the underdeveloped world to progress toward narrowing the gap between rich and poor nations in income and development will bring about instability, violence, and warfare, all of which can inevitably destroy our hopes for a peaceful world.

Our aid to newly developing nations to control their explosive population growth rates should be sharply accelerated. Most seriously overpopulated countries have national policies directed toward curbing growth rates, and they are anxiously seeking help. They need technical assistance. They need help in research and development. They need materials and supplies. Moreover, initial successes in some countries, notably Taiwan and South Korea, reveal that family planning programs can bring results.

For many underdeveloped countries time is fast running out. Unless they can be encouraged and helped to control their population growth rates by humane means, famine, war, and pestilence may well take over. This must be granted without delay.

In urging a further effort for family planning, President Nixon in his foreign aid message on May 28, joined his four predecessors in the White House in recognizing the importance of the population problem. His message to the Congress of June 18 further emphasizes his determination in this area. It is now up to the Congress to insure that the highest priority will be given to family planning in the AID program.

In 1967, Congress earmarked \$35 million in AID funds to help solve population problems. In 1968, this was raised to \$50 million.

We should now at least double that amount.

We should further provide that at least 5 percent of the total dollar grant and loan funds allocated to any country should be available only for population programs in that country. If the country cannot utilize the full 5 percent for this purpose, it would receive the proportion of it that could be used. The remainder of the funds would be allocated through public or private programs under regional or international agencies. It would be used in addition to the funds given to these programs through regular channels such as the United Nations.

Such provisions would not impose upon a recipient country a policy dictated by the United States, but rather serve as an incentive, both to the AID program and to the host country, to give population programs adequate priority as an essential part of the overall development effort.

More AID personnel should be specifically assigned to this field. The program should be run by an official at the level of assistant administrator. There should be additional qualified professional personnel in Washington and at least one population officer in each of the AID missions in critical host countries. I am today introducing an amendment to the foreign aid authorization bill to accomplish these objectives.

Unfortunately, population programs have long been a matter of controversy and are therefore relatively new. It is only since 1967 that they have been included in AID programs. Without earmarking funds and setting specific provisions for adequate official personnel assignments, these birth control efforts tend to lose out—not because anyone ob-

jects to them, but rather because, when there is not enough to satisfy all of the claims, the older, more experienced, better established programs tend to get the most. The Congress can give an invaluable impetus to birth control programs by building into the law essential incentive measures.

A further reason for priority emphasis lies in the simple fact that in most of the underdeveloped world all other development efforts hinge on decreasing population growth. Agricultural progress is of little avail in raising nutritional levels if increasing population claims most of the increase in food production. Industrial advance cannot raise standards of living if the increased production has to be divided among ever more and more consumers. Educational facilities and personnel cannot meet the aspirations of the people if their numbers continue to increase at present rates. Problems of unemployment, underemployment, poverty, unrest, and violence will hold back social and political advance unless the problem of population is solved.

I believe the crisis can be met in time. But meeting it calls for more vigorous effort—on the part of public and private agencies—on the part of highly developed as well as newly developing nations—than has yet been forthcoming. By supporting an intensified drive, both at home and abroad, we can hope for major benefits for ourselves and our children from relatively modest investments. In view of the stakes involved, we can afford to do no less.

Mr. President, on behalf of myself, and Senators BROOKE, GRAVEL, MAGNUSON, MCGOVERN, METCALF, NELSON, and PACKWOOD, I submit an amendment, intended to be proposed by us, jointly to the bill (S. 2347) to promote the foreign policy, security, and general welfare of the United States by assisting peoples of the world to achieve economic development within a framework of democratic economic, social, and political institutions, and for other purposes.

The PRESIDING OFFICER. The amendment will be received, printed, and appropriately referred.

The amendment (No. 175) was referred to the Committee on Foreign Relations.

ADDITIONAL COSPONSORS OF AMENDMENT 128 TO H.R. 11271, AN ACT TO AUTHORIZE APPROPRIATIONS TO THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Mr. YARBOROUGH. Mr. President, I ask unanimous consent that at the next printing, the names of the Senator from South Carolina (Mr. THURMOND), the Senator from Arizona (Mr. GOLDWATER), the Senator from Florida (Mr. GURNEY), the Senator from Alabama (Mr. SPARKMAN) and the Senator from Alaska (Mr. GRAVEL) be added as cosponsors of amendment 128 to H.R. 11271, an act to authorize appropriations to the National Aeronautics and Space Administration.

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

NOTICE CONCERNING NOMINATIONS BEFORE THE COMMITTEE ON THE JUDICIARY

Mr. EASTLAND. Mr. President, the following nominations have been referred to and are now pending before the Committee on the Judiciary:

William W. Milligan, of Ohio, to be U.S. attorney for the southern district of Ohio for the term of 4 years, vice Robert M. Draper, resigned.

Stanley G. Pitkin, of Washington, to be U.S. attorney for the western district of Washington for the term of 4 years, vice Eugene G. Cushing.

On behalf of the Committee on the Judiciary, notice is hereby given to all persons interested in these nominations to file with the committee, in writing, on or before Thursday, September 25, 1969, any representations or objections they may wish to present concerning the above nominations, with a further statement whether it is their intention to appear at any hearing which may be scheduled.

INCREASED SOCIAL SECURITY BENEFITS

Mr. SCOTT. Mr. President, yesterday President Nixon announced, upon the occasion of the signing of the extension of the Older Americans Act of 1965, that he would be sending to Congress next week legislation which would increase present social security benefits paid to our older Americans. I warmly applaud, on behalf of every American receiving or about to receive social security benefits, this timely recognition of the serious economic difficulties of citizens forced to live on a fixed retirement income. Year by year, month by month, week by week, the value of social security benefits shrinks under the continuing high cost of living.

Our retired Americans are more than aware that the last benefit increase in social security by Congress came in 1967. Since then there has been neither an automatic cost of living increase in benefits nor provided for in the current Social Security Act, nor has there been the slightest change in benefits, notwithstanding the cruel march of inflationary pressures.

No one can deny the hard fact that inflation hits the hardest at our retired or semiretired elder people who have not received the raises the workingman has received. Instead, under the cruel burden of inflation, his moderate and unincreasing amount of benefits has brought less and less and less as each day passes.

I believe it is time for action, and am most hopeful that Congress will be able to enact a measure soon. Our older Americans spend proportionately more on food, housing, household operations, and medical care than younger families. The burdens of increasing local property taxes are on the 70 percent of our older Americans who own their own homes, and 20 percent of those homes are classified as substandard. It is estimated that 7 out of 8 older persons have chronic illnesses. Medical care represents a substantial share of their expenditures.

I, therefore, welcome the news that the President will send a special message to Congress next week. He has demonstrated to our older Americans, to our widows with minor children, to all those who must exist on a fixed income which cannot keep up with the galloping economy, that this Republican administration cares deeply. He has increased an early figure of 7 to 10 percent the amount of benefit increases he will request. I believe the President will be most explicit in calling attention to the need for the speedy consideration of social security benefit increases.

I also believe that the President will hold the Democratic Congress to strict accountability on his forthcoming request. Based on well documented knowledge of the great difficulties Pennsylvanians on fixed incomes are having in keeping up with rising living costs, I would hope Congress will act quickly on this matter. The Democratic Congress will have the cruel fact upon adjournment, if there is no action, that it has done nothing to adjust the level of social security payments and alleviate, to some degree, the acute plight of those who must live by their social security check.

FEDERAL DISCRETIONARY GRANT PROGRAMS

Mr. KENNEDY. Mr. President, I have received from the Administrative Law Section of the American Bar Association a letter announcing a national institute dealing with Federal discretionary grant programs for urban areas to be held in Washington on October 3 and 4. Because I believe that staff personnel of the Members and committees of Congress and other readers of the CONGRESSIONAL RECORD may be interested in attending this institute, I ask unanimous consent that the letter of announcement be printed in the RECORD.

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

AMERICAN BAR ASSOCIATION,
September 17, 1969.

HON. EDWARD F. KENNEDY,
U.S. Senate,
Washington, D.C.

DEAR SENATOR KENNEDY: A National Institute dealing with Federal discretionary grant programs for urban areas, sponsored by the Administrative Law Section of the American Bar Association, will be held on October 3 and 4, 1969, at the Washington Hilton Hotel in Washington, D.C.

The speakers will explore in depth the standards and methods used in exercising administrative discretion under these grant programs in distributing billions of dollars annually. The Urban Renewal and Model Cities programs of the Department of Housing and Urban Development, the Air Pollution Control program of the Department of Health, Education and Welfare, and the Urban Mass Transportation program of the Department of Transportation, will be discussed as sample programs, and an opportunity will be presented to registrants to obtain information as well about other programs administered by the Departments. On the first day, the procedures presently followed under the sample programs will be described and evaluated. On the second day, there will be a discussion of questions of current interest and emerging trends in the development of Administrative Law, as well as con-

current workshops dealing with each department.

The speakers include administrators and attorneys from these three Departments, as well as Judge Harold Leventhal of the U.S. Court of Appeals for the District of Columbia Circuit, and distinguished executives, attorneys, and professors from outside the Government. Richard C. Van Dusen, Under Secretary of Housing and Urban Development, will speak at the luncheon on October 3.

All interested persons, both lawyers and nonlawyers, are cordially invited to attend. The registration fee (which includes luncheon on both days), applicable to full-time governmental employees, is \$60 for American Bar Association members and \$70 for nonmembers. Reservations should be made with the Division of Legal Practice and Education, American Bar Association, 1155 East 60th Street, Chicago, Illinois 60637. Brochures giving full details concerning the Institute may be obtained from Willis B. Snell, Chairman of the Section National Institute Planning Committee, telephone 296-4800, Washington.

Sincerely yours,

WILLIS B. SNELL.

THE IMPORTANCE OF SOUND AGRICULTURAL PROGRAMS

Mr. HUGHES. Mr. President, our justifiable concern with Vietnam and other grave problems that dominate the headlines, these days, should not be permitted to make us forget the importance of sound agricultural programs to the security and well-being of the United States.

Never was there a more compelling need for informed and forthright spokesmen on behalf of the American farmer than in the present confused situation.

It, therefore, seemed appropriate to share with Senators the wisdom of the remarks made by the distinguished senior Senator from Missouri (Mr. SYMINGTON) before the annual convention of the MFA Oil Co. in Columbia, Mo., Monday, September 15, 1969.

Senator SYMINGTON has been performing an invaluable service in the Senate in recent weeks with his outstanding experience and expertise in the area of military affairs. I would remind Senators that the Senator from Missouri is also an authority on farm problems and a champion of the farmer's cause. He knows combines and crop programs as well as fighter planes and aircraft carriers.

I ask unanimous consent that the distinguished Senator's MFA speech of September 15 be printed in the RECORD.

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

AGRICULTURE AND THE FUTURE (By Senator STUART SYMINGTON)

It is a privilege to meet with you here in Columbia today, for it provides us with a fine opportunity to visit over some of the problems that concern us all.

Let me say first how proud I am, and how proud the citizens of our State and this great farm region are and rightly should be, of the fine accomplishments of the MFA Oil Company.

It is not unusual for the people of agriculture to take hold of a problem to the point where they are among the nation's leaders. But it is a special distinction that you all have built up one of the most successful cooperative oil companies in the United States.

I am told that but one of the outstanding results of your work during the past year has been the achievement of substantial saving in the price of oil for your members; and as we look at the great and growing problems which face most farmers today, a substantial saving in any field of agricultural cost is welcome news indeed.

For me it is a special privilege this morning to share this platform with your Board Chairman, Fred Heinkel. As all of you know, Fred Heinkel has probably had as much influence on the direction of the nation's farm legislation as any other American. His work in Washington, along with the unique respect in which he is held in that city, is in itself a great credit to MFA and all farmers in our State and region. It is his wise counsel and foresight that has built MFA into one of the nation's most important voices when it comes to farm matters.

Farm unity. As one looks back over the years, one cannot recall a single year when unity among farmers and farm organizations was more important than it is today. We have watched with sadness from the standpoint of rural welfare the once recognized as powerful farm bloc deteriorate into many not so powerful "crop" blocs.

Thanks to your outstanding leaders within MFA, and thanks to the efforts of each and every one of you, this organization has consistently been at the forefront in working to restore that unity and cooperation which is essential if we are to achieve our rightful goals and objectives.

The need for restored unity is perhaps best illustrated today by recognizing that in the last nine years the farm population of the United States has dropped from some 16 million in 1960 to 10 million at this time; over the same period, the number of farms has declined 25 percent.

As many of us here can recall only too well, not many decades ago the farmer and the rural community comprised a majority of the American population. What a change today. That is the basic thrust of the danger—man can live without many things but not without food—and that is the basic reason why agriculture must recognize and follow the basic wisdom contained in the trite but true observation of Benjamin Franklin, "We must all hang together, or assuredly we shall all hang separately."

Even as we meet here today, representatives of some 17 farm organizations are together in Washington discussing with Secretary Hardin the future of farm legislation.

These organizations are recommending an extension of the basic features of the present farm program, and the fact that they are united in their presentation is one of the best omens for sound future farm legislation.

And may I add that MFA is represented in Washington today by a man who has full appreciation of the art, as well as the science, of government, Clell Carpenter. Clell has worked long and hard for more just farm bills over the years; and he too is widely respected.

Farm legislation. The current discussion has to do with the future of the present basic farm program, passed by the Congress in 1965, because the 1965 Act expires with the 1970 crop; and in order to permit plenty of time for advance planning by farmers it is mighty important for the issues concerning farm programs to be resolved as quickly as possible.

Up until now, this Administration has not made it clear to the Congress the direction in which they would like us to proceed. It is understood, however, that the Secretary of Agriculture plans to testify before the House Agriculture Committee next September 24; and we would hope at that time to receive a better idea of Administration views.

Let us hope that Congress will act this year to re-new those farm programs that have already proved of substantial benefit to

our farm communities, making adjustments where those adjustments are needed. I cannot agree with those who call for the sweeping away of all farm programs; rather than bringing improvements, that action could only bring chaos and disaster to the farm community.

As discussion centers on the broad aspects of the current farm program, nevertheless increasing attention is being given to problems that have been encountered under the International Grains Agreement. This agreement, ratified little more than one year ago, has not lived up to expectations. Its shortcomings have become clear in recent months; and it is clear that American farmers have not gained the benefits which were expected when the Agreement was presented to Congress.

Rather than scrapping what was once hoped for as a major asset to wheat prices, we might make a full scale effort to correct the obvious defects, primarily through better enforcement where enforcement has been seriously lax. Close attention will be paid to this problem in the months to come.

Meanwhile, and because of the apprehension that you all know I have had for many years with respect to our continuing unfavorable balance of payments problem, I personally am especially disturbed that total United States farm exports continue to decline, to the point where, if new estimates for the current year are correct, farm exports will have declined more than a billion dollars over the last two years to a low of 5.7 billion dollars.

A major reason for this development is that, after we reached agreement with other countries during the Kennedy Round negotiations, those same countries put into force various "non-tariff" barriers.

At a time when the farmer is being hit from every side domestically in this cost-price squeeze, we just cannot afford further cuts in our food and fiber exports; and I am hopeful that practical new and if necessary reciprocal steps will be taken to help correct this situation.

Interest rates and inflation. As a result of a tour through Missouri during the recent Congressional recess, I saw and heard plenty of evidence with respect to problems facing agriculture in this State today.

One farmer from North Central Missouri reported, "This year is a bust as far as farming is concerned in this area. We will have less than forty percent of a crop. Part of this is due to floods but more to surface water and excessive rainfall."

When in South Missouri I saw just the opposite—problems created by drought and the consequent lack of water.

There is no reason to kid ourselves. This is not one of the best years for many Missouri farmers, either from the standpoint of prices or weather. And everyone is aware of the heavy additional impact created by these unprecedentedly high interest rates. Nowhere does this hit harder than in farm communities.

As we all know, high interest rates are particularly damaging to the little people. Farmers, especially the family size farmer, must have capital to operate, and to obtain those capital improvements essential if he is to have a chance to overcome the prevailing cost-price squeeze. He cannot wait around in the hope the banks will be able to lower interest rates.

These high interest rates are just one more example of the way this inflation has undermined and is undermining the economy of our nation; and that brings me to certain observations with respect to our foreign policy, including Vietnam; and what this foreign policy, in negative fashion, is doing to the plans and programs we all know are necessary for a better State and nation.

When asked, as happens frequently these days, "What can be done to combat this

rising inflation?", I try to answer with some questions; as examples:

How many Americans realize that today the United States has 429 major bases, and over 2,000 minor installations in foreign countries, with some 1.5 million Americans living on or near them?

How many of our citizens realize that this country is now committed to use its armed forces in the defense of 42 other countries; that thirty-two percent of all Americans under arms are stationed outside the United States; that there are 50 American military aid missions abroad; that U.S. troop deployments abroad this year will cost the American taxpayer 3.5 billion dollars in foreign exchange alone; and that bilateral economic aid is provided to 73 countries, military aid to 48?

And all this at a time when this Vietnam war is draining from our national treasury 2.5 billion dollars a month, or 30 billion a year.

It is no longer any secret in Washington that the crushing cost of our international commitments makes it increasingly difficult, if not impossible, to handle adequately growing problems here at home, not the least of which we know is the need to step up the pace of rural development.

As we all know, there were serious floods in Missouri again this year. Thousands of acres of land and millions of dollars in crops were damaged.

At least half of all this damage could have been prevented if Federal reservoirs had been completed up-stream. Instead of pressing forward with the construction of these reservoirs, however, funds have been withheld due to the great cost of our foreign commitments, primarily Vietnam.

We have just been told that 75 percent of all new contracts for flood control will be frozen, one more setback for the farmer and rural America.

We are also being told that the answer to inflation is high interest rates and higher taxes, both of which are hurting everybody, and the farmer at least as much as anybody.

Is it not high time that we face up to the fact that we must restore a proper balance between our national and international priorities?

Over the years we have stood together for a better agricultural picture in our State; let me assure you today that I am prepared to work with you to that end in the months and years ahead.

This is a great country, the finest the world has ever known. We can keep it that way if we dedicate ourselves to a more prosperous agriculture and a more secure and prosperous America; and therefore a better world in which to live.

FEDERAL HEALTH PROGRAMS IN A STATE OF DISARRAY

Mr. RIBICOFF, Mr. President, Federal health programs are in a state of disarray.

There is little coordination among the 23 Federal departments and agencies that will spend \$18.3 billion on Government health programs in fiscal 1970.

On Tuesday, I introduced legislation to provide for a Council of Health Advisers in the Executive Office of the President.

Such a Council is required to coordinate the hundreds of Federal health programs.

In addition, I recommended that the Department of Health, Education, and Welfare be reorganized to provide for an undersecretary for health.

These recommendations are among

the results of an investigation of the Federal role in health care that the Subcommittee on Executive Reorganization has been conducting for nearly 2 years.

In keeping with the subcommittee's jurisdiction over interagency coordination and conflict in similar program areas, the Subcommittee analyzed health construction funds within the Federal Government.

We felt this inquiry would serve as an indication of the success or failure of other areas of Federal health spending.

With regard to construction, the subcommittee found serious gaps in interagency coordination that is resulting in the waste of millions of Federal dollars each year.

The waste of dollars is directly attributable to poor management of Federal funds.

Let us look at what the subcommittee found.

Six Federal departments and agencies are involved in hospital construction.

The Departments of Health, Education, and Welfare; Housing and Urban Development; Commerce; and the Small Business Administration finance civilian hospital construction.

HEW, the Department of Defense, and the Veterans' Administration finance construction of federally operated facilities.

In the current fiscal year the Government will spend \$173 million to finance construction of civilian hospitals and \$144 million on federally operated facilities.

The largest Federal hospital construction effort is the Hill-Burton program of HEW.

Its prime concern has been to build hospitals in rural areas. The program was well conceived and generally has been well executed.

Its enabling legislation suggested some planning. Each State, in order to qualify for Hill-Burton funds, had to establish a planning agency.

These State agencies took inventories of their State's hospital needs, the service requirements of the population and their manpower needs and financial resources.

To acquire Hill-Burton funds, a hospital must channel its request through the State Hill-Burton agency.

To assure that these local planning mechanisms were not ignored, memoranda of agreement were established between HEW and other Federal civilian hospital financing agencies.

These agreements call for agencies financing civilian hospitals to clear their proposed projects with State Hill-Burton agencies.

But there is very strong evidence to suggest that these interagency coordination agreements frequently are ignored.

For example, a Federal official said that a hospital financed by the Commerce Department's Economic Development Administration recently was built in the Midwest.

The proposal was never brought to the attention of the Hill-Burton agency.

Only when the hospital was completed did EDA notify Hill-Burton administrators of this fact, at which time EDA

apologized for not clearing the project with Hill-Burton.

There are many reasons why Federal agencies should coordinate their hospital construction programs with the HEW's Hill-Burton program.

First of all, the hospital may not be needed in the area.

If the hospital is needed, and the construction is not coordinated with the State Hill-Burton agency, the facility may be too small or too large to serve the community's needs.

Furthermore, when a State Hill-Burton agency is bypassed, what guarantees have we that there is sufficient health manpower in an area to staff the facility?

To learn whether State Hill-Burton agencies were bypassed, the Subcommittee staff reviewed Small Business Administration hospital financing in four States. SBA finances only profitmaking hospitals. The results were startling.

Take, for example, the situation in one Florida city.

The city of Belle Glade, Fla., is a small rural community in the State's southern interior.

In February 1963, the Hill-Burton program approved a grant of \$635,000 toward the construction of a new \$1.6 million, 75-bed hospital. This hospital was completed in September, 1965 and presently has an occupancy rate of between 50 and 55 percent. This means that on the average, nearly half of the beds in the hospital are not used.

In August 1965, the month before the Belle Glade Memorial Hospital opened, the Small Business Administration approved a \$60,000 loan to the Carver Memorial Hospital Holding Corp. to build a 13-bed hospital in Belle Glade. Two years later, the same corporation received approval for an additional \$10,000 loan from SBA.

Carver Memorial Hospital was absolutely necessary. Administrators of the Small Business Administration were advised of this by State of Florida health officials. Ronald Burton, a consultant to the Florida State Bureau of Health Facilities and Services told the subcommittee staff:

There was a phone conversation with SBA and we said they should not build it.

Furthermore, the subcommittee staff reviewed SBA files on this loan and found no correspondence with the State Hill-Burton agency giving specific approval for the construction of this hospital.

Carver Memorial Hospital was licensed by the State of Florida in July 1968 but never opened as a hospital.

Von D. Mizell, M.D., medical director of Carver Memorial, advised the State board of health of this fact in a letter dated January 3, 1969.

He wrote:

As of this date, we have been unable to secure sufficient nursing personnel and medical doctors to supply adequate hospital coverage in order to open as we had hoped. To date we have not admitted any patients.

As per our telephone conversation some time ago, you may be aware of the fact that we have concluded a hospital in the Belle Glade area is not feasible at this time for the above reasons.

Between August 1965, when the first SBA loan to Carver Memorial was approved and July 1968, when the hospital was licensed, nearly 3 years had elapsed. By January, Dr. Mizell said that a hospital was not feasible and he asked that the State grant a license to operate the facility as a nursing home.

On April 14, 1969, the Florida State Board of Health granted a license to the Carver Memorial Hospital Holding Corp. to operate the Sunset Heights Nursing Home.

Here is a case where SBA financed an unnecessary facility in a community where the Federal Government had already committed a substantial amount of funds to provide a health facility for the community.

While the SBA may be assisting in overbuilding hospital services in some areas, in others—particularly metropolitan areas—it is building hospitals too small to truly serve the communities' needs.

The subcommittee found that in the Los Angeles area, and in several of its crowded suburbs, SBA has financed hospitals with as few as 52 beds.

There is a consensus among health care planners and hospital specialists that hospitals in metropolitan areas with less than 200 beds should not be built. These experts contend that small hospitals in metropolitan areas just cannot provide the services necessary to the populations they aim to serve.

The subcommittee also found indications that in three of the four States in which SBA loans were reviewed—California, Arizona, and Florida—Federal funds may have been used to create personal tax shelters.

California, Arizona, and Florida hospitals that had received SBA loans had converted from profitmaking operations to nonprofit operations.

In one case, the principals turned over the operations of their hospital to a family foundation, while title to the land and buildings remained under the control of the principals.

In another case, the entire hospital—its operations, buildings, equipment and land—were turned over to a nonprofit corporation.

It would appear from these cases that some individuals are building, with SBA assistance, hospitals they subsequently turn into arrangements that could serve as personal tax havens.

I am therefore writing a letter today to the Commissioner of the Internal Revenue bringing this entire matter to his attention. I shall make available to him the information developed by the subcommittee staff and request IRS to undertake a full investigation of SBA-financed health facilities to determine whether Federal health money is being used to develop tax shelters.

Furthermore, we will ask the IRS to recommend to the Congress any legislation it deems necessary.

Perhaps the most important single consequence of health programs being administered by agencies not primarily responsible for health is that the programs often are not directed toward car-

ing for the sick and delivering health care.

Officials of the Small Business Administration view themselves as bankers, not health planners. That is their basic purpose. They should not be called upon to make decisions with regard to health.

Likewise, officials of the Commerce Department's Economic Development Administration view themselves as business and employment developers. They, too, should not be called upon to make decisions regarding health.

Nonetheless their health construction financing programs give them decision-making power in health care for scores of communities and thousands of citizens.

Because their priorities are elsewhere and because there is so little coordination between EDA, SBA, and HEW, some immediate steps must be taken to improve the organization of the Federal health effort.

Accordingly, I shall recommend in writing to the Secretary of Commerce and the Administrator of the Small Business Administration that all health functions be eliminated from the Economic Development Administration and the Small Business Administration.

These agencies are operating health programs without the specific legislative authority of the Congress.

Furthermore, the continued administration of health programs by these agencies would at this point be in total disregard of a well-organized and efficiently organized Federal health effort.

The Economic Development Administration will spend \$9,212,000 in the current fiscal year on health. The Small Business Administration does not know how much it will spend on health this year. However, officials estimate spending will amount to some \$25 million.

These funds should be reallocated to other functions of these agencies, which have been severely underfunded. EDA and SBA sorely need these funds for other areas of their respective missions. But to continue spending these funds for health functions would represent waste.

Such a reallocation of these functions would represent a savings of roughly \$34 million in overall Federal health outlays.

The Department of Health, Education, and Welfare should assume full responsibility for the present health functions of these agencies. Furthermore, HEW should assign to these functions the lowest of priorities.

While there are serious problems with the health care roles of EDA and SBA, HEW's Hill-Burton construction program is not without its flaws.

Take, for example, the grant it made for the Palm Beach Gardens Hospital in Florida.

In February 1963, the Hill-Burton program approved a \$440,000 grant for the construction of an 86-bed, \$1.3 million facility.

The hospital was completed in 1965 but it did not open until late in 1968. It was a ghost hospital for 3 years.

The subcommittee also found other ghost hospitals.

In June, the subcommittee asked

Health, Education, and Welfare Secretary Finch to provide names and addresses of hospitals and nursing homes that were built with Federal assistance but have never opened.

We also asked about federally financed hospital facilities that were abandoned during construction.

And finally we asked about federally financed facilities that were completed, opened but ceased operations after a short period of time.

In August, Secretary Finch provided the subcommittee with the names of two hospitals. Both had been built with Federal funds. They opened and then closed.

The subcommittee has names of other federally financed hospitals, not mentioned by Mr. Finch.

We will ask for a further investigation into these matters.

While there are many problems that beset the Federal construction programs for civilian hospitals, much takes place in the construction of federally operated hospitals that escapes necessary scrutiny.

In the San Francisco area, the Army and the Navy refused to consolidate into one facility the separate hospitals each was planning to build. Both hospitals opened within the last 12 months.

The General Accounting Office and private hospital planners in the area recommended a joint facility be built and shared by each service.

The services refused. They said there was a strong preference on the part of military personnel to be treated in a hospital of their own service. Army and Navy representatives told the GAO that separate Army and Navy hospitals in the San Francisco area were essential for purposes of morale and medical training.

In fact, medical training probably would have been upgraded in a larger facility. With regard to personnel morale, we cannot comment.

The GAO estimated before the hospitals were built that \$10 million would be wasted with the construction of two separate facilities. Furthermore, GAO said an additional \$8.2 million would be wasted each year from the maintenance and operations of two separate facilities.

This situation and others like it around the country represent some of the worst decisions made in the Federal health effort.

It represents a waste of millions of health dollars each year that could be so much better spent in other health areas.

For example, just the money wasted by the duplicated DOD facilities in San Francisco matches the nearly \$8 million allotted annually to the California Hill-Burton program.

If we could apply just the \$8.2 million wasted by the Defense Department in the San Francisco area to the California hospital and modernization effort, we could double the impact of the State's present Federal hospital construction effort.

The needs for new hospital construction and modernization are great in California.

Hill-Burton Administrators in California say they now need 3,600 new hospital beds at a cost of \$144 million. Moreover, the cost for presently needed modernization would run \$350 million.

In reviewing the administration and coordination of Federal health construction expenditures, the subcommittee only scratched the surface.

The information developed by the subcommittee indicates the need for a full-scale investigation of Federal hospital construction programs.

Therefore, I am asking the Comptroller General of the United States to review the material developed by the subcommittee and to begin a full-scale investigation and audit of Federal hospital construction spending.

This General Accounting Office investigation should involve the health construction activities of the following departments and agencies: The Departments of Health, Education, and Welfare; Housing and Urban Development; and Defense; and the Veterans' Administration.

The GAO investigation should also include the Commerce Department's Economic Development Administration and the Small Business Administration, unless these agencies voluntarily remove themselves from health program administration.

As we said on Tuesday:

One of the major barriers to effective health policy formulation is the fragmentation of the Federal health effort. Health program administration becomes confused because it falls under the separate and distinct primary missions of each of the 23 health agencies.

Health programs become subordinated to these missions which further remove them from effective coordination.

We must begin to solve the problems posed by health program duplication and the lack of coordination.

We must begin to establish some overall health policy to guide the administration of these billions of dollars.

NEED TO RECOGNIZE FEDERAL AUTHORITY OVER GENOCIDE CONVENTION—AND TO EXERCISE IT

Mr. PROXMIRE, Mr. President, one of the arguments in opposition to Senate ratification of the Genocide Convention has been in the area of the effect of this convention on Federal-State relations. What is our form of government? It is a government of a federal character, with national and international matters the business of the Federal Government, and with local matters the business of the 50 States and the subdivisions of those States.

According to the Constitution, the treaty-making power and also the power to define and punish offenses against the laws of nations are specifically given to the Federal Government. Congress is already invested by the Constitution with the power to provide the criminal sanctions for offenses against the law of nations, Constitution Article I, section 8, clause 10.

It is wholly unwarranted to say that, because another offense has been added to the list of the few now punishable as offenses against the law of nations, the States have been deprived of a field of criminal jurisprudence.

Dean Rusk answered this argument very ably in his capacity at that time of Deputy Under Secretary of State when

he appeared before the special ad hoc subcommittee of the Senate Foreign Relations Committee. He stated:

Twice all of the states-members of the United Nations have declared that genocide is a matter of international concern. Twice all states-members of the United Nations have declared that genocide is a crime under international law. All have declared that internal cooperation is needed to stop this practice and that states have a duty to put a stop to such practices within their own respective borders. In view of this history, no one can doubt that genocide is a subject within the constitutional power of the Federal Government to define and punish offenses against the law of nations.

It is both important and imperative that the Federal Government and the Senate of the United States recognize its authority and need for commitment in this area—and to exercise that authority by ratifying the Genocide Convention.

ATOMIC ENERGY COMMISSION TESTING ON AMCHITKA ISLAND

Mr. NELSON. Mr. President, sometime within the next month the AEC will detonate a nuclear device deep beneath Amchitka Island in Alaska. The explosion will have a force of about a million tons of TNT. This blast is intended to be an experiment, determining whether this island has the ability to withstand still more powerful nuclear detonations.

The underlying purpose of the AEC test firing is not widely known. There is speculation that this underground shot is related to the development of nuclear warheads for our missiles. Whatever the objective of this firing, it should be absolutely certain before the blast that the delicate balance of nature will not be irreparably harmed by this large explosion.

In addition, the AEC should provide scientific evidence that will guarantee that the enormous shock waves from this tremor will not cause a chain reaction of earthquakes and tidal waves endangering man and animal life.

In a most interesting two part series written by Don L. Johnson, outdoors writer for the Milwaukee Sentinel, some other dangers are outlined that could threaten the ecology of this area because of the nuclear test.

Mr. Johnson accurately points out that there is controversy over the AEC test. There will be a great deal more if severe damage to man's environment results from the explosion.

I ask unanimous consent that the excellent and informative articles about the AEC nuclear test in Alaska, published in the Milwaukee Sentinel, be printed in the RECORD.

There being no objection, the articles were ordered to be printed in the RECORD, as follows:

[From the Milwaukee Sentinel, Aug. 30, 1969]

BLAST PROPOSALS SHAKE ALASKANS

(By Don L. Johnson)

ANCHORAGE, ALASKA.—The earthquake which shook this city the day I landed was the second felt within a week.

The jolt, although far weaker than the one which left Anchorage a shambles five years ago, caused a brief rattling of windows and shuddering of residents who remembered that fateful Good Friday in 1964. Yet most Alaskans quickly shrugged off the shock.

"As long as there's a little quake once in

awhile to relieve the pressures, we shouldn't have to worry about a big one," observed a federal public health administrator with whom I'd visited on the flight from Sitka.

Later, landing at the naval station at Adak, far out on the Aleutian chain, I learned that the commanding officer, Capt. Hubert Glenzer, Jr., a native of Owen, Wis., had ordered all planes aloft. Island residents were gathering in nervous groups on high ground.

"We've had a tsunami warning," Glenzer explained. "There's been an earthquake in the Kuriles."

A tsunami is better known as a tidal wave. The one which came in the wake of the 1964 quake virtually destroyed the Alaskan communities of Kodiak, Valdez, and Cordova.

When this wave arrived, it was barely discernible. The patrol planes swooped back out of the mists to land and life quickly resumed its regular schedule on the island.

Another kind of earthquake was in the making on my next stop, 200 miles farther westward.

Sometimes soon on Amchitka island, the atomic energy commission (AEC) plans to trigger a nuclear "device" 4,000 feet beneath the surface.

AEC officials, who avoid such terms as "bomb" and "weapon," say that the device will have a force of 1.1 or 1.2 megatons. A megaton is the equivalent of a million tons of TNT.

The AEC has set off underground blasts of that power before—in Nevada. Never before, though, has such a force been unleashed in one of the most earthquake prone areas of the world.

And so, there is worry. Fears that the blast will create destructive tremors and waves affecting far places. There is worry too, about radiation leakage. Special concern has been voiced for unique forms of wildlife, including sea otters, which live on Amchitka and neighboring islands.

There has been a report that a fault has already been found in the rock which must contain the blast; that leakage of radioactive materials was noted after a far smaller blast triggered on the island in 1965.

Such claims are denied by AEC spokesmen, who declare that every safeguard is being taken and that complex monitoring will measure the smallest effects of the test.

The blast, indeed, has been publicized as a "calibration shot"—its purpose to measure the island's ability to withstand still more powerful forces.

More tests are contemplated—the next possibility in the fall of 1970. It is generally believed that the tests are coupled with development of the controversial antiballistic missile system. The AEC has no comment on that.

Detonation of the device is expected about Oct. 1. Recent hints (such as establishment of a "safety area" of 50 miles around the island until Oct. 15) have led to speculation that it could come two weeks later.

Joe Brown, AEC site manager on Amchitka, answered questions as noncommittally as possible when he met me at the island's airfield. Clearance to make the visit had been difficult to secure, even after calls to AEC offices in Washington, D.C., Las Vegas, and Anchorage. Tightening security seemed to lend credence to a rumor that the device had just been delivered to the island. Armed men stayed close until I boarded an airplane again.

The impression I got was this:

It is too late for talks and hearings to alter the AEC plans. The pressures to trigger the blast are inexorable. This country has committed \$192 million for the Amchitka "event" (another AEC euphemism).

Although the test can be aborted at any moment for technical reasons, AEC technicians appear as certain of a successful "shot" as were NASA officials of the moon flight.

"We are on schedule," Brown told me simply.

But I also came away with some answers which held reassurance for all of us who worry when somebody wants to rock this shaky world.

[From the Milwaukee Sentinel, Sept. 1, 1969]
MANMADE "QUAKE" IN ALASKA—FUSE SHORTENS ON DATE OF AMCHITKA TEST

(By Don L. Johnson)

AMCHITKA, ALASKA.—Picture islands smothered by fog; dismal, snow streaked peaks seeming to grope for the sky. Imagine churning waves where currents of northern and southern seas clash in stormy channels. Hear the awesome wail of williwaw winds.

These are the Aleutians, curving westward from the Alaskan peninsula, reaching to within 250 miles of Russia's Komandorski islands; almost 1,800 miles from Anchorage and a brief flight from Soviet mainland on the Kamchatkan peninsula.

Feel a trembling under the tundra. There is an uneasiness in the earth's bowels. It breathes fire, belches smoke from craters. There are sink-holes and fumaroles, crumbling rock and volcanic ash. Streams slither down slopes, dive from sight, and reappear to form misty lakes.

Men have come here for many reasons. For fish, for fur—and even to fight a war. What better place, they now ask, to bury a fiery bomb?

FUSE SHORTENS

As the fuse shortens, however, that question is being countered by conservationists, other concerned citizens, and their representatives in congress.

Sometime early in October, the atomic energy commission (AEC) plans to explode a "high yield" nuclear device deep beneath Amchitka, about 350 miles from the western end of the island chain and 1,400 miles from Anchorage, Alaska.

Plans for the "event" (a word which, like "device," is favored by AEC officials) actually began in 1950, when technicians started probing the island for a place to trigger an atomic bomb. In the spring of 1964, they returned to prepare for a deep underground, low yield, atomic blast.

Called "Long Shot," it was fired in 1965 (over earnest objections from the department of interior, which includes Amchitka in the Aleutian national wildlife refuge).

The blast itself had little apparent effect on the island's wildlife, which includes large populations of eagles and of sea otters, returning from the brink of extinction. More difficult to measure were effects of presence of men and machines on the fragile habitat which supports such creatures.

SEARCH STARTED

In 1966, the AEC began an intensive search for an area suitable for testing new, more powerful devices. It is popularly supposed that the need for such tests is coupled with development of the disputed Safeguard antiballistic-missile system but AEC spokesmen admit only they are "weapons oriented."

Because of the proximity to Salt Lake City (250 miles) and Las Vegas (175 miles), the AEC site in central Nevada was deemed "possibly inadequate" for the anticipated blasts. The north slope of Alaska's remote Brooks mountains showed the desired geology but was considered too inaccessible.

Amchitka, too, presented "significant" logistical problems, but wartime experience had shown it could be supplied and manned, although weather might keep aircraft from landing for as much as a week at a time. Geology and ground water characteristics seemed suitable.

During the last two years, eight exploratory holes have been drilled on the island to depths of more than 6,000 feet. Drill site "B," a hole 60 inches in diameter, is near the main camp, near the southeast end of the narrow, 42 mile long island.

DEVICE READIED

It is there that the device is to be sealed at the 4,000 foot level. The control point for the shot is 25 miles away.

"Ground zero" was an apt description of this place, even before nuclear blasts added that term to our vocabulary. Zero-zero ceilings—dense clouds of fog hugging the ground—are often encountered by pilots.

The ceiling seemed scarcely higher than the rooftops when I arrived at Amchitka aboard a Reeve-Aleutian DC-6 carrying men and materials to the site. Rusty roofs of quonset huts—mementos of 1942 when United States forces gathered to oust the Japanese from nearby Kiska and Attu—appeared beneath the wings just seconds before we slipped onto the runway.

For a Reeve pilot, it was all in a day's work. But I was also aboard another day when the same pilot decided against landings on Amchitka and Attu. We spent the night with the air force at Shemya where ground control facilities brought us safely through the gloom.

Joe Brown, the AEC's site manager, met me at the Amchitka airfield. He wore a white helmet and brown jacket, and he had a determined squint behind his glasses. Armed security officers eyed the cameras I carried and remained close as we talked.

CONTROVERSY CITED

Was Brown aware of the controversy his holes on the ground were causing in Anchorage and Juneau, in Washington, D.C. and across the nation?

"We get newspapers. We read them," he answered dryly.

Also unhappy with publicity he had received was Roger Desautels, a bearded archeologist from the University of Alaska, who had been digging other holes on the island to unearth evidence of ancient cultures. It was recently widely reported that he had found evidence of pre-Aleut occupation dating back more than 9,000 years.

Other scientists—including Prof. William Laughlin, of the University of Wisconsin, who had combed some of the same sites last year—questioned the validity of finds three times older than any previously reported.

"I was misquoted; misunderstood. I've written an explanation to Laughlin," he told me in a brief meeting on the island. Asked to set the record straight, he answered, "I'll put it in writing and send it to you."

STATEMENT RECEIVED

From Brown, I received a 30 page statement from the AEC, newly prepared to answer questions and criticisms from concerned citizens and their congressmen. Briefly, it contained these assurances:

The blast will be of predictable power, in the one megaton range (equivalent to a million tons or more of TNT). Similar devices have been fired in Nevada and techniques to prevent seepage or venting of radioactive materials have been developed during more than 270 underground tests since 1957.

This is to be a "calibration shot," carefully monitored by complex instruments. Its purpose is to measure the island's ability to withstand still more powerful blasts.

AEC experts say it is highly improbable that any radioactivity will be released, but background data is being collected on the area's fish, shellfish, mammals, and birds—and their food chains and environment—to measure effects "in case an unlikely accident occurs."

More than \$3 million (of a total project cost of \$192 million) has been spent to identify and minimize ecological effects of the tests.

The shock, equaling an earthquake with force of 6.5 on the Richter scale, will be felt at the air force installation on Shemya and the naval station on Adak (each about 200 miles away) but not at Anchorage. A slightly stronger quake centered near Amchitka last

May caused no damage beyond neighboring islands.

It is considered unlikely that the blast will cause a larger earthquake and the remote location will limit the effects should that occur.

Although tidal waves several feet high have been observed in the Aleutians following severe quakes, the May shock showed no such effect. None is anticipated from the test.

The test is timed to avoid disturbance of nesting birds, but the shock may topple some eagle nesting sites on "sea stacks" (pinnacles of rock surrounded by the sea) and peregrine falcon aeries on the steep cliffs.

Experiments have indicated that the shock will be a possible hazard to sea otters only near ground zero, with young animals and pregnant female animals most susceptible. Since the otter population has reached the carrying capacity of the island, some are being captured and moved to other islands off southeastern Alaska, British Columbia, and Washington.

Summing up, the AEC says "the commission does everything necessary to ensure that the nuclear testing program causes no hazard, either immediate or future, to the public."

No further tests are planned "for at least a year" after the calibration shot, which AEC scientists seem certain will create only ripples, compared with the waves of controversy now arising.

But it is likely that those waves will rise higher still, before an even bigger "device" is lowered into an abyss on Amchitka.

ANOTHER MOTHER LODGE—WAITING TO BE MINED

Mr. HATFIELD. Mr. President, as we bask in our deserved glow of national self-pride following the successful Apollo moon shot, one side effect of the attendant publicity is worth noting. Our country's oceanography program has received more attention of exploration, scientific research, and other such terms. I believe our fledgling oceanography program deserves more national attention.

My thoughts on this are detailed in a well-written editorial published in the Portland Oregonian of September 7, 1969. The editor states:

The ocean unquestionably is a vast mother lode of resources waiting to be mined. An efficient harvest of its fish, shellfish, and plankton could increase vastly the supply of protein for undernourished humanity. We need to know much more about the effect on the oceans, and this protein harvest, of the growing flow of solid and liquid wastes going into the world's bays and estuaries. We can search for unknown seabed sources of oil, gas and minerals. And when scientists at last understand fully the role of the seas as the generator of weather and the source of rainfall we can have improved storm predictions and perhaps some day the ability to modify or even control weather conditions.

These goals are being sought rather haphazardly at present by many public and private agencies. This fragmented approach cannot very soon hope to unravel the mysteries of the 71 per cent of the earth covered with salt water. A strong federal operating agency could coordinate these efforts and mobilize new industrial and institutional marine research and engineering teams.

The editor also comments that—

Ocean and weather research may not have quite the same political oomph, and spending billions for aquanauts may not be as popular as for astronauts. But the net return on the investment could be much greater.

As the problem of feeding the world's

growing population becomes more difficult every day, we must look to the sea as a greater source of food. Money spent on research in this area promises a return of great magnitude from the moneys invested.

Estimates of the potential mineral wealth of the seabeds are such that we should consider giving increased attention to devising ways to utilize the mineral wealth in ways consistent with the ecology of the oceans.

Mr. President, the title of the editorial to which I referred earlier is "Look Down. Not Up." I think our country should take steps to encourage oceanographic research. We must act so that we can reap the benefits for the betterment of the country.

THE PANAMA CANAL: THE PROBLEM OF INCREASED TRANSIT FACILITIES AND THE ANSWER

Mr. THURMOND. Mr. President, one of the gravely important questions now before the Congress and the Nation is that of providing increased transit facilities across the Isthmus of Panama. Though current literature on this subject, official and unofficial, is voluminous, the problem when reduced to its essentials is relatively simple and the proper solution obvious.

Experienced Members of Congress who have studied the canal question in depth for many years have arrived at the same answer—the major modernization of the existing high-level lake-lock canal.

In a recent discussion in the U.S. Naval Institute Proceedings, the respected professional magazine of the Navy, Representative DANIEL J. FLOOD, of Pennsylvania, one of the leading authorities in Congress on interoceanic canal problems, admirably summarizes the canal question with important facts and figures and proposes what independent canal experts consider the best solution from all significant angles, including what is best for the economic well-being of Panama as well as that of the United States. To provide such a solution, identical bills have been introduced in both House and Senate to authorize the needed increase of capacity and operational improvement of the Panama Canal.

Mr. President, as evidence of the wide support for the proposed canal legislation, the 51st Annual National Convention of the American Legion in August 1969 adopted a notable resolution calling upon the Congress for legislation that would protect U.S. sovereignty over the Canal Zone territory and provide for the major modernization of the Panama Canal.

Mr. President, because the discussion by Representative Flood in U.S. Naval Institute Proceedings, September 1969, the American Legion resolution, and the texts of the proposed legislation should be of great interest to Congress, the Nation at large, and foreign countries with vessels that use the Panama route, I ask unanimous consent that all three items be printed in the RECORD.

There being no objection, the items were ordered to be printed in the RECORD, as follows:

[From the U.S. Naval Institute proceedings, September 1969]

A SOUTHEAST PASSAGE?

(By Hon. DANIEL J. FLOOD, Representative from Pennsylvania)

As a member of the Congress with assignment for many years to the Subcommittee on National Defense of the House Committee on Appropriations, and as a long-time student of interoceanic canal problems, I have read the article by Rear Admiral Gibbs with considerable interest. Though it introduces some new angles into current canal discussions, it does not present the real issues involved, which must be understood and not ignored if our canal policies are to be wise.

The gross investment of the United States, from 1904 through 30 June 1968, including defense, in the Panama Canal enterprise was \$6,368,009,000. Total recoveries during the same period were \$1,359,931,421.66, making a net investment of over \$5,000,000,000.

The Isthmian Canal policy of the United States, as developed over many years and which is embodied in treaty and law, has these objectives: the best type of canal, at the best site for the transit of vessels of all nations, on terms of equality, with tolls that are just and equitable. It was pursuant to this policy that the United States acquired by treaty with Panama the grant in perpetuity of sovereign rights, power, and authority over the Canal Zone territory and constructed the high-level-lake and lock type canal, all to the entire exclusion of the exercise by Panama of any such sovereign rights, power, or authority. The United States also obtained ownership of all land and property in the Zone by purchase from individual owners.

In these connections, it is important to realize that Panama has been, and still is, an area of endemic revolution and endless political instability; and that at the time of acquisition, it was one of the worst pest holes in the world.

The construction of the Panama Canal was one of the truly great achievements of man. Its subsequent maintenance, operation, sanitation, and protection have measured up to our solemn treaty obligations. The transit since opening to traffic on 15 August 1914 through 30 June 1968, of 403,230 vessels of various types and descriptions during both peace and war (World Wars I and II, Korean, and Vietnam, as well as the 1962 Cuban missile crisis) completely establishes the wisdom of the original construction.

As to current discussions over the type of canal, the idea of constructing a canal at sea level is a "hardy perennial." It appeals strongly to the manufacturers of heavy earth-moving machinery, dredging combines, a limited number of professional engineers, and various theorists. Many independent experienced engineers, navigators, and scientists oppose it. Thus, Rear Admiral Gibbs's emphasis that certain large vessels now constructed or planned were designed to avoid transit of either the Panama or Suez Canals for the reason that it is more economical for them to go around Cape Horn or the Cape of Good Hope rather than pay tolls is most pertinent. Also, as he points out, the closure of the sea-level Suez Canal in 1967 by means of "primitive weapons" is highly significant. It dramatizes the irrelevance of the ancient argument of "vulnerability" to enemy attack in the design of navigation projects. The true criteria, the only basis, for such planning are ease and safety of navigation.

Many years of experience in the operation of the Panama Canal have shown that what is needed there is a two-way ship channel in the summit level, with ample and logically arranged locks at both ends.

The two-way ship channel will be supplied on completion in 1970 of the enlargement of Gaillard Cut from 300 feet minimum bottom width to 500 feet. The required lock capacity

and arrangement will be provided under the Terminal Lake-Third Locks Plan.

This proposal, which would eliminate the bottleneck locks at Pedro Miguel, consolidate all Pacific Locks at one location south of Miraflores, create a summit-level lake anchorage at the Pacific end of the Canal, and solve other important marine operating problems, was developed by the Panama Canal organization as the result of World War II experience. It was recommended by the Governor of the Panama Canal to the Secretary of War for comprehensive investigation. It won the support of the Secretary of the Navy, and was approved by President Franklin D. Roosevelt as a postwar project.

The original Third Locks Project, authorized in 1939 at a cost not to exceed \$277,000,000, was suspended in May 1942 because of more urgent war needs, after a total expenditure of \$76,357,405, largely for huge lock site excavations at Gatun and Miraflores which are still usable. The estimated cost for enlarging Gaillard Cut is \$81,257,097. These two projects together, representing an expenditure of more than \$157 millions are a substantial commitment by our government for the major modernization of the existing Panama Canal. Moreover, such modernization of the existing Panama Canal enables the maximum use of all work so far accomplished in the construction of the Canal and its subsequent maintenance, and it does not require a new treaty with Panama with the inevitable huge indemnity and increased annuity that would be involved. Thus, the United States would continue its full control and ownership of the Canal Zone and Canal.

The principal issues in the present canal situation are:

The safeguarding of our indispensable sovereignty over the Canal Zone, now jeopardized by ill-advised proposed new treaties.

The necessity for increase of capacity and operational improvement of the existing canal through the major modification of the authorized Third Locks Project under the Terminal Lake-Third Locks Plan.

The subject of a second canal.

As to these points, extensive clarifications in the Congress over a period of years have removed the confusion surrounding them and cleared the way for proper action by our government. This action is the major increase of capacity and operational improvements of the existing canal, and bills for the "Panama Canal Modernization Act" have been introduced.

The enactment of such legislation not only will protect the vital interests of the United States, benefit Panama, serve world commerce, and safeguard our indispensable sovereign rights, power, and authority over the Canal Zone and Canal, but will also clear up the entire canal situation.

[Adopted by the 51st annual national convention of the American Legion, August 1969]

RESOLUTION 207

To oppose abrogation of U.S. rights concerning operation and security of the Panama Canal

Whereas, in 1903, the United States and the Republic of Panama entered into a treaty "to insure the construction of a ship canal across the Isthmus of Panama to connect the Atlantic and Pacific Oceans"; and

Whereas, by that treaty, the Republic of Panama (for a lump-sum payment of ten million dollars in gold, plus an annuity now amounting to nearly two million dollars) granted to the United States in perpetuity the use, occupation and control of a zone of land and land under water for the construction, maintenance, operation, sanitation and protection of the canal, and granted to the United States all the rights, power, and authority, within the zone mentioned, "which the United States would possess and exercise if it were the sovereign of the territory within which said lands and waters are located,

to the entire exclusion of the exercise by the Republic of Panama of any such sovereign rights, power or authority"; and

Whereas, the Panama Canal now represents a total United States investment of nearly five billion dollars, and is a vital strategic asset to the United States for hemispheric defense and our own national security; and

Whereas, the Panama Canal also is of great economic importance to the United States, inasmuch as 70 percent of traffic through the Canal either originates or terminates in U.S. ports, and Canal operations represent a net gain for U.S. balance-of-payments of more than 40 million dollars annually; and

Whereas, The American Legion has consistently expressed its strong opposition to any weakening of the United States sovereign rights, power, and authority over the Panama Canal and the Canal Zone; now, therefore, be it

Resolved: That The American Legion reaffirms its positions heretofore taken with regard to the Panama Canal and the Canal Zone, and opposes any new Canal treaties that would abrogate the essential provisions of the 1903 Treaty between the United States and the Republic of Panama; and

Further resolved, That The American Legion urges both the House of Representatives and the Senate of the United States Congress to adopt a Joint Resolution expressing it to be the sense of the Congress and the Nation that the Government of the United States shall maintain and protect its sovereign rights in the Panama Canal Zone and its jurisdiction over the Panama Canal, and that the United States shall in no way forfeit, cede, or transfer any of these rights or jurisdiction to any other administration, government, or international organization; and

Further resolved, That The American Legion urges the Congress of the United States also to adopt legislation to provide for an increase in the capacity and for operational improvements of the existing Panama Canal in accord with the principles of the so-called "Terminal Lakes-Third Locks Plan."

S. 2228

A bill to provide for the increase of capacity and the improvement of operations of the Panama Canal, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Panama Canal Modernization Act".

SEC. 2. (a) The Governor of the Canal Zone, under the supervision of the Secretary of the Army, is authorized and directed to prosecute the work necessary to increase the capacity and improve the operations of the Panama Canal through the adaptation of the third locks project set forth in the report of the Governor of the Panama Canal, dated February 24, 1939 (House Document Numbered 210, Seventy-sixth Congress), and authorized to be undertaken by the Act of August 11, 1939 (53 Stat. 1409; Public Numbered 391, Seventy-sixth Congress), with usable lock dimensions of not less than one hundred and forty feet by not less than one thousand two hundred feet by not less than forty-five feet, and including the following: elimination of the Pedro Miguel locks, and consolidation of all Pacific locks near Miraflores in new lock structures to correspond with the locks capacity at Gatun, raise the summit water level to its optimum height of approximately ninety-two feet, and provide a summit-level lake anchorage at the Pacific end of the canal, together with such appurtenant structures, works, and facilities, and enlargements or improvements of existing channels, structures, works, and facilities, as may be deemed necessary, at an estimated total cost not to exceed \$850,000,000.

(b) The provisions of the second sentence

and the second paragraph of the Act of August 11, 1939 (53 Stat. 1409; Public Numbered 391, Seventy-sixth Congress), shall apply with respect to the work authorized by subsection (a) of this section. As used in such Act, the terms "Governor of the Panama Canal", "Secretary of War", and "Panama Railroad Company" shall be held and considered to refer to the "Governor of the Canal Zone", "Secretary of the Army", and "Panama Canal Company", respectively, for the purposes of this Act.

(c) In carrying out the provisions of this Act, the Governor of the Canal Zone may act and exercise his authority as President of the Panama Canal Company and may utilize the services and facilities of that company.

SEC. 3. (a) There is hereby established a board, to be known as the "Panama Canal Advisory and Inspection Board" (hereinafter referred to as the "Board").

(b) The Board shall be composed of five members who are citizens of the United States of America. Members of the Board shall be appointed by the President, by and with the advice and consent of the Senate, as follows:

(1) one member from private life, experienced and skilled in private business (including engineering);

(2) two members from private life, experienced and skilled in the science of engineering;

(3) one member who is a commissioned officer in the Corps of Engineers, United States Army (retired); and

(4) one member who is a commissioned officer of the line, United States Navy (retired).

(c) The President shall designate as Chairman of the Board one of the members experienced and skilled in the science of engineering.

(d) The President shall fill each vacancy on the Board in the same manner as the original appointment.

(e) The Board shall cease to exist on that date designated by the President as the date on which its work under this Act is completed.

(f) The Chairman of the Board shall be paid basic pay at the rate provided for level II of the Executive Schedule in section 5313 of title 5, United States Code. The other members of the Board appointed from private life shall be paid basic pay at a per annum rate which is \$500 less than the rate of basic pay of the Chairman. The members of the Board who are retired officers of the United States Army and the United States Navy each shall be paid at a rate of basic pay which, when added to his pay as a retired officer, will establish his total rate of pay from the United States at a per annum rate which is \$500 less than the rate of basic pay of the Chairman.

(g) The Board shall appoint, without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, a secretary and such other personnel as may be necessary to carry out its functions and activities and shall fix their rates of basic pay in accordance with chapter 51 and subchapter III of chapter 53 of such title, relating to classification and General Schedule pay rates. The secretary and other personnel of the Board shall serve at the pleasure of the Board.

SEC. 4. (a) The Board is authorized and directed to study and review all plans and designs for the third locks project referred to in section 2(a) of this Act, to make on-site studies and inspections of the third locks project, and to obtain current information on all phases of planning and construction with respect to such project. The Governor of the Canal Zone shall furnish and make available to the Board at all times current information with respect to such plans, designs, and construction. No construction work shall be commenced at any stage of the third locks project unless the

plans and designs for such work, and all changes and modifications of such plans and designs, have been submitted by the Governor of the Canal Zone to, and have had the prior approval of, the Board. The Board shall report promptly to the Governor of the Canal Zone the results of its studies and reviews of all plans and designs, including changes and modifications thereof, which have been submitted to the Board by the Governor of the Canal Zone, together with its approval or disapproval thereof, or its recommendations for changes or modifications thereof, and its reasons therefor.

(b) The Board shall submit to the President and to the Congress an annual report covering its activities and functions under this Act and the progress of the work on the third locks projects and may submit, in its discretion, interim reports to the President and to the Congress with respect to these matters.

SEC. 5. For the purpose of conducting all studies, reviews, inquiries, and investigations deemed necessary by the Board in carrying out its functions and activities under this Act, the Board is authorized to utilize any official reports, documents, data, and papers in the possession of the United States Government and its officials; and the Board is given power to designate and authorize any member, or other personnel, of the Board, to administer oaths and affirmations, subpoena witnesses, take evidence, procure information and data, and require the production of any books, papers, or other documents and records which the Board may deem relevant or material to the performance of the functions and activities of the Board. Such attendance of witnesses, and the production of documentary evidence, may be required from any place in the United States, or any territory, or any other area under the control or jurisdiction of the United States, including the Canal Zone.

SEC. 6. In carrying out its functions and activities under this Act, the Board is authorized to obtain the services of experts and consultants or organizations thereof in accordance with section 3109 of title 5, United States Code, at rates not in excess of \$200 per diem.

SEC. 7. Upon request of the Board, the head of any department, agency, or establishment in the executive branch of the Federal Government is authorized to detail, on a reimbursable or nonreimbursable basis, for such period or periods as may be agreed upon by the Board and the head of the department, agency, or establishment concerned, any of the personnel of such department, agency, or establishment to assist the Board in carrying out its functions and activities under this Act.

SEC. 8. The Board may use the United States mails in the same manner and upon the same conditions as other departments and agencies of the United States.

SEC. 9. The Administrator of General Services or the President of the Panama Canal Company, or both, shall provide, on a reimbursable basis, such administrative support services for the Board as the Board may request.

SEC. 10. The Board may make expenditures for travel and subsistence expenses of members and personnel of the Board in accordance with chapter 57 of title 5, United States Code, for rent of quarters at the seat of government and in the Canal Zone, and for such printing and binding as the Board deems necessary to carry out effectively its functions and activities under this Act.

SEC. 11. All expenses of the Board shall be allowed and paid upon the presentation of itemized vouchers therefor approved by the Chairman of the Board or by such other member or employee of the Board as the Chairman may designate.

SEC. 12. Any provision of the Act of August 11, 1939 (53 Stat. 1409; Public Num-

bered 391, Seventy-sixth Congress), or of any other statute, inconsistent with any provision of this Act is superseded, for the purposes of this Act, to the extent of such inconsistency.

SEC. 13. There are hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act. Any sum appropriated to carry out the provisions of section 2(a) shall remain available until expended.

TENNESSEE WALKING HORSE

Mr. TYDINGS. Mr. President, yesterday the Subcommittee on Energy, Natural Resources, and the Environment held a hearing on S. 2543, my bill to outlaw the barbaric practice of "soring" whereby the feet of Tennessee walking horses are deliberately made sore in order to achieve a more exaggerated "walk."

Soring is a common practice, condemned by those who condone it. It is neither necessary nor nice, and is a black mark against all those who permit this cruelty to continue.

In the September 4 and 7 editions of the Nashville Tennessean, Wendell Rawls, Jr., has written two articles about the soring of these horses. I ask unanimous consent that they be printed in the RECORD.

There being no objection, the articles were ordered to be printed in the RECORD, as follows:

[From the Nashville (Tenn.) Tennessean, Sept. 4, 1969]

"SORING" NECESSITY IN DISAGREEMENT (By Wendell Rawls, Jr.)

"Soring" is the most openly admitted evil in the posh walking horse business, but there is wide disagreement among people in the trade just how necessary it is.

Ultimately, of course, the responsibility for the practice rests on the trainers. Some of the trainers say they have to do it, if the horses are to adopt the mincing, prancing gait that will draw customers to the show ring. Other trainers say they can do just as well without it, with a little more careful training and a little more time to do it in.

Breeders, generally, don't like the practice, and some of them express fear that it will eventually ruin the carefully nurtured walking horse breed. As for owners . . . well, most of them like those ribbons and prizes, whatever it takes to get them.

"Soring" is the practice of using mechanical and chemical means—commonly, oil of mustard—to make a horse's feet tender so it will lift them high in the show ring . . . a gait prized by judges and spectators alike.

Tennessee law declares soring of horses with "sharp-pointed instrument" or any "blistering compounds or other devices or drugs" to be a misdemeanor, and provides for fine and/or imprisonment of any owner, rider, ringmaster, manager or show chairman responsible. Despite this, owner George Lenox compares soring to sin.

"Everybody is against it, but everybody does it," he said.

The Walking Horse National Celebration, Inc., at Shelbyville has vowed that sore horses will not be permitted to show, but raw and scarred horses were seen yesterday in both the workout ring and the blacksmith quarters where the 31st National Celebration is being held. Walking horse supply booths are shelved with smearing substances to cover raw places on horses' legs, and there is an ample supply of "freeze" applications.

The state law places the burden of responsibility for seeing that horses are not sored on the owner, as well as the rider. Under the

law, the ringmaster is responsible for reporting sored horses to the horse show managers or chairmen, who in turn are held accountable for reporting violations to the district attorney-general of the county in which the violation occurs.

Aside from the illegality of the practice, it has put Tennessee, heart of the walking horses industry, in an uncomfortable position vis-a-vis other states where walking horses are raised and shown. A primary concern of many horsemen now is that the rules in other states are being tightened drastically, as these states react to pressures from outside the horse industry.

Horses are being disqualified "with even a small scar" in his state, said Guy E. Ward, California attorney, and buyers soon will be unable to exhibit Tennessee horses anywhere outside the state.

"When that happens," he predicted, "pressure in the pocketbook will help stop soring."

On the other side of the question, Bud Franklin, a California trainer, said he cannot bring a horse to Tennessee for exhibition, because he "refuses to sore."

"And you can't compete there if your horse isn't sore," he said.

Some trainers from other states feel that the laxity in enforcement of Tennessee laws is intentional, for the benefit of Tennessee horses. If out-of-state trainers don't sore, their horses won't capture the big "lick" (stride) that Tennessee trainers accomplish with it.

So, if only Tennessee trainers can produce the exciting walk that the audiences love, the business of selling horses will continue to thrive in this state, where the blue ribbons are won.

This, some think, poses an ultimate danger to the breed.

Soring "misleads people into thinking a mediocre horse is a great horse," according to Harlin Hayes, manager of Harlindale Farms, home of Midnight Sun until his death in 1965.

Others point out that a horse with less natural ability and more "bottle" sometimes can defeat a horse with more natural ability but no bottle. Then, if the horse with less natural ability should become a world champion, he will be demanded for breeding, while the more gifted horse will not. In this case, the true walking horse blood is not passed on to build a strong walking horse strain.

Some walking horse folk are more concerned about the fraud perpetrated on the viewing public, which thinks it's seeing the true walking horse gait when it's really seeing an artificial, exaggerated performance, manufactured literally "out of a bottle."

Knowledgeable walking horse people say walking horses didn't always exhibit the long, climbing gait, with the rear end of the horse tucked under to give the illusion of "walking like a man." The trouble is that today's version is, although artificial, more exciting, and the public has gotten accustomed to it.

J. T. Nelms of Nashville, one of the six judges of the current Celebration in Shelbyville, stood under the tin roof of the shed in the Triangle Community Center yesterday, toyed with his cigar, and expressed his sentiment in the matter.

Without the excitement of the "big lick," which soring produces easier than any other method, he said, people will lose interest in walking horses. It is an analysis with which many trainers agree.

"The owners want the sore lick," said one trainer. And, said an owner: "When my horse enters the ring, I want him sore." Without soring, he added, the horse could not compete.

This viewpoint is by no means unanimous. S. W. Beech Jr., a powerful member of the Tennessee Walking Horse Breeders and Exhibitors Association of America, said his late, great stallion, Merry Go Boy, won the

world's grand championship twice "without either hot stuff or boots."

Most trainers agree that they can "make a walking horse" without soring. But they don't have time to do this if they get a horse in January and the owner wants him ready to show in April.

From this standpoint, soring is a time-saver in training (and a work saver). The consensus, however, is that soring will eliminate "about one week in four." The question boils down to the value of that "saved week" in comparison to the pain and ultimate damage to the horse—and the ultimate damage to the industry itself.

One of the ways soring can be, and is, concealed is by use of "the boot." Naturally, then, a lot of the controversy inside the industry centers around "the boot rule," which some would like to do away with, and others would like to keep.

The American Horse Show Association requires a three-inch boot on show horses. This is a white, leather object around the horse's ankle.

Its purpose is supposedly to protect the front feet from overstriding back legs—but, obviously, it can conceal evidence of soring, too.

To complicate matters, according to Beech, the trainers demanded a two-inch boot for walking horses. He himself, he says, has contended for years that each horse would wear the boot best suited to him—"like people wear shoes."

The three-inch boot is not as pliable as the two-inch boot, and doesn't allow as much loose action of flopping around the ankle, like a chain or roller.

There is no question, however, that a practice which has been excused as an emergency measure, a time saver, has become standard operating procedure for some trainers who either do not want to take the time and trouble to train a horse without soring, or cannot.

Charles I. Mullins, a Pennsylvania owner-trainer, contends that the industry must become repopulated with "trainers who know how to train a horse, and not just pour a bottle to it"—it must separate the true trainers from the "bottle-happy idiots."

How can such a result be brought about, though, if the bottle gives bad trainers and poor horses an edge over competent trainers and good horses?

"Tell us the rules, then everybody abide by them completely," is a common solution proposed by trainers themselves. Veteran horseman Randall Hicks of Arlington, Va., says the present breeding association rules would eliminate the soring problem if "all judges would force the trainers to comply with the regulations."

The trouble is, said Vic Thompson, president of the fledgling Walking Horse Trainers Association, the breeding association makes the rules for all Tennessee Walking Horse exhibitions, but they are "enforced only outside Tennessee."

Joe Urquhart, Columbia trainer, says the responsibility for eliminating soring practices "ultimately lies with the trainers." If they don't stop it, he says, the responsibility devolves on the horse show managers and ringmasters.

"A judge can tell when a horse is sore without having to see his feet," said Urquhart.

If the walking horse industry doesn't clean its own dirty linen, the government probably will step in. Not just the state government, either.

Legislation is now before both houses of Congress, designed to prohibit soring of walking horses.

Sen. Joseph D. Tydings, D-Md., will begin subcommittee hearings in Washington Sept. 17 on his bill to make interstate shipment or exhibition of sored walking horses a federal offense, with the Agriculture Department holding the hammer of enforcement. Rep.

William Whitehurst, R-Va., has introduced a similar measure in the House of Representatives.

Representatives of humane organizations from Denver to Washington are attending the current Celebration in Shelbyville, gathering data for the hearing.

[From the Nashville (Tenn.) Tennessean, Sept. 7, 1969]

HORSE ACQUIRED AS SORING EXHIBIT FOR SENATE STUDY

(By Wendell Rawls, Jr.)

A Washington-based horse protective association purchased a Tennessee Walking Horse at a Shelbyville sale yesterday which the group said will be used as a "blatant example of soring."

A veterinarian for the group said the horse, a 3-year-old gelding is "the most unsound horse" he has examined and that poor training practices have made him "worthless" as a walking horse.

The horse is expected to be taken later this month before a special Senate committee studying legislation that would make the soring of horses a federal offense. It is already unlawful in Tennessee.

The horse, a registered gelding named Papa Charcoal, was purchased for \$500 by Mrs. William Blue of Washington, D.C., vice president of the American Horse Protection Association, at an auction sale, owned by S. W. Beech Jr. and Pete Yokley, two Tennessee horse breeders.

The sale, called the "Sale of Show Ring Champions," is being held in conjunction with the Tennessee Walking Horse National Celebration which ended last night at Shelbyville, but is not connected with the show or its officials.

"We bought this horse as any example of blatant soring," said Mrs. Blue. "It is obvious that trainers and owners have contempt for the sufferings of the animals and are interested in the Tennessee Walking Horse as a trade, not in the animal or sportsmanship."

Soring is the practice of using mechanical and chemical means—commonly oil of mustard—to make a horse's feet tender so it will lift them high in the show ring, producing the gait prized by judges and spectators.

Mrs. Blue said a veterinarian present at the sale examined the horse and gave her a written statement that he was suffering from "chain rubs."

Later, Dr. William R. Porter, a Maryland veterinarian licensed by the Maryland Racing Commission, described the horse as "the most unsound I have seen in 21 years of practice."

"The horse is in generally poor condition due to mistreatment during training," he said.

Dr. Porter said the horse was suffering from:

A "bowed tendon" in his right foreleg, probably caused by ankle stress.

Deep chain cuts on the ankles of both fore legs.

Sprained suspensory ligaments in the forelegs.

Possible navicular bone involvement caused by stress.

Porter accompanied Mrs. Blue and Mrs. Paul W. Twine, Great Falls, Va., the association president, to the sale. He said he will examine the horse further at a later date.

The horse was brought to the auction by Roy Davis, a Calhoun, Ga., horse owner. He said he took it in a trade recently and knew nothing of its condition.

"He's just one of the horses I brought up here to sell," said Davis. "I don't check them very closely."

Registration papers given to Mrs. Blue show the horse is the grandson of the great Merry Go Boy, a two-time world champion walker who died earlier this year. The papers showed the horse had passed through three owners

before Davis, the last being Mrs. Patricia Gober, Prattville, Alabama.

Mrs. Gober said she traded the horse in March 1968, and that he had passed through traders before he got to Davis.

"He was not sore while we had him", she said. "We never showed him."

Mrs. Gober, who said she is opposed to soring, said the horse had not been gelded when she sold him.

Mrs. Blue said the horse was wearing the "training chains" when he was offered at the auction but that she was assured by stablehands the chain rubs were not serious.

The condition of Papa Charcoal is not surprising. For he is the product of an industry where the soring of horses is the "rule" rather than the exception.

In Tennessee, especially, it has become an art, an illegal art but one which trainers say must be learned in order to compete.

The fact that Tennessee law expressly forbids it and makes it punishable by fine and imprisonment means little. That law and a companion statute requiring judges and horse show officials to report violations are seldom, if ever, enforced.

Although several of the leading trainers like Vic Thompson of Shelbyville and Joe Urquhart of Columbia disagree, most say the "art" is necessary to produce the "big lick"—the climbing, reaching stride of the professional walking horse. Without this "lick," they say, horse stands will not be filled.

The ultimate responsibility lies with these trainers, but most are reluctant to stop unless all others do. Owners and breeders seem to be interested mainly in winning, even if the trainers have to "sore" to accomplish it. Trainers who want to stop soring are getting little help from them.

In fact, the Tennessee Walking Horse Breeders and Exhibitors Association, the heart of the industry and the organization which makes the rules for the showing of the Tennessee Walker, is so beset with internal problems and outside pressures that the entire walking horse business is suffering.

Close scrutiny of the walking horse business by the Nashville Tennessean in the last two months has disclosed a multitude of practices which are at best questionable.

Among them are numerous instances of fraudulent registration of horses, a practice so widespread many horsemen say it is threatening the purity of the breed.

Consider the case of "Midnight Lena," a registered mare whose owner says she died in a fire in 1959. Urquhart, the Columbia trainer, appraised the loss for an insurance company at the time and remembers certifying the death of Midnight Lena.

Midnight Lena, or a horse with her papers, was found by the Tennessean at Stallion Stables at Unionville last week.

The owner, Jack Short, executive secretary of the Walking Horse Trainers Association, was surprised to learn Midnight Lena's history. She has passed through four owners before being purchased by Short.

The man who says Midnight Lena died in the fire, B. C. Baker of Centerville, says he has no knowledge of how the papers were transferred to the horse belonging to Short.

The breeder's association, which controls registrations, is now embroiled in controversy over two such questionable registrations.

In one case a Memphis breeder is complaining that a colt was registered as being by his world champion stud when it was not. In another a Woodbury owner says that two colts by his stallion were registered with the association as being those of another.

Though plagued by such problems for years, the breeders association has added to its woes by approving artificial insemination, a practice which makes horse breeding easier, but raises even more questions about the purity of the breed.

If controlled, it could be a boon to the

industry, but as practiced now it could destroy it. The presence of a few unethical breeders heightens the possibility of fraudulent registrations.

As one trainer said, "The possibility exists for substituting the semen of one horse for that of another. Who can tell the difference if both studs are the same color?"

Although the breeders association did not approve artificial insemination until 1966, many breeders acknowledge they have been using it for years. Some use it selectively, others do not.

Beech, a Belfast breeder and a power within the association, points up the problem. "How am I going to turn down a friend if he has a \$100 mare and wants to breed her to one of my studs?" he asks.

Testimony in a recent lawsuit disclosed that in 1963 Beech's late, great stallion, Merry Go Boy, was bred to 403 mares.

He was 19 years old at the time and artificial insemination was still against association rules.

Artificial insemination has been used effectively in the thoroughbred horse industry. Among walking horses, a world champion stallion averages well over a 100 breedings a season. The fee ranges from \$50 to \$400.

Near the top of the list of complaints about the walking horse industry is its system of judging, a system which puts the judge in a most vulnerable position.

Most horse shows have only one judge and he almost always is a trainer or a breeder. These men more often than not are close friends of trainers and breeders with horses in the show.

The judge knows well that he may be showing a horse the next night in a show at which one of these men could be the judge.

The pressure is compounded because the value of a Tennessee walker depends on his show performance. Winning can mean a difference of \$10,000 in the price of a horse, possibly even more.

With this much money on the line, the judges—whether one or three—cannot but be conscious of who is riding the horse.

THE PESTICIDE PERIL—II

Mr. NELSON. Mr. President, the primary aim of the efforts of a growing number of individuals and organizations concerned about the threat of persistent, toxic pesticides to the environment and human health is the improvement of current controls on the use of these poisons.

It is growing abundantly clear that the existing Federal agencies charged with pesticide research and regulation have failed to launch the comprehensive, coordinated effort necessary to effectively deal with the problem of worldwide pesticide pollution.

Two General Accounting Office reports in the past year have been very critical of the Agricultural Research Service's handling of its pesticide responsibilities. Last September, GAO stated that ARS did not have an adequate system for tracing misbranded, adulterated, or unregistered pesticides and was also failing to report violations to the Justice Department for prosecution.

In another report in February, GAO indicated that ARS was allowing the pesticide Lindane to be used in commercial and industrial establishments, including food handling businesses, without resolving certain questions of safety and health that the American Medical Association and the Department of Health, Education, and Welfare have raised.

Fortunately, ARS has finally taken action to correct these deficiencies in their operation. However, as a recent article written by Morton Mintz and published in the Des Moines Register pointed out, a House Government Operations Committee investigation has uncovered a series of additional cases where the ARS has apparently failed to fulfill its responsibility in safeguarding the public against hazards caused by contradictory and inadequate labeling practices.

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:

REVEL LAX POISON LAW ENFORCEMENT—SUBCOMMITTEE PROBE EXPOSES VIOLATIONS (By Morton Mintz)

WASHINGTON, D.C.—The Agriculture Department has about 50 employees who screen labels for "economic poisons"—insecticides and pesticides, mainly—to be sure that they are written to minimize the possibility of injury to the user.

At a hearing of the House of Representatives intergovernmental relations subcommittee, last month, counsel James R. Naughton asked Harry W. Hays, who presides over the screening operation, if he were confident that the system worked well.

"Yes, sir," he said. "I am fully convinced they are being screened very carefully."

Naughton then produced a label from a can of a "new super" concentrated insecticide, made by Hysan Products Co. One panel of the label, cleared by the pesticides regulation division of the Agricultural Research Service (ARS) on May 12, lists cautions that Naughton read aloud.

"Use in well ventilated rooms or areas only . . . do not stay in room that has been heavily treated. Avoid inhalation."

On the other side of the label were the directions for use:

"Close all doors, windows, and transoms. Spray with a fine mist sprayer freely upwards in all directions so that the room is filled with vapor. If insects have not dropped to the floor in 3 minutes repeat spraying. . . . After 10 minutes doors and windows may be opened."

IF ANYBODY LIVES

"If there is anybody around to open them," Representative Benjamin S. Rosenthal (Dem., N.Y.) commented.

Naughton, formerly of Sioux City, Ia., pointed out that the pesticides division, which Hays heads, had cleared the label only five days after a May 7 hearing at which other cases of confused or contradictory labeling had been exposed.

One of these cases involved thallium, which is spread on floors and other places to poison ants and rats. Hays admitted that there is no way for the labeling to recommend effective use of products containing thallium without creating a hazard for children, who have access to some places frequented by insects and rodents.

Because of numerous poisonings of children, the Agricultural Research Service acted in 1960 to try to curb the use of thallium products. This plan didn't work and, in 1965, the agency prevented further manufacture of thallium products by canceling their registration.

Yet, as late as last year inspectors from the General Accounting Office and the ARS found pre-1966 thallium products on sale in a significant number of stores in the Washington area. Twenty cases of thallium poisoning were reported in the first 10 months of 1968.

At a hearing on June 24, the GAO's Morton Myers, who has worked with the subcommittee staff, asked Hays whether the ARS

had acted on the possibility, discussed at the May 7 hearing, of issuing a press release to warn the public that thallium products were still around. "There has been no press release," Hays conceded.

Representative L. H. Fountain (Dem., N.C.) asked Hays if he could "think of any good reason why we should not be concerned that hundreds or possibly thousands of approved labels out of some 45,000 products on the market are not just as obviously contradictory?"

Hays' complete answer was, "I would be very much concerned, sir."

HALT SALES

On Aug. 1, 1967, the ARS proposed to halt sales of insecticides with arsenic trioxide. One manufacturer, the Pax Co., which makes insecticides containing 40 per cent or more arsenic trioxide, resisted.

In the ensuing 22 months, counsel Naughton brought out, no action has been taken. He emphasized that the law requires a manufacturer to provide evidence that a product of this kind is safe, rather than putting a burden on the ARS to demonstrate that it is unsafe.

"Why all this solicitude for the company?" Naughton asked. "The burden of proof is on them, isn't it? Why are you assuming it? . . . How many more poisonings of children will it take?"

Hays answered, "We would hope none." He also promised to "do everything possible to expedite the matter."

The ARS has a system, which relies mainly on reports in news media, for reporting pesticide accidents. Hays testified that it works "very well." Last year, he said, 151 episodes were reported. He called this "a reasonable estimate" of the actual national total.

Hays' boss, ARS administrator George W. Irving, Jr., remarked that his "impression . . . is that the number of deaths from pesticides is very, very small."

Two seats to Irving's right an aide sat. He was asked how many deaths there were among the 162 humans on the ARS list. There were 18.

"Eighteen is not many?" Representative Rosenthal asked.

Surprised, Irving said, "I think 18 deaths is very serious. Eighteen deaths is most serious."

Under further questioning, Hays admitted that until last year the ARS made no effort to obtain data from the national network of poison-control centers operated by the PHS. In 1968 the centers recorded 4,000 child and 1,000 adult poisonings. Because such accidents are commonly grossly under-reported, Naughton estimated that the actual toll was closer to 50,000.

Rosenthal asked Hays how many of the 5,000 cases recorded by the poison-control centers were fatal.

"I don't think we asked that question," Hays said.

"Why don't you call them up and ask them?" the congressman inquired.

"That we can do," said Irving, answering for Hays. "We should have this figure. I am sure it must be a matter of record." Actually it isn't, because the centers are not reliably kept informed about the outcome of the cases.

The two days of hearings brought out a series of other troubling disclosures. Here is a partial list:

By failing to require Shell Chemical Co. to add a new health warning to existing stocks of non-pest strips, a popular insecticide product, in addition to new production, the ARS allowed sale of misbranded merchandise, thus violating the law it is supposed to enforce.

On last Thursday July 3, the department issued a press release warning that "no-pest" and other strips containing the insecticide DDVP should not be hung in rooms where

infants or sick and elderly persons are confined.

The law has permitted recall of unsafe products for 22 years, but procedures for carrying out a recall were not approved until last May 5. The first recall was in September, 1967.

When the ARS seized an unsafe product from a retail outlet, it did not once check manufacturer's records to find out where else the same product was on sale.

TRIBUTE TO "CHUCK" JOELSON

Mr. WILLIAMS of New Jersey. Mr. President, I would like to salute a good friend and an outstanding legislator who has left Congress to sit on the Superior Court bench in New Jersey. I refer to former Representative Charles S. Joelson, who was elected to the 87th Congress and subsequently reelected to the 88th, 89th, 90th, and 91st Congresses.

"Chuck" Joelson brought an outstanding record of accomplishment to Congress. As a student at Cornell University, he was elected to Phi Beta Kappa. He served his country with distinction in World War II as a member of the Naval Intelligence. Later, he was a city counsel, an acting county prosecutor, a deputy attorney general, and, immediately prior to his election, was director of criminal investigation for the entire State of New Jersey.

He more than lived up to his history of achievement during his years in the House. His accomplishments in Congress were many. But I think his last major accomplishment perhaps best typified "Chuck" as both a superb legislator and an understanding, warm human being. He led the successful fight in the House to add almost \$1 billion in appropriations for education.

Many people thought it would be impossible to get the extra, badly needed funds appropriated. He was not deterred by those doubts and decided to make the fight.

He did his homework well. He used his knowledge of the rules and his understanding of what his colleagues would approve—hallmarks of an outstanding legislator.

"Chuck" put together what came to be known as the "Joelson package," a program which attracted enough support to get the votes for passage. In the end, he had taken on a monumental challenge and overcame it.

But beyond legislative ability, the fight showed what kind of man "Chuck" Joelson is. He will not stand for reelection so he did not have to march into the fray in the hopes of winning popularity or votes. He undertook the battle because he believed the need is there, and it is.

Through his efforts, the door now has been opened for additional funds for vocational education, college classrooms, student loans, ghetto schools, school libraries, and federally impacted school districts.

"Chuck" always has been an advocate, and an untiring worker, for increased educational opportunities. In his waning days in Congress, he might have been excused if he said, "I've done enough" and walked away. Being the man he is, he decided to do more and more he did.

It is particularly appropriate that "Chuck" should move to the judiciary since it completes a governmental cycle for him. He has served in the State executive branch and the national legislative branch. He has served on the municipal, county, State, and national levels of government.

His background, his ability, and his understanding of people, make him preeminently qualified for the bench.

I know we all wish him well. I also know we can all look forward to a career of continued excellence from a man who already has achieved more than many men do in their entire lifetime.

STATE FUNERAL OF HENRY CLAY IN CAPITOL ROTUNDA

Mr. COOK. Mr. President, last week it was our privilege to honor our departed colleague, Everett McKinley Dirksen, with a state funeral, and we further marked our esteem for him when he lay in state in the great rotunda of the U.S. Capitol. This has become one of the highest honors we can bestow on those who have served the Republic. Through the medium of television, such an occasion and honor has become familiar to most of our people all over America. It was never more vividly portrayed to the citizenry than in the days that followed the death of our fourth assassinated President, John F. Kennedy.

A news article published in the Washington Post of Tuesday, September 9, reported that Everett M. Dirksen was the 21st person to be so honored. The article further stated that only three other Senators—Charles Sumner, John A. Logan, and Robert Taft—have been accorded this signal honor, and that Abraham Lincoln was the first, in 1865. These statements are in error. They neglect what was quite probably one of the greatest state funerals to take place in Washington. It was the funeral of yet another Senator, one of the greatest, Kentucky's own Henry Clay, the Great Compromiser, three-time presidential candidate, Speaker of the House of Representatives, and Secretary of State.

This state funeral took place on June 30, 1852, 13 years before it was repeated for the martyred Lincoln. The Washington Daily Globe, the predecessor of the CONGRESSIONAL RECORD, on July 1, 1852, reported:

The funeral honors paid to the remains of Mr. Clay . . . were as impressive as any ever witnessed in Washington.

I am indebted to my special assistant, Bob Fearing, of Ashland, Ky., who has earned himself a reputation for his knowledge of the Capitol and its history, for bringing this information and these newspaper accounts to my attention and for the sake of brevity I shall read only the pertinent parts of these articles. From the Daily Globe of Washington, July 1, 1852:

The burial of the illustrious Chief Magistrate who have died amidst the grand association which the highest station on earth necessarily confers, were not attended with circumstances which so strongly marked the emotion of the whole community. The scene on the Avenue, in the Senate, and in the

Rotunda, which will be described by a thousand pens, was the finest exhibition of the homage of a great people to a great man this country has ever witnessed.

From the regular newspapers of the day we have several accounts, and copies of these stories will be filed with the Architect of the Capitol for his reference section. From the Washington Daily Telegraph of July 1, 1852:

THE FUNERAL OF HENRY CLAY

10½ o'clock A.M.—The population of our whole city, and of contiguous towns and country around us, is thronging the streets and avenues of Washington. Business is suspended and the whole city wears the livery of woe . . . At the Capitol the multitude awaiting the procession is immense—unprecedented! there is a peculiar stillness in the city.

The Washington Daily Telegraph of July 1 gives the details of the funeral procession and then further states:

The corpse will be placed in the Rotunda where it will remain until half past three o'clock.

The Washington Union likewise reported on July 2, 1852:

The coffin was first borne to the Senate chamber, where the funeral solemnities were performed; and the coffin being then placed in the Rotunda, a crowd of citizens viewed for the last time the features of the illustrious deceased.

Another Washington newspaper, the Republic, goes into great detail concerning the funeral procession and noting the similarity to the Lincoln funeral, one must wonder if the Clay funeral was the one which set precedent for all future state funerals. A check of other funerals since the completion of the rotunda in 1829, through 1865, has not revealed any similar events. The Washington Post Republic, in its July 2 account of the funeral, states further:

The corpse was afterwards removed to the Rotunda, where it was placed on a handsome pedestal eight feet in length and four in breadth, the base exhibiting two steps, twelve inches in width, on the sides. It was covered with black velvet, and constructed by Mr. William Douglas. The patent metallic coffin was richly mounted with silver, and a breast-plate bore the simple inscription, "Henry Clay". A large and beautiful wreath of flowers lay upon it.

The crowd in the Rotunda was extremely dense; and to the excellent arrangements of the Marshall of the District of Columbia and the Committee on Arrangements, the public was able to gaze for the last time upon the face of the deceased.

Mr. President, there is no need at this time to extoll the merits and greatness of Henry Clay. His stature as a great Senator and great Speaker of the House of Representatives is well established. The people of my State had little difficulty in choosing him to represent Kentucky in the National Statuary Hall of Fame. He has been honored in marble, bronze, and in paintings no less than eight times in this building alone. I do feel, however, that in light of this information from the newspapers of his day, we owe it to Clay to correct the record. I do not feel that such a move would in any way detract, but rather would enhance the significance of the honor. I hope that the future publications about the Capitol will

include this fact and that the officials of the Architect's Office will add his name to those listed on the official list as being honored by a state funeral.

Following a long tradition begun by Henry Clay, Everett McKinley Dirksen was honored as a great and eloquent speaker for the good of the Nation.

ENVIRONMENTAL QUALITY: THERMAL POLLUTION AND TRITIUM

Mr. TYDINGS. Mr. President, a major conservation issue now facing this Nation is the ecological threat from nuclear power plant discharges. In Maryland it is a very real threat for there is such a facility now under construction at Calvert Cliffs on the Chesapeake Bay.

A number of scientists from Johns Hopkins University commenting on this plant have raised the question of possible danger from tritium releases. I have asked the Atomic Energy Commission to comment on this danger. In order to make public and circulate the Commission's views, I ask unanimous consent that the AEC comments on tritium be printed in the RECORD.

I have asked three distinguished scientists in Maryland, Dr. Roland Beers and Dr. Timothy Merz, of Johns Hopkins University, and Dr. Eugene Cronin, of the University of Maryland, to review the AEC papers and I expect to reprint their comments when available.

I ask unanimous consent that my statement on the Calvert Cliffs nuclear facility be printed in the RECORD along with the Commission's comments on it, as well as the AEC covering letter of August 8.

I also ask unanimous consent that an article written by Hal Willard, entitled "Tritium Problem Outlined," in the September 11, 1969, Washington Post, be printed in the RECORD, and that the article in the September 12, 1969, Life entitled "Peaceful Atom Sparks a War" be printed also. I regret that the pictures cannot be reproduced, but I ask that their captions be included.

There being no objection, the items were ordered to be printed in the RECORD, as follows:

U.S. ATOMIC ENERGY COMMISSION,
Washington, D.C., August 8, 1969.

HON. JOSEPH D. TYDINGS,
U.S. Senate.

DEAR SENATOR TYDINGS: I am pleased to enclose for your review, information which we believe will answer some of the concerns expressed in your statement of May 12, 1969, regarding the projected Calvert Cliffs nuclear power plant and its possible effects on the Chesapeake Bay.

At the public hearing held in connection with the application by the Baltimore Gas and Electric Company for a construction permit for this facility, a statement was introduced by several scientists from Johns Hopkins University entitled, "Effects of Nuclear Power Plants on the Chesapeake Bay from an Environmental and Public Health Point of View." In view of the concerns expressed by those scientists about the effects that might result from releases of small quantities of tritium into the Bay during routine plant operation, I am also enclosing two AEC commentaries on several statements made in their testimony on this subject. The first paper presents AEC comments on expected tritium releases from the proposed

Calvert Cliffs nuclear power plant in non-technical terminology. The second is a technical discussion of the same subject, and serves as a basis for the AEC comments on tritium.

I hope you will find this information useful. If we can provide any further information on these matters, please let me know.

Cordially,

Chairman.

Enclosures.

AEC COMMENTS ON TRITIUM RELEASES FROM THE PROPOSED CALVERT CLIFFS NUCLEAR POWER PLANT¹

Public hearings were held in May, 1969, on the proposal to build a nuclear electric power plant at Calvert Cliffs, on the Chesapeake Bay. At these hearings concern was expressed by interested citizens as to the possible environmental effects that might result from routine releases of low levels of radioactive hydrogen (tritium) into the Bay. A careful review of the information available on this question leads to the general conclusion that the resulting radiation exposures to members of the public who would come into contact with Bay waters or with food from the Bay would be a very tiny fraction (not more than a few millionths) of levels considered acceptable by national and international advisory groups (the International Commission on Radiological Protection, National Council on Radiation Protection and Measurements and the Federal Radiation Council). The biological effects, if any, of exposures to such a low level would be too small to be detected, even if very large populations were exposed, and would have no ecological significance. In deriving limits for tritium applicable to members of the general public, these expert groups have taken into account the unique energy and absorption properties of tritium as they relate to distribution of the dose in body tissue.

Tritium is a form of hydrogen, with chemical behavior very similar to ordinary hydrogen. Water containing tritium acts chemically like ordinary water; most of it passes through the human body very rapidly. More than half of the tritium taken up by the body is passed on within three to ten days; practically all remaining molecules of water containing tritium are gone within sixty days. It is this rapid turnover that has made tritium a valuable research and diagnostic tool to doctors and radiobiologists.

The only radiation exposures from tritium of interest are exposures that would result from the small amount that would be taken into the body by absorption or through contact with Bay water or eating food from the Bay over extended periods of time. The external exposure to the very low energy radiation from tritium is of no interest since it is absorbed harmlessly in the insensitive outer layer of skin.

To bring the exposures to tritium from the Calvert Cliffs reactor into perspective, consider an extreme case. Assume that an individual obtains his drinking water from a water supply containing the same concentration of tritium as the coolant water proposed to be discharged from the Calvert

¹ The quantities of tritium that would be released from the Calvert Cliffs Nuclear Power Plant discussed in this paper refer to releases expected from one nuclear unit of 2700 thermal megawatts capacity as described in the construction permit. It is noted that the Baltimore Gas and Electric Company has construction permits for two such units—one scheduled for operation not before January 1973, and the other scheduled for operation not before January 1974. The quantities of tritium that would be released from the second unit would be approximately the same as from the first unit.

Cliffs plant before dilution in Bay water. Assume also that he obtains his entire food supply from aquatic plants and animals growing in the same water supply.

The resulting annual radiation exposure that this individual would be expected to receive from tritium contributed by the reactor could not exceed one millirem per year to the whole body. This amount of exposure is about one five hundredth (1/500) of the exposure considered acceptable for individuals in the general public and one one hundredth (1/100) of what a person in this area receives every year from natural sources.

In the Calvert Cliffs situation, however, possible exposures involved would be at least a thousand times lower, less than 0.001 (1/1,000) millirem per year, for the following reasons. Water in the Bay is not used for drinking. In addition, the water discharged from the plant will be diluted many fold by the water in the Bay. Furthermore, of course, it is doubtful that many persons would obtain more than half of their protein from the Bay.

What is known about the relative biological importance of this small an exposure? In this regard, a large number of research programs on these subjects have been and are being undertaken. The results of this research on biological and environmental effects of radiation provide a solid background against which to consider this question. In particular, there is much known about the biochemical behavior and effects of tritium. For example, a report by L. E. Feinendegen, "Tritium-Labeled Molecules in Biology and Medicine", Academic Press, 1967, provides a mass of sound information on the questions raised and includes references to approximately 1,000 experimental studies of the behavior of tritium in the body, more than 100 studies of its effects on the body, and nearly 400 articles on experimental techniques. The probability of effects from exposures of 0.001 millirem per year is extremely small. This is far below the level where even minimal effects have been observed. Even so, in developing radiation protection standards, it has been assumed, as a matter of prudence, that there may be some risk associated with any exposure, however small.

It can be stated with confidence that the effects, if any, of an exposure of 0.001 millirem from tritium will not differ substantially from those that might result from an exposure of a similar level to radiation from natural sources. We have been unable to detect any biological effects due to natural background levels of radiation (natural background in most sea level regions averages 100 millirems/year; which is 100,000 times larger than the exposure that would result from the tritium from the Calvert Cliffs reactor).

To put an annual exposure rate of 0.001 millirem per year into perspective in day-to-day terms, it can be compared to variations in background radiation levels from place to place. For example, if a person living in Baltimore moves to Cumberland, Maryland, his average annual exposure rate from natural background cosmic radiation alone would be increased by approximately 3 millirems per year. This difference is about 300 times any exposure that might be expected to result from eating Chesapeake Bay fish and shellfish containing tritium from the Calvert Cliffs reactor.

There has been a suggestion that the exceedingly dilute concentrations of tritium might become concentrated by processes in nature. For some elements this can and does happen. But there is no theoretical or experimental support for a conclusion that significant separation of tritium from hydrogen can occur by natural chemical or biological means. These properties of tritium tend to prevent concentration of tritium by biological processes, for example, in the food chain.

Concentrations of tritium in the cells of an animal feeding on aquatic organisms cannot be higher than the concentration in the water where the aquatic organisms live, unless there are biological processes which concentrate the tritium relative to hydrogen. A great deal is known about the biological behavior of tritium. There is no evidence for a biological mechanism capable of incorporating the tritium in water into tissue at substantially higher concentrations than were originally present in the water. Experimental studies indicate that, on the average, there will be substantially the same ratio of tritium to ordinary hydrogen in the animal using the water, as was present in the water itself.

A portion of an individual's diet, let us say, consists of fish from the Chesapeake Bay which contains a minute increase in tritium concentrations (above that from natural background) as a result of the operation of the proposed nuclear plant. The tissues of the fish would have a tritium concentration comparable to that present in the Bay. In the normal process of digestion, some organic molecules (building blocks) may be incorporated directly into new tissues. This new tissue then would have a tritium concentration comparable to that present in the fish. This conclusion applies to all tissue cells, including those of genetic concern. Hence, the suggestion of a concentration mechanism for tritium in nature of any importance is unsupported by either theoretical or experimental considerations.

AEC TECHNICAL DISCUSSION ON TRITIUM RELEASES FROM THE PROPOSED CALVERT CLIFFS NUCLEAR POWERPLANT

The following discussion is addressed primarily to one question: Can tritium released as T₂O or HTO into the Chesapeake Bay from the proposed Calvert Cliffs reactor become more concentrated or, with respect to hydrogen, more enriched as it moves along natural food webs to man? The answer arrived at is no. In addition, based upon information furnished to us on tritium release rate, bay size and flush time, we have assumed a simple model and estimated the equilibrium concentration for reactor-produced tritium in the bay and the resultant dose rate.

The suggestion has been made that tritium will concentrate significantly in organic compounds as it moves upward through a food web and that higher concentrations, particularly in genetic material, could ultimately be achieved in man. We know of no mechanism that would tend to support this suggestion. Organisms living in the bay should ultimately have the same ratio of tritium to hydrogen (T/H)¹ in their organic molecules as the T/H ratio in the water in which they grow. This equilibrium will be reached slowly on the order of a few years.

Any presumed biological concentration of tritium would have to result from differences in rates of chemical reactions involving the heavier tritium atom as compared to the lighter hydrogen. In general, the compounds in living organisms are present in concentrations which result from the steady state processes of formation and destruction. There is a tendency for tritium to remain behind in those reactions involving transfer of hydrogen (which must initially come from H₂O) to a compound, but there is also a tendency for tritium to remain behind in reactions transferring hydrogen away from the organic compound. The net effect of these two opposing

¹ As used throughout this discussion, the ratio of tritium to all hydrogen isotopes (T/H) is the specific activity of tritium. The a tritium unit (TU), is defined as a tritium-standard tritium ratio (TR), previously called to-hydrogen ratio of 10¹⁸ (i.e., one atom of tritium per 10¹⁸ atoms of hydrogen). On a water concentration basis, a TR of 1.0 is 3.2 x 10⁹ microcurie per cubic centimeter.

processes is to keep the T/H ratio approximately the same as in the ambient water once this ratio has been closely approached.

The statement that tritium decay within the cell nucleus is particularly hazardous simply paraphrases the well-known fact that the nucleus of the cell is more radiosensitive than is the cytoplasm. This is true whether the ionization be from x-rays, gamma rays, or radioactive isotopes. This fact, in conjunction with the supposition that tritium concentrates to a high degree locally in the cell nucleus and deposits the energy resulting from its decay in this more radiosensitive volume leads to an implication that tritium is uniquely hazardous. But, as pointed out above, there is little reason to assume that such localization occurs; and since the volume of the cytoplasm is about 10-30 times larger than the volume of the nucleus, homogeneously distributed tritium atoms would expend their energy proportionately more frequently in the cytoplasm. Such irradiation of the cytoplasm contributes little to lethality or to mutations.

The point has been made that the concentration of tritium in specific portions of the cells of people eating seafood from the bay could become substantially higher than that predicted from the concentration of tritium in the water in which the marine life lived. In particular there is concern that tritium might accumulate in deoxyribonucleic acid (DNA), the genetic material of the cell. DNA is a polymer that is synthesized from building blocks of purine and pyrimidine nucleotides. Higher organisms such as man obtain these building blocks from their diet and through biosynthesis from more elementary cell constituents.

With regard to the present matter the worst case would be if all of the building blocks came from the diet. Then, all of the newly formed DNA would have the same tritium concentration as that of the seafood ingested. The tritium concentration of these building blocks from the diet, however, could be no higher than that of the water in which the organisms lived. Calculations to be presented later show that even this level would represent a small addition to the present tritium background.

Higher organisms such as man also synthesize their own purine and pyrimidine nucleotide building blocks. The tritium concentration of these molecules will depend on the tritium concentration of dietary water. So to the extent that other sources of water are part of the diet the tritium concentration of these building blocks would be accordingly reduced. From either consideration the tritium concentration in the DNA in cells of people would not be higher than that of the seafood they ingest and the expectation is that it would be far less.

Extensive measurements of tritium concentrations in animals from the Nevada Test Site and the Savannah River Project, where ambient tritium levels in certain areas are far higher than those anticipated near the Calvert Cliffs reactor, confirm the above assertion that there is no evidence for concentration of tritium in organic molecules as tritium passes up through the food web.

As indicated earlier, we have calculated very roughly the anticipated equilibrium concentration of tritium in the bay and the radiation dose rate to the bay water from this concentration. The calculations are based on the following assumptions:

1. 2,910 curies of tritium released per year and uniformly distributed in the bay.²

² The quantities of tritium that would be released from the Calvert Cliffs Nuclear Power Plant discussed in this paper refer to releases expected from one nuclear unit of 2700 thermal megawatts capacity as described in the construction permit. It is noted that the Baltimore Gas and Electric Company has construction permits for two such units—one scheduled for operation not before Jan-

2. A physical half-life of tritium of 12.3 years; therefore, a mean life of 17.7 years.

3. A bay volume of 6.4×10^{12} cubic feet (1.8×10^7 cubic meters).

4. Mean residence time ("Flush" time) of water in the bay is 2.3 years, and the bay is considered to be a homogeneous well-mixed reservoir having a rate of discharge that is proportional to its volume. We think that this value is conservative because it does not consider tidal action. A more realistic value would be about one year.

Using these assumptions, the equilibrium concentration would be 3.3×10^{-3} microcuries of tritium per cubic centimeter (a T/H ratio of about 10^{-12}) and the radiation dose rate would be 4.0×10^{-7} millirad per hour or about 3.6×10^{-3} millirad per year. This dose rate represents about 1/30,000th of natural background radiation. One might also compare the value of 3.6×10^{-3} millirad per year with the larger whole-body radiation dose rates of about 19 and 1 millirad per year, which man continuously receives from the decay of naturally occurring ^{40}K and ^{14}C , respectively. The dose rate from all sources of natural background is roughly 100 to 150 millirad per year but may vary considerably depending on numerous factors such as altitude, geography, and shelter construction. We fully realize that the current philosophy of radiation protection does not recommend unnecessary additions to background radiation-dose rates; the values are used for illustrative and comparative purposes and show that the dose rate from reactor-produced tritium is small compared with dose-rates associated with natural sources.

The foregoing calculation is more applicable to sites near the head of the bay. The assumption that the tritium will distribute throughout the entire volume of the bay is perhaps invalid because the reactor is not sited at the head of the bay. Because Calvert Cliffs is part way down the bay, the "flush" time will be shorter than the one assumed and the "flush" time is the most important single factor determining equilibrium concentrations.

It is recognized that the tritium releases may vary in magnitude at different times and that back waters may accumulate higher concentrations in limited volumes of bay water. However, the radiation dose would still be small, about 1% of natural background, even if these local concentrations reach 300 times the anticipated average. Furthermore, the population of bay organisms exposed to these higher concentrations would necessarily be smaller and hence quantitatively less important as regards human consumption.

Because biological enrichment of tritium relative to hydrogen is not known to occur, the equilibrium concentration and dose rates calculated above would apply to a human cell and to the nucleus of a human cell. There are about 1.57×10^{11} hydrogen atoms in the DNA of the mammalian cell nucleus. Thus, using an estimate of 5×10^{-16} for the current T/H ratio, a total of 8×10^{-5} tritium atoms would be expected in the DNA of a cell. Put another way, 80 cells per 10^6 cells would have a tritium atom associated with its DNA. Recent unpublished data from the USPHS give T/H ratios of $1-2 \times 10^{-16}$ for water in the Susquehanna and Potomac Rivers in the spring of this year.

By comparison the T/H equilibrium ratios of roughly 10^{-12} to be reached in the bay water from reactor-produced tritium alone would produce an additional 1.6×10^{-6} tritium atoms in the DNA of a cell. That is, another 1.6 cells per 10^6 cells would have a tritium atom associated with its DNA.

January 1973, and the other scheduled for operation not before January 1974. The quantities of tritium that would be released from the second unit would be approximately the same as from the first unit.

STATEMENT OF SENATOR JOSEPH D. TYDINGS, SUBMITTED TO THE ATOMIC ENERGY COMMISSION HEARINGS ON THE PROPOSED CALVERT CLIFFS NUCLEAR ELECTRIC POWER GENERATING FACILITY, PRINCE FREDERICK, CALVERT COUNTY, MD., MAY 12, 1969

The Baltimore Gas and Electric Company's planned nuclear power station at Calvert Cliffs will be a two unit, 1.6 million kilowatt facility. It will use 5,000 cubic feet of water per second for cooling purposes. This water will be returned to the Chesapeake Bay at a higher temperature than that withdrawn.

The Calvert Cliffs plant will be in full operation by 1974. It will then be the tenth largest power facility in the nation.

The need for this plant cannot be doubted. Our nation has almost insatiable appetite for electricity. Since World War II production of electricity has doubled every ten years. This trend is expected to continue. Our nation's growth depends on an ample power supply being readily available.

This is particularly true for the Baltimore area which in the next decade will experience considerable growth. The Calvert Cliffs plant is designed to serve this area.

Yet with progress comes problems. The discharge of the cooling water affects the ecology of the receiving waters. Scientists consider temperature the primary control of life and report that fish are especially sensitive to changes in the thermal environment. They and other forms of marine life are often unable to adjust to even the most limited changes in temperature.

"For this reason there is growing concern among ecologists about the heating of aquatic habitats by man's activities. In the U.S. it appears that the user of river, lake, and estuarine waters for industrial cooling purposes may become so extensive in future decades as to pose a considerable threat to fish and to aquatic life in general." So writes John R. Clark in the March, 1969 issue of the *Scientific American*.

Thermal pollution must thus be recognized as an important problem, one which may block our achieving a quality environment.

By 1980, the electric power industry will use one-fifth of the total fresh water runoff of the U.S. for purposes of cooling. The scope of this potentially dangerous thermal discharge is therefore large.

The Chesapeake Bay is an invaluable natural resource of Maryland. Its quality cannot be tampered with. The AEC, the business community, and the state and local agencies involved must recognize the great importance of the Bay to the people of our state.

Thermal pollution simply must not be permitted to abuse its water quality.

The proposed facility at Calvert Cliffs will be nuclear powered. Atomic energy has been shown to be a safe and efficient source of future potential energy.

The Atomic Energy Commission proceeds with extreme caution when licensing atomic reactors. It is of course proper that they do so. I am confident that the Commission will exercise considerable and great care with the Calvert Cliffs reactor and that, upon their final approval, the facility will pose no danger of a nuclear nature to the area.

The responsibility of the AEC, however, extends only to issues of national security and health and safety. It has no jurisdiction over concerns of environmental quality. A January 13, 1969 ruling of the U.S. Court of Appeals for the First Circuit affirmed a lower court decision that the AEC did not err in refusing to consider the possibility of thermal pollution from a nuclear power facility. The Court held that the Commission simply did not have the necessary jurisdiction to involve itself in such an area.

This is a serious gap in the legislative authority of the AEC. I respectfully urge the Commission, on its own, to seek redress before the Congress. Thermal pollution is too serious a threat to permit an inactive posi-

tion on the part of the AEC. Additionally, I urge the Commission to upgrade its informal, advisory contacts with the Department of Interior in order to insure maximum use of available expertise within that Department.

For my own part I am cosponsoring legislation, the Water Quality Improvement Act of 1969, which in part directs itself to this problem of thermal discharges by requiring certification, consistent with established water quality standards, of permits required for water withdrawals affected with a federal interest.

As a regulated public utility the Baltimore Gas and Electric Company has the responsibility to meet the present and future power needs of well over a million Marylanders. In general the company has served the people well. Their desire to build a plant at Calvert Cliffs reflects their awareness of future power demands in the Baltimore area.

The company has often expressed their willingness to preserve and protect the Chesapeake Bay. I have no doubt of their sincerity and am aware of steps taken by Baltimore Gas and Electric to transform this willingness to action. One particular step that is significant is the extensive consultations that have taken place between the company and concerned state officials. These have resulted in design alterations which lessen the impact of plant operations on the cooling and receiving waters. Such action can only be applauded and recognized as an absolute necessity in the future.

There are, however, two disturbing aspects to this project. The first is the absence of public research on the environmental impact of the Calvert Cliffs facility. The state and the Atomic Energy Commission should not have to rely on company sponsored studies, with or without access to their data. They should be provided with the capacity to conduct independent studies of their own. My second concern involves the simultaneous nature of the research undertaken and actual construction at Calvert Cliffs. The latter suggests that the site is an accomplished fact and that no evidence brought forward by any research will alter it. Additionally, as the Washington Post suggests in a May 8 editorial, this lessens the importance of these hearings and lends credence to those who argue that local interests are in fact being overlooked.

An additional problem raised by the construction of new electric power generating stations is the routing of power lines. It is a problem here, as the B.G. & E. lines must go northwest to the Baltimore area, and elsewhere. Present technology does not permit such high voltage lines to be placed underground.

The industry as a whole must recognize that it has an obligation to minimize the environmental impact of these lines, and that this will cost considerable money. Power lines no longer can simply be strung in a straight path, representing the shortest distance between two points. Concern for aesthetics and history must be programmed into the routing. We do not need another Antietam affair. The industry must recognize that the additional expense incurred must be borne as a regular cost of doing business. The public interest does not ask the industry to do this. It demands it, and expects that it will be done.

In concluding, I would like to state that I believe that the proposed nuclear power plant at Calvert Cliffs is needed if Maryland's future electric demands are to be met. Equally necessary, however, is the responsibility of all of us to preserve and protect the Chesapeake Bay. The threat to the Bay from thermal pollution is a real one. To argue that all the nuclear facilities now in existence would raise the temperature of the Bay only one or two degrees is misleading. Thermal discharges are like some poisons: In small dosages they can be lethal. The

overall temperature at the Bay may be only slightly affected but a specific portion, the receiving waters, may be severely damaged. I do not think we can be too careful.

We need electric power; we need environmental protection as well.

It is imperative that the appropriate state agencies act now to institute objective, State-sponsored scientific studies of each area of the Bay and its tributaries proposed to be used as a site for a power generating station during the next 20 years. We should determine long before construction plans are finalized whether the site selected by the power company is desirable from a conservation point of view. The study should determine further which areas of the Bay are best suited to absorb thermal discharges without injury to the ecology of the estuary.

[From the Washington Post, May 8, 1969]

NUCLEAR POWER AND THE PUBLIC INTEREST

The storm that has blown up in Southern Maryland over the proposal to locate a nuclear power plant on the Calvert Cliffs at Lusby, Calvert County, is typical of many that will be brewing in the months and years ahead. People who live in the area are worried about the possibility of radiation and heat pollution in the Chesapeake Bay. Others are deeply concerned about the clutter of towers and wires that will be necessary for the transmission of 1,600,000 kilowatts of power to Baltimore. And many others whose lives will not be immediately affected see in this project an unwarranted assault on our natural environment.

As Hal Willard noted in an illuminating discussion of the problem in our Panorama Section on Thursday, 11 nuclear power plants are already under construction or in operation along the Atlantic Coast. Every one has been controversial, and the controversy is certain to mount as additional plants of this kind are planned and constructed. The outcome may cast a long shadow over the future.

It is not a question of whether or not the power companies are planning wisely. Calvert Cliffs, for example, was selected by the Baltimore Gas and Electric Co. from about 50 potential sites. Possibly it is the best location for a nuclear power plant that can be found in the area. It is also clear that elaborate precautions will be taken to make the plant safe and to minimize its impact on wildlife in the area, especially the fish in the Chesapeake Bay. Yet some vital changes in the environment will be unavoidable, and the results of these changes cannot now be fully known.

There is not much comfort in the assurance of one company official that if studies now being undertaken show that "the plant will have significant effects on the Bay then we will have to try to do something about it." When the plant is built and in operation, it will be too late to turn back. Some responsible body ought to be determining before the die is cast, whether the risk is tolerable and if so where the plant can be best located in the public interest.

It is interesting to note that the first public hearing on this project will be held by the Atomic Energy Commission on May 12, although excavation for the plant has been completed and the company has spent millions of dollars for right-of-way, equipment and so forth. The hearing will have the appearance of a mere ratification proceeding for a fait accompli. The company must also obtain a certificate of convenience and necessity from the Maryland Public Service Commission, but this too will seem to be a mere formality. Fortunately, the Maryland regulations will require site approval before construction of another such project can begin, but that does not change the unpalatable facts in the present situation.

The least the country can ask, in venturing into a new field of this kind which may

vital affect the environment, is that a competent and disinterested public body take a careful look at all the available facts before the leap is taken. The location of such plants ought to be a major issue before a Council on Environmental Quality, such as Senator Jackson has proposed. The hope for cheaper nuclear power must be weighed against long-range risks to all forms of life, and no private enterprise is competent to make such determinations by itself.

AEC COMMENTS ON SENATOR TYDINGS' STATEMENT REGARDING THE CALVERT CLIFFS NUCLEAR POWERPLANT

The following information is submitted with reference to the statement made by Senator Tydings on May 12, 1969, regarding the Calvert Cliffs Nuclear Power Plant.

"This is a serious gap in the legislative authority of the AEC. I respectfully urge the Commission, on its own, to seek redress before the Congress. Thermal pollution is too serious a threat to permit an inactive position on the part of the AEC."

The Commission recognizes the desirability of controlling thermal effects of released heated water on the environment, and has examined a number of proposed legislative solutions to this problem over the past few years. The AEC favors legislation in this area along the lines of the proposed Water Quality Improvement Act of 1969, introduced in the Senate as S. 7 by Senator Muskie for himself, Senator Tydings, and others. This legislation would require applicants for federal licenses to obtain advance certification from state water pollution control agencies with respect to compliance with applicable state water quality standards, and the AEC would be precluded from issuing any license or construction permit until this precondition had been met. AEC Commissioner James T. Ramey appeared before the Subcommittee on Air and Water Pollution of the Senate Committee on Public Works on March 3, 1969, where he testified that the Commission was pleased to support this proposed legislation, subject to certain technical modifications.

The AEC presently lacks authority to impose restrictions regarding the thermal effects of discharges from licensed nuclear facilities. Licensing by the AEC, however, does not relieve the applicant from being subject to the appropriate jurisdictions in other areas which would also be involved if the plant were fueled by coal, oil, or other nonnuclear means. Each state, of course, has the same authority to deal with thermal effects from nuclear power plants as it does from fossil fueled power plants unless in some way restricted by state law. In this connection, the AEC keeps interested state and local officials informed of applications received and licensing actions taken on the proposed nuclear projects.

The Commission recently surveyed the New England utilities that were constructing or operating nuclear power facilities, and found that they all had extensive environmental studies in progress to determine the potential thermal effects of the operation of their facilities. In addition, the AEC is now conducting a survey of all applicants and licensees to obtain detailed information concerning their studies relating to possible thermal effects on the environment.

"Additionally, I urge the Commission to upgrade its informal, advisory contacts with the Department of Interior in order to insure maximum use of available expertise within that Department."

The Commission is cognizant of the Department of the Interior's interest in the thermal effects of such discharges under the Fish and Wildlife Coordination Act and the Federal Water Pollution Control Act, as amended. Under a 1954 Memorandum of Understanding between the Atomic Energy Commission and the Department of the

Interior, the AEC routinely obtains expert advice and recommendations on all projected nuclear power facilities from appropriate agencies of the Department. This practice involves the U.S. Geological Survey, the U.S. Fish and Wildlife Service, and more recently, the Federal Water Pollution Control Administration. In addition to comments on the radiological health and safety aspects of the proposed facilities, the Fish and Wildlife Service report (which includes FWPCA's comments) also makes recommendations on nonradiological matters, including the thermal effects of the discharge of coolant water in the marine environment. A copy is sent to the applicant, calling attention to the Service's recommendations concerning potential nonradiological effects and urging cooperation with the appropriate federal and state agencies. These reports are also made public and are forwarded to the state and local agencies that may have an interest for their information and use. As indicated above, the Commission is conducting a survey of all AEC licensees to determine the extent of their cooperation, and our information to date indicates that the utilities are cooperating in resolving the various environmental problems that might be associated with the construction and operation of these large facilities.

"There are, however, two disturbing aspects to this project. The first is the absence of public research on the environmental impact of the Calvert Cliffs facility. The State and the Atomic Energy Commission should not have to rely on company sponsored studies, with or without access to their data. They should be provided with the capacity to conduct independent studies of their own. My second concern involves the simultaneous nature of the research undertaken and actual construction at Calvert Cliffs. The latter suggests that the site is an accomplished fact and that no evidence brought forward by any research will alter it."

The AEC has been very conscious of the possible impact of radioactivity in the environment and, realizing that radionuclides released to the environment might find their way back to man through food chains, has for over 20 years funded research programs in this area. The program supports work by many of the Nation's leading scientists, and includes studies of rivers, streams, lakes, and bays throughout the Nation. During the past 12 years about \$70,000,000 has been expended in this program, and in our 1969 budget over \$9,000,000 is included.

For several years, the AEC has supported research by scientists at Johns Hopkins University on the ecology and movement of water in the Chesapeake Bay. Three contracts for research are now in force. One is for ecological studies of the Bay, from the Susquehanna River to near the south end of the Bay. Another is for a study of plankton and other small organisms in the Bay. The third is for dye studies of the dispersion of plumes in the near-shore environment (which have been in progress since 1962). This work is designed to predict the dispersion of both heat and radioactivity in the Bay. The total expenditure on these contracts, including money for 1969, is about \$1,590,000.

Much of the work on behavior and fate of radionuclides in the environment will become available in a new book by the National Academy of Sciences—National Research Council entitled *Radioactivity in the Marine Environment*. This volume, sponsored by AEC, will be published early in 1970, and will summarize knowledge gained from studies of nuclear tests, nuclear reactor effluent in the environment, and natural radioactivity. Nearly all of the work on behavior, fate, and effects of radionuclides on the environment is also published in the open scientific literature.

The AEC also has been supporting research

in thermal effects. The Research, Development and Demonstration Subcommittee of the Federal Council for Science and Technology's Committee on Environmental Quality is currently making a study of Federal Government activities in this field. Their data show that of \$867,000 committed to thermal pollution research in 1969, 54% (\$471,000) is being provided by the AEC.

The second concern "involves the simultaneous nature of the research undertaken and actual construction at Calvert Cliffs. The latter suggests that the site is an accomplished fact and that no evidence brought forward by any research will alter it."

It was noted above that much research by many qualified biologists and ecologists in many areas of the Nation has been and still is going on; furthermore, environmental surveys in the vicinity of reactors now in operation—both power reactors and AEC-owned reactors—have shown no deleterious effects on the environment. In a recent survey by the U.S. Public Health Service in the vicinity of the Dresden nuclear power plant in Illinois, for example, it was found that radioactivity levels contributed by the Dresden plant were so low that it was difficult to distinguish the levels either from natural background radioactivity or from fallout.

As to the relation between research and actual construction at the site, the research and experience mentioned above were taken into account by the AEC regulatory staff in its consideration of the site and of the proposed plant. The staff's position set forth at the public hearing was based on this research and on the knowledge that environmental effects can be controlled by limiting the radioactive effluents. Specific limits for such effluents will be incorporated in any operating license which may be issued for the facility; nonetheless, the AEC's Division of Biology and Medicine is currently negotiating with the University of Maryland for a comprehensive ecological study in the vicinity of Calvert Cliffs. This study is part of a planned program for in-depth study of typical power plant sites, Calvert Cliffs being representative of a bay site. It should be noted that the Calvert Cliffs Unit 1 is not scheduled for operation before January 1973, and Unit 2 not before January 1974. If an operating license is issued, the licensee will be required to monitor effluent releases to assure that radioactivity in such releases from the facility are within limits prescribed in the license and AEC regulations. The licensee will also make periodic radiological surveys of the environment in the vicinity of the site in order to detect any significant increase in radioactivity and assure that exposures of the public that may result from releases are well within radiation protection guides.

The Commission understands that Baltimore Gas and Electric Company has also initiated three basic studies relevant to the question of thermal effects on Chesapeake Bay. The first of these involves general oceanographic studies being carried out by Sheppard T. Powell Associates to assemble data on the physical characteristics of the Bay at the Calvert Cliffs site to obtain basic information such as depths, flow, temperatures, salinity concentrations and tide levels.

The second program involves model studies of the Bay being carried out by the Alden Research Laboratories of Worcester Polytechnic Institute. A scale model of a 34-mile stretch of the Bay has been utilized for some time to study the thermal dispersion of cooling water leaving the plant. The stated objective of these studies is to provide information for appropriate design of the intake and discharge structures to minimize thermal effects in the Bay. These model studies are being followed by a model advisory committee appointed by the Board of Natural Resources of the State of Maryland. The committee, which consists of three state repre-

sentatives and three company representatives, is expected to report on the results in the near future.

Baltimore Gas and Electric Company's third program is being conducted by the Academy of Natural Sciences of Philadelphia to obtain base line information on aquatic life in the vicinity of the plant site. This broad program involves accumulation of information on physical, chemical and bacteriological characteristics of the water, plankton studies, and population and reproduction studies of fish and shellfish species of importance in the Bay. The general objective of the work by the Academy is to establish a basis for comparison with corresponding data obtained after the plant may be placed in operation.

The Baltimore Gas and Electric Company has indicated that it will design and operate the plant in such a manner that the water quality standards of the State of Maryland are met. From the standpoint of thermal effects, this involves provisions in the design and operation of the condensers such that the temperature elevation would not exceed 10° F. above natural water temperature. In addition, a limit of 90° F. would be set for cooling water discharges, taking into account a small mixing zone to be specified by the Department of Water Resources of The State of Maryland.

It is the understanding of the Commission that the State Department of Water Resources has authority to decide whether Bay water may be used for cooling purposes, and that the Company will file an application in the near future with that Department seeking authorization to use Chesapeake Bay water for cooling purposes.

"Additionally, as the Washington Post suggests in a May 8 editorial, this lessens the importance of these hearings and lends credence to those who argue that local interests are in fact being overlooked."

Sites for nuclear power plants are selected by the utility which proposes to build such facilities, and the AEC's jurisdiction in this respect is limited to consideration of the suitability of the site and the other features of the proposed reactor that have a bearing on radiological health and safety. Insofar as the local interests are related to matters such as zoning, aesthetics, and land acquisition, the AEC has no regulatory authority to deal with them. These matters, however, are traditionally considered by state and local jurisdiction.

With respect to matters within the AEC's jurisdiction, excavation work and some concrete construction had been done at the Calvert Cliffs site prior to the public hearing. Under the AEC's regulations, site preparation is permitted, and in certain circumstances limited construction may take place under exemptions as provided in the regulations; however, all such work done prior to the issuance of a construction permit represents only a very small fraction of the total cost of the facility and is done wholly at the risk of the applicant. The fact that such work is permitted does not mean that a construction permit will be issued. For example, the regulatory staff recommended against the construction of a nuclear power plant by Pacific Gas and Electric Company at Bodega Bay, and the Company withdrew its application after the expenditure of several million dollars in work on the site.

TRITIUM PROBLEM OUTLINED

(By Hal Willard)

The problem of radioactive tritium being released from nuclear plants is unresolved, despite utility company advertising and Atomic Energy Commission assurances, a Johns Hopkins University radiologist maintains.

The radiologist, Dr. Timothy Mertz, says tritium from water, a byproduct of nuclear

reactors, can enter the human body and stay in cells long enough to cause genetic mutations and possibly leukemia in descendants.

Dr. Mertz cautions that two reactors, such as will power the electricity-generating station on the Chesapeake Bay at Calvert Cliffs, will not emit enough tritium to be a major danger. However, he says, the electric power industry must recognize tritium as a problem because of the cumulative effect if too much tritium escapes or too many nuclear stations are built.

There are 13 civilian nuclear stations operating in the United States; 46 are under construction, and nearly 50 more are planned. The greatest concentration of them, totaling all stages of development, is in the Middle Atlantic region, including the Chesapeake Bay. But, Dr. Mertz says, scientists still don't know precisely how many plants could be built in a given area before tritium became an actual danger to human life.

The Atomic Energy Commission is well aware of the potential danger of tritium, according to Dr. John Totter, chief of the biology and medicine division, and has established strict standards on the amount of tritium that a reactor is allowed to release.

Furthermore, Dr. Totter says, the AEC has regulations controlling the total amount of tritium that can be released in a given body of water that isn't constantly circulating so that it does not become saturated.

Dr. Mertz feels these regulations are not stringent enough.

Dr. Totter also said he felt that the AEC had not done a thorough job in explaining the facts about tritium to the public and that if it had there would be less concern about the substance.

Dr. Mertz and Dr. Totter agreed that the advertising concerning tritium by the Baltimore Gas and Electric Co., builders of the Calvert Cliffs station, could be misleading to people unfamiliar with the scientific jargon employed.

The ads have appeared in several newspapers, including The Washington Post, and have caused the Public Service Commission to order an accounting to determine whether the expenditure for the ads is in the public interest. The money to pay for the ads, of course, comes from the regular utility rate, paid by the public. The PSC emphasized that it allows a certain amount of institutional advertising. (The least an advertiser must pay The Washington Post for a half-page ad is just under \$1450, according to Post rate listings.)

Money spent on advertising conceivably could affect the utility rates paid by the public and the PSC must decide whether the purpose of the advertising justifies the expense.

The uncontested facts about tritium are that it is radioactive and is an isotope of hydrogen and, therefore, is actually part of the water disgorged back into any body of water being used by a nuclear power station as coolant, as Chesapeake Bay water will be used. The chemical formula for water is two parts of hydrogen and one part of oxygen (H₂O). Tritium becomes one of the hydrogen parts, making the formula for water HTO.

Once the tritiated water is in the Bay, or any other body of water supplying a nuclear station, it is used by plant life to make carbohydrates through the process of photosynthesis. Thus, the tritium becomes part of the plant.

Any creature eating the plant, whether it be fish or man, is ingesting food that becomes structural protein and nucleic acid containing tritium. If a human being simply drank the water, the effect would be the same.

No one is expected to drink from the Bay, of course, because it is salt water.

The dialogue on tritium began at a public hearing conducted last May by an AEC re-

actor licensing and safety board in Prince Frederick, county seat of Calvert County.

An AEC statement used at the hearing said in part: "Water containing tritium acts chemically like ordinary water; most of it passes through the human body very rapidly. More than one-half of the tritium taken up by the body is passed on within three to 10 days; practically all remaining molecules of water containing tritium are gone within 60 days."

Dr. Merz contends that this statement oversimplifies the situation. He says the elimination of tritium is not rapid and says he places a different emphasis on the word "practically" than the AEC does.

Dr. Trotter says the statement was accurate, but not nearly as precise as it should have been—and therefore is open to misinterpretation and misunderstanding. A construction permit for the plant has been issued.

Dr. Merz and six other Johns Hopkins scientists submitted testimony at the hearing, but at the time their views about it were merely theory. Since then, Dr. Merz has proven his views by independent laboratory experimentation, he says.

He learned that the AEC already knew, it turned out, but he places a different emphasis on it. The chief fact involved is that tests show a permanent incorporation of tritium in water creatures that eat plant life that had absorbed tritium from water.

Advertising by the Baltimore Gas and Electric Co. manages to convey a contrary opinion by the use of accurate, but imprecise and esoteric language, Dr. Merz feels.

An advertisement on page D12 of the Sept. 3 editions of *The Washington Post* says in part: "The Calvert Cliffs plant will include the most complete system available for removing radioactive 'impurities' from any water discharged from the plant to the Bay. However, this \$4,400,000 processing system will not completely remove everything from the water . . . Since tritium becomes a part of the water molecule itself, it is not removed. This is why there will be a large quantity of tritium discharged than any other radioactive isotope . . ."

"The major route to man of these radioactive liquids would be through seafood. For anyone eating normal amounts of seafood harvested in the immediate vicinity of the plant site, the radiation exposure from this seafood would be infinitesimal. In a single year, a real seafood lover would have to eat at least 30 tons of fish, crabs, clams, and oysters from the same plant area to receive as much radiation exposure as from an annual chest X-ray. These exposures consider the fact that some elements reconcentrate in the seafood chain to levels above the concentration in the Bay water. But there is no theoretical or experimental support for a conclusion that significant separation of tritium from hydrogen can occur by natural chemical or biological means. These properties of tritium tend to prevent reconcentration of tritium in the food chain."

But, according to Drs. Totter and Merz, there is "permanent incorporation" of tritium by the person absorbing it. Therefore, all sides agree, the public must answer two questions: How much risk are humans willing to take that the standards set by the AEC are high enough; and how much are humans willing to gamble that AEC scientists will not be proven wrong in the future—perhaps because of the newness of the science.

The AEC and the electric power industry are confident that the risk is so small that it is worth taking.

THE PROMISE OF NUCLEAR ENERGY IS DIMMED BY A GROWING FEAR OF CONTAMINATION: "PEACEFUL ATOM" SPARKS A WAR

To counter the nightmare of the mushroom cloud, scientists and statesmen held

forth an exciting promise for mankind—the peaceful atom. Now that promise, originally accepted with few reservations by the public, is being challenged on every side. Once communities vied for nuclear power plants ("nukes") as passports to prosperity; now angry citizens battle to keep them out. Nukes were once admired as cleanly esthetic—they do not belch forth conventional air pollution. But they do bristle with the menace of other pollutants—a variety of radioactive and thermal hazards. Electric power companies, already harassed by the escalating costs of nukes as well as by unforeseen bugs in the technology itself, are frustrated by rising public opposition. As a result, an industry that seemed securely on its way to boom times only a few years ago has skidded to an uncertain slowdown. The principal villain, in many eyes, is the Atomic Energy Commission. The sole nuclear regulating agency, AEC has at the same time been the vigorous promoter and generous subsidizer of the peaceful atom. But America's power needs are doubling every decade. And with everyone concerned about the dissipation of the earth's fossil fuels (coal, oil, natural gas), it seemed logical, even necessary, to go nuclear. Though only 1% of U.S. electricity is now nuclear-generated, the AEC predicts it will go up to 50% by 2000. If it does, high-grade uranium fuel may also become scarce—unless, by then, "breeder-reactor" technology has been perfected. This would allow the creation of new nuclear fuels faster than the old are used up—and perhaps present even greater hazards to the environment. "Maybe we must ultimately decide," suggested one AEC official, "between electrical power on the one hand, and beaches, oceans the other."

COPING WITH NEW PERILS

Once steam begins to spin the turbine that generates the electricity, a nuke works just like any other power plant. The difference is that the heat that makes the steam comes from nuclear fission in the reactor's core. But this one difference means that radiation contamination is a constant concern. Thus every step of the operation is incredibly complex, requiring nonstop monitoring by automatic instruments and nonstop monitoring of the instruments by men. And at the end of the line the spent fuel is still so dangerous that it must be stored in underground tanks for additional hundreds of years. Truckloads of waste are driven through towns. Even underground, some radioactivity has leaked, perhaps into water supplies. What if an earthquake split the tanks open? Though a nuke could never blow up like a bomb, a runaway reaction could melt down the core and, if the protective housing gave way, permit the escape of contaminants in disastrous quantities. The elaborate safeguards required of nuclear plants—more stringent, perhaps, than in any other industry—make such an accident seem remote, but insurance companies still refuse to underwrite most of the risks (the government does). Nukes keep in over 99% of the fission products, but the 0.5% permitted to escape is a big issue in the current battle.

An angry housewife, fearful for the future of the child in her arms. The chairman of the Atomic Energy Commission, a calm and patient Nobel Prize winner whose good intentions no one questions. Thus are the lines drawn, the positions staked out in the war of words and feelings over the nukes. It began as a series of local skirmishes—a committee of concerned scientists here, a citizens' protest group there. Then two books appeared—*The Careless Atom*, by Sheldon Novick, and *Perils of the Peaceful Atom*, by Richard Curtis and Elizabeth Hogan—and helped to crystallize the issues. Amid general outrage over environmental pollution, people were beginning to demand that, instead of the burden falling to the public to prove that nukes did harm, it was up to the AEC

and power companies to prove they were safe. No technology is totally without risks, the AEC argued, and nuclear technology is safer than most. Just the same, in a few places such as Ithaca, N.Y. and Westport, Conn., utilities were forced to scrap their plans and write off their preliminary investments. Emotions were often too polarized to permit compromise. In Minnesota, for instance, after an outside expert had been called in to set strict standards, utility executives protested that he had made it virtually impossible for them to operate—while the opposition accused him of selling out to the utilities. At every prospect of installing a nuclear plant near a heavily populated area, city dwellers howled in pain. Put it out in the boondocks, they said. Out in the boondocks, meanwhile, people said, "Why ruin our countryside? If they want the power, let them have the plants too."

Part of the 0.5% of radioactive "effluent" that leaves the nukes comes out as gases. These appear to diffuse safely into the atmosphere—for now, at least; but many fear that over the years and decades the concentrations will build up to dangerous levels. Besides, who can say for sure what constitutes a "safe" level of radiation for anyone? Much of the 0.5% goes into the water. These minute quantities also are considered safe. But are they still safe once they enter the "food chain," where tiny organisms are gobbled by ever-bigger ones, eventually to be eaten by fish and, finally, by the organism at the end of the chain—man? Ominous questions, as yet only partially answered.

HEAT UPSETS THE BALANCE

Radioactive pollution of water by nukes is a long-range worry. A much more immediate danger, only recently recognized, is thermal pollution. A nuke is always built alongside a body of water because it needs a lot of water to cool its reactor. Conventional power plants heat the water, too, but not nearly so much as nukes. And the more economical (*i.e.*, the bigger) the plant is, the more water it uses. At higher temperatures, water cannot dissolve as much oxygen. Hence it is less able to assimilate organic wastes, and its aquatic life tends to sicken and die more readily. (Some species of fish seem to be attracted by the warmer waters. This may one day be of economic value.) Ecologists are afraid that disturbance of these delicate balances could destroy all present life in a river, stream, lake or bay—or, most worrisome of all, in an estuary, that point at a river's mouth where its current meets the tide. Estuaries are among the richest sources of irreplaceable aquatic life, and even small temperature differences there can make it impossible for certain tiny organisms to survive. As a result, the larger creatures that feed on them starve to death.

Perhaps the rush to go nuclear was premature. Too many unknowns still afflict the industry. Until some of them are resolved through further research and experience, and until breeder-reactor technology is closer at hand, it is just as well to go slow on nukes for now.

PICTURE CAPTIONS

1. Thousands of balloons representing radioactive particles were loosed by Vermonters protesting a proposed nuclear plant in nearby New York.

2. Mammoth nuclear vessels are part of TVA's unfinished 3-million-kilowatt plant in Browns Ferry, Alabama.

3. So powerful are the uranium pellets that make up nuclear fuel assemblies that the 15 in this gloved hand are equal in energy to 22½ tons of coal in the background. The pellets are relatively safe to handle at this point, but after about a year or so of use they become dangerously radioactive.

4. At Con Edison plant near Peekskill, N.Y. spent fuel rod "cools" underwater for months before transfer to cask at bottom and more processing.

5. Among wallfuls of complex controls at Con Edison plant is a switch marked SCRAM. If radioactivity approaches abnormal levels, flipping this switch stops the nuclear reaction.

6. These huge steel concrete-walled tanks are two of 151 at Hanford, Wash. plant. Each holds a million gallons of radioactive wastes and is covered with 10 feet of earth. New AEC rules will require that all liquid wastes be solidified, then shipped to be stored in underground federal mines.

7. Protesting a planned Con Ed nuke at nearby Fort Stoom, Mrs. Dana Levy of New Rochelle, N.Y. asks angrily: "What do you say to your kids when they grow up—'Sorry, no air to breathe, no water to drink'?"

8. Members of New Hampshire's Seacoast Anti-Pollution League, John Parker and Walter Tingle oppose nuke planned for salt marsh. "Why threaten small communities," they ask, "so large ones can have power?"

9. Research by Dr. Dean Abrahamson of the University of Minnesota precipitated a still-pending court contest between Minnesota and the federal government over who has the right to set radiation-safety standards.

10. At a study-group discussion in Huntington, N.Y., Mrs. Richard Westphal speaks against two proposed nukes on Long Island. "They're advertised as clean," she says, "but only because you can't see the waste."

11. Map of U.S. shows 11 nukes in operation (squares), 46 under construction (triangles) and 32 planned (circles). Actually, more are planned; map shows only nukes whose reactors have been ordered. AEC Chairman Glenn Seaborg (*right*), who calls himself a "salesman" for nuclear energy, believes rapid nuke development is not only desirable but inevitable.

12. Haddam, Conn. plant can heat 370,000 gallons of water per minute. A new plant up-river in Vermont has to put up a \$6 million tower to cool water before returning it to river.

13. In lab experiment on Columbia River, young salmon were put in water 10.5° warmer than river. In three hours, half were dead. (Few have so far been killed by heat outside labs.)

14. At Alden Hydraulic Laboratory near Worcester, Mass., Dr. L. C. Neale, helping Con Ed improve heat disposal, uses a model of a 17-mile stretch of the Hudson River which includes site of three Con Ed nukes. Time exposure shows patterns made by candles on floats which trace how plants' warmed water would flow as tide moves it first upstream, then down.

15. This striking infrared "scan," with temperatures converted into colors, shows how water from nuke (lower right) heats Connecticut River at Haddam plant. Blue is normal temperature, while the deep red "plume" is 14° hotter. The plume flows downstream (right to left) in narrow channel, then tide carries it back up. The fear is that the plume in some rivers might go all the way across, creating a "thermal barrier" to aquatic life.

LET US REMEMBER OUR SERVICEMEN'S WIDOWS AND CHILDREN

Mr. YARBOROUGH. Mr. President, the Senate has before it two bills of great significance to our servicemen and their dependents.

S. 1471 provides an overall increase of 13 percent in the dependency and indemnity compensation program for widows and orphans of servicemen and veterans whose death was service related. These increases are designed primarily to benefit the widows and children of the lower ranking enlisted men. The

present dependency and indemnity compensation program has generally provided adequate protection for the career military servicemen. However, it has not met the needs of the survivors of our noncareer enlisted men who have given their lives in the Vietnam war. These are the people who need protection since five-sixths of the deaths in the war are young enlisted men who were drafted to fight this cruel war.

S. 1479 would increase the face value of servicemen's group life insurance from \$10,000 to \$15,000. This increase in the insurance benefits will assist the widow of a serviceman who gave his life in Vietnam, to aid her to meet the staggering cost of living that exists today.

Nothing that we can do will ever compensate a family for the loss of a young husband and father. However, these two bills show that Congress cares about the welfare of our brave servicemen's dependents.

Therefore, I urge that all Senators support these two vital measures.

THE FOOD STAMP PROGRAM

Mr. COOK. Mr. President, the U.S. Department of Agriculture has long been in the forefront of the battle against hunger and malnutrition in this country.

The present administration has given new emphasis and direction to this very important work. Since January, the number of counties and independent cities without a food program has been reduced from 480 to 348. To continue this record of accomplishment, the Honorable Clifford M. Hardin, Secretary of Agriculture, reaffirmed the Department's commitment to an expanded and improved food stamp program in his testimony to the Select Committee on Nutrition and Human Needs on September 15.

Mr. President, I ask unanimous consent that Secretary Hardin's testimony be printed in the RECORD.

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

TESTIMONY OF THE HONORABLE CLIFFORD M. HARDIN, SECRETARY OF AGRICULTURE, BEFORE THE SELECT COMMITTEE ON NUTRITION AND HUMAN NEEDS, SEPTEMBER 15, 1969

Mr. Chairman, and Members of the Committee:

I am pleased to again appear before this distinguished Committee.

On May 7th Secretary Finch and I met with you and discussed President Nixon's commitment "to put an end to hunger in America itself for all time." We described to you the features of the expanded food stamp program that had been outlined in the President's message to Congress of May 6th.

We explained that the President's revised food stamp program would:

Provide poor families enough food stamps to purchase a nutritionally complete diet, Provide food stamps at no cost to those in the very lowest income brackets,

Provide food stamps to others at a cost no greater than 30% of income,

Give the Secretary of Agriculture the authority to operate both the Food Stamp and Direct Distribution Programs concurrently in individual counties at the request and expense of local officials.

Legislation embodying the President's proposals has been submitted to the Congress

and hearings have been held before the Agriculture and Forestry Committee of which many of you are members. A committee bill incorporating some, but not all of the Administration's proposals is now awaiting action by the full Senate.

Since I appeared before you in May, I have testified before the Agriculture and Forestry Committee and before the House Agriculture Committee in support of the President's proposals.

The President has continued to give his personal support to expanded nutrition programs. On June 11 he named the distinguished nutritionist, Dr. Jean Mayer, to head the White House Conference on Food and Nutrition which will convene in December.

Addressing the Nation's Governors on September 1 in Colorado Springs, the President reiterated his commitment to good nutrition when he pointed out that "... now, for the first time, we propose that every American family shall have the resources, in food stamps, commodities and other assistance, to obtain a minimum nutritious diet, with free food stamps for those with very low incomes."

There can be no question about the high priority that this Administration has assigned to eliminating poverty-caused malnutrition. We are most anxious that the Senate act on the pending food stamp legislation. We trust that the House will do the same.

We regret that certain key features of the President's proposal have been omitted from the Senate Committee bill. In particular we feel that food stamps should be available without cost to those with very low incomes. We are also hoping that the full Senate will restore the authority requested by the President to allow the simultaneous operation of Food Stamp and Direct Distribution Programs where that may be appropriate.

Since Secretary Finch and I last met with you, the President has proposed a far-reaching overhaul of our whole welfare system. The President's family assistance proposals will have a tremendous impact on the situation of the poor. Assistance will for the first time be available to the working poor, just as food stamps have been available to them in the past and will continue to be available.

You will recall that the President, in his May 6 message to Congress, promised that his food stamp proposals would "ensure that the Food Stamp Program is complementary to a revised welfare program, which I shall propose to Congress this year."

The Administration's Food Stamp and Family Assistance proposals are complementary as the President pledged they would be. Both are designed to provide substantial assistance to the poorest of the poor. Both are available to the working poor. In each program, assistance is reduced on a gradual basis as income rises so that the incentive to work is preserved. Assistance in each program is phased out when income reaches a level somewhat above the current poverty line—\$3920 for a family of four under Family Assistance, \$4000 with Food Stamps. With the two programs operating together we have a chance to begin a comprehensive approach to the income problems of the poor.

Family Assistance in no way detracts from the priority that the President assigns to eliminating malnutrition. In the existing Food Stamp Program we have a vehicle for dealing with poverty caused malnutrition. When the President delivered his message of May 6, he made clear that it was time to go ahead and reshape the Food Stamp Program to make it workable, available and attractive. This is something we can do now and that we should do now. We in the administration are hopeful that Congress will give the same priority to food stamp legislation that we do and act on it now, so that we can go out and meet the needs of hungry people.

By the time that Family Assistance is considered and enacted by the Congress, we hope to have an expanded Food Stamp Program, fully in operation. We see no reason to further delay this giant step forward.

Secretary Finch will describe the Family Assistance Proposal. Without going into the details of the program, I would like to indicate briefly how the two will operate together.

Under the Administration's food stamp proposals, a family of four prior to the enactment of the Family Assistance Program with no income or welfare payments would be eligible for \$1200 worth of food stamps without charge. As income rises the family would continue to be eligible for a \$1200 food stamp allotment at a cost not in excess of 30% of income. For the purposes of determining food stamp bonus levels, Family Assistance will be considered income, just as present public assistance is treated as income.

When Family Assistance becomes available, the family of four that previously had no income will have \$1600 in cash. That family will still be eligible for the Food Stamp Program. It will be able to obtain its \$1200 Food Stamp allotment by paying not more than 30% or about \$480 of its income. Thus, the total benefits to the family will be at least \$2320. By giving poor families an opportunity to participate in both programs simultaneously we provide them with added income and a chance to allocate a fixed portion of this to food.

The Administration is now making the important proposal that the new food stamp program be administered to permit so called variable purchase of stamps. This will allow a family to buy less than the full amount of stamps available to it at a proportionately reduced cost. Many families have difficulty now, under the present food stamp program, in scraping together enough cash to purchase their entire monthly allotment of stamps. This is one of the major reasons they fail to participate in the program. In spite of the reduced purchase costs under the President's May 6 proposal, we believe some families would still have difficulty. We propose to ease this by permitting them to allocate a varying amount of cash to the purchase of stamps. This variable purchase proposal will effectively increase the number of families participating in the administration's expanded food and nutrition program.

Family Assistance will create significant savings for the Food Stamp Program. Free food stamps will only be necessary for the one and two person households that qualify for neither family assistance nor revised public assistance that will be available to the elderly, the blind, and the handicapped. Families applying for stamps will have incomes in excess of \$1600.

As we move on down the road with these two programs . . . as Family Assistance becomes a reality, then I believe there should be consideration given to consolidating their administration. The agency which is charged with certifying eligibility for Family Assistance and for distributing payments should, it seems to me, be able to distribute food stamps to Family Assistance recipients more effectively than any other agency.

We have worked with the Department of Health, Education and Welfare to calculate the potential Food Stamp Program savings that will result from fully implemented Family Assistance. Working with the most recent available data—the results of the 30,000 person Survey of Economic Opportunity, conducted by the Office of Economic Opportunity—we conclude that both programs be made available on nationwide basis at \$700 million less cost for the Food Stamp Program than we had previously estimated.

Thus, you see the two programs are, as the President promised in his May 6 message, not only compatible but also complementary.

They combine to represent the most far-reaching attack on the problems of the poor that has ever been proposed by any Administration.

We have had seven years of experience with the Food Stamp Program. We would like to build upon that experience, and we have requested changes that will give it greater merit, changes that will make it a more attractive program and one in which more of those in need will participate. We need these changes now! I solicit your assistance and support.

DIFFICULTIES OF THE SHOE INDUSTRY

Mr. McINTYRE. Mr. President, the shoe industry is one of this country's most venerable industries. It was in 1629 that Thomas Beard, the first shoemaker in America, landed in Salem with a supply of upper and sole leathers and a guarantee of 10 pounds a year for his efforts.

It has been, ever since, one of our most important industries, especially in that part of the country from which I come. The shoe industry is today the largest nondurable industry employer in New England, providing jobs for some 72,000 people engaged in shoe production and for perhaps 20,000 more in dependent industries—such as lasts, heels, dressings, supplies, findings, leather, and machinery.

This venerable and important industry is now in trouble. In the past year and one-half some 31 New England shoe plants, employing several thousands of workers, have been forced to close their doors. In my own State of New Hampshire, several plants have shut down recently and almost as many others are now on the verge of following suit. Other sections of the country have also been hit.

Most of the plants affected have been small businesses, vitally important to the small communities in which they operated. In light of this fact, and as chairman of the Subcommittee on Small Business, I felt it important that hearings be called to examine in depth the causes of these recent closings and to make this information known to the Nation.

These hearings were held, under my chairmanship, on Tuesday and Wednesday of this week. Joining me at the hearings were the Senators from Maine (Mrs. SMITH and Mr. MUSKIE), the Senator from Illinois (Mr. PERCY), the Senator from South Carolina (Mr. HOLLINGS), and Representative JAMES CLEVELAND, of the 3d Congressional District of New Hampshire.

National representatives, both of shoe industry management and labor, and of other concerned groups, appeared before us as witnesses at the hearings. I had hoped that we would be able to hear also from Secretary of Commerce Stans and Special Trade Representatives Gilbert. They felt, however, that trade negotiations with the Japanese might proceed more smoothly if they could appear instead at a later date. I, therefore, excused them from appearing with the understanding that they would be called at some time later this year.

These hearings made clear the fact that the shoe industry is on the verge of even more serious difficulties than it has thus far experienced. In the first 6 months of 1969, domestic shoe production was down 12 percent from year earlier figures, while shoe industry employment, at least in New England, showed a drop of 9 percent. Mr. President, if this trend continues for the balance of the year, it will be the biggest drop in both categories for any single year since World War II.

These hearings indicated also that the most important single cause of the industry's difficulties has been shoe imports. In 1968, over 73 percent of the shoes imported into the United States were women's shoes and imports in this category totaled a full 30 percent of domestic production. In light of these figures, it is surely no coincidence that almost all the factories recently shut down have been primarily manufacturers of women's shoes.

Mr. President, some witnesses at the hearings emphasized the superior styling of foreign-made shoes. I say that it makes no sense at all to blame the industry's problems on styling superiority abroad. The basic fact of the matter is that there is no way in which an American factory paying \$2.50 per hour in wages can hope to compete with a factory in Taiwan where the average hourly wage is 12 cents per hour or less.

On a few points, however, there were important conflicts of testimony. Some witnesses suggested that the industry was faced with a labor shortage, while others said that recent closings had created wide pockets of unemployment. Some who testified claimed that the plants which have closed were old and inefficient, while others rebutted them on this point.

Mr. President, on October 2 and 3, my Small Business Subcommittee will be holding additional hearings in both Manchester, N.H., and Boston, Mass. We will hear then from some of the people most intimately affected by the recent closings. We will learn directly of the closings of generations-old businesses, the loss of long-held jobs, and the disruptive effects on whole communities.

I am sure that this second set of hearings will resolve the few areas of dispute left open by the hearings here in Washington earlier this week. I sincerely hope that the way will then be clear for the enactment immediately of orderly marketing legislation designed to restrict the flow of shoe imports.

The purpose of such legislation would not be to cut off imports altogether but to limit them to a rate of growth consistent with the health of the domestic industry.

Mr. President, free trade is a fine idea. What it requires, however, is cooperation between countries and not unilateral action on the part of one alone. At present, the tariff barriers of those countries whose shoes have been flooding our markets are considerably higher than the barriers in this country. I think it is time we learned, as the Senator from Maine (Mr. MUSKIE) said the other day at the hearings, that unless cooperation from

other countries is forthcoming, the United States can no more be the world's consumer than it can be the world's policeman.

DEATH OF EARL DEARING, LOUISVILLE, KY.

Mr. COOK. Mr. President, I invite the attention of Senators to a great Louisville and Kentucky leader who recently passed away. Earl Dearing's name was usually preceded in print by the descriptive adjective "Negro," but to the community of Louisville and Jefferson County, Ky., his name was invariably followed by such accolades as outstanding leader, excellent lawyer, devoted civil-minded public servant, and loyal Republican.

When he died he was the nominee of my party for one of the highest positions which any lawyer can achieve, a circuit judgeship. The bench would have been enhanced by his selection.

Mr. President, I ask unanimous consent that an article from the Louisville Courier Journal describing Judge Earl Dearing's accomplishments appear in the RECORD at this point.

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

JUDGE CANDIDATE: EARL DEARING, LOUISVILLE RIGHTS LEADER, 48, DIES

J. Earl Dearing, Louisville Police Court prosecutor and long-time civil rights activist, died of cancer at his Louisville home at 11:20 p.m. Friday. He was 48.

Dearing was a Republican candidate for Jefferson Circuit judge. Four years ago he became the first Negro elected as Police Court prosecutor.

He first entered Jewish Hospital for surgery on May 27, the day he won the primary election. He had spent all but three weeks in the hospital this summer and had been home eight days before he died.

Dearing lived at 3418 Grand Ave., and is survived by his wife, the former Mary Alice Hambleton, a teacher at DuValle Junior High School; a son, David Earl, a sophomore at Yale University, 19, and a daughter, Francis Penn, 14, a ninth grader at Highland Junior High School.

A quiet, uncontroversial man, Dearing spent his working life plowing the fields of controversy.

"COOLNESS" OVERCOME

The most recent instance was on the national level last year when Dearing, somewhat untypically, created a stir after meeting with then Republican presidential nominee Richard Nixon.

Emerging from the meeting, Dearing told reporters that Negro voters felt a "coolness" toward vice-presidential candidate Spiro Agnew and might "revolt."

A month later, however, everything was patched up as the Nixon-Agnew team circulated literature bearing an endorsement from Dearing saying Mr. Nixon would "do more to solve the human . . . problems" than would Hubert Humphrey.

As a civil rights activist, a Police Court prosecutor and a partisan politician, Dearing remained remarkably free of personal criticism through a decade and a half before the public eye.

An attorney respected by his fellow members of the bar, Dearing scored well in a 1969 lawyers' poll rating the qualifications of circuit judge candidates.

A DEPUTY COURT CLERK

But the overriding factor at every turn in Earl Dearing's career was always his race. He was a black man who worked his way upward through a system that was white.

Thus he frequently was hailed as "the first Negro" to hold this public appointment or win that elective post.

If at times the fact of his race, for political reasons, opened the door for advancement, Dearing was always equal to the task, fulfilling the duties of each post with credit to himself and his party.

The appointments at first were rather lowly. In 1953, while serving in the administration of a Democratic police judge, Dearing became the court's first Negro deputy clerk.

By 1969, he had become the first Negro nominated by the voters in a primary election for an esteemed Circuit Court judgeship. He was a candidate for 4th Division of Common Pleas bench.

In the intervening years, in addition to various intermediate political posts, Dearing had served as president of both the local and state chapters of the National Association for the Advancement of Colored People (NAACP).

He was an active civil rights leader in Louisville in the late 1950s—when segregation was not only a common practice, but was thought to be a quite lawful one.

Militancy wasn't Earl Dearing's style. Quite the contrary. As attorney for the NAACP and other groups opposed to segregation, Dearing's approach was always calm and legalistic.

At times he could use understatement with powerful effect.

For example, while local NAACP president in 1957, he urged passage of an ordinance to outlaw segregation in local theaters, restaurants and other places of public accommodation.

In campaigning for his proposal, Dearing posed this simple but eloquent argument:

"My 7-year-old boy wanted to go see 'Bambi.' It was distasteful to me to tell him he couldn't go because of his race.

"He didn't understand."

EASY WINNER IN 1965

Five years later, in May 1963, Dearing finally saw a public accommodations ordinance adopted in Louisville.

That same year, the local Republican Party backed Dearing for election to the state Senate. Although defeated by the veteran Democratic incumbent, Bernard J. Bonn, Dearing gained 48 per cent of the vote.

In 1965, the Republicans backed him in the citywide race for Police Court prosecutor, and Dearing was an easy winner.

The funeral will be 1 p.m. tomorrow at Mount Lebanon Baptist Church, 222 W. Chestnut, with burial in Eastern Cemetery. The body is at the A. D. Forte & Sons Funeral Home, 1300 W. Chestnut.

Expressions of sympathy may take the form of memorial contributions to Virginia Union University at Richmond, Va.

JASPER, NEWTON, HARDIN AND TYLER COUNTY DOG AND WILDLIFE PROTECTIVE ASSOCIATION ENDORSED 100,000-ACRE BIG THICKET NATIONAL PARK

Mr. YARBOROUGH. Mr. President, the Jasper, Newton, Hardin, and Tyler County Dog and Wildlife Protective Association, an organization with a membership of over 15,000, has passed a resolution calling for the establishment of a 100,000-acre Big Thicket National Park in Southeast Texas. This fine organization has joined with the many other civic and conservation groups which

have expressed concern for the preservation of this beautiful and unique wilderness.

In addition to the rich and diverse plant and bird life which may be found in the area, the Big Thicket provides a home for many varieties of animal life, including beaver, mink, otter, muskrat, fox, wolf, red and gray squirrels, raccoon, opossum, and many others. The seriously threatened American alligator can still be found in the bayous of the Big Thicket. The endangered Texas red wolf has found a refuge there.

Unfortunately, the Big Thicket is in serious danger of being lost forever. As a result of encroachments by highways, pipelines, and lumber companies, the Big Thicket is disappearing at the alarming rate of 50 acres per day. We must act now if we are to save the Big Thicket for future generations.

Mr. President, I ask unanimous consent that the resolution be printed in the RECORD.

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

RESOLUTION OF JASPER, NEWTON, HARDIN, AND TYLER COUNTY DOG AND WILDLIFE PROTECTIVE ASSOCIATION ON THE BIG THICKET NATIONAL AREA

The Jasper, Newton, Hardin, and Tyler County Dog and Wildlife Protective Association does hereby adopt the Policy Statement on The Big Thicket National Area, a copy of which is attached hereto and made a part hereof for all purposes, and urges the President of the United States, the Congress, the Department of the Interior, the U.S. Corps of Engineers (as to Dam B), and the appropriate state agencies (as to supplemental state and historic parks) to take appropriate action to implement this policy as soon as possible.

H. R. YAWN,
President.

POLICY STATEMENT ON BIG THICKET NATIONAL AREA

We favor a Big Thicket National Park or area which would include a minimum of the 35,500 acres proposed in the Preliminary Report by the National Park Service study team, with the following modifications and additions:

1. Extend the Pine Island Bayou section southward and eastward down both sides of Pine Island Bayou to its confluence with the Neches River.

2. Extend the Neches Bottom Unit to cover a strip, a maximum of three miles, but not less than four hundred feet, wide on both sides of the Neches River from Highway 1746, just below Dam B, down to the confluence of Pine Island Bayou.

3. Extend the Beaumont Unit northward to include all the area between the LNVA Canal and the Neches.

4. Incorporate a Village Creek Unit, comprising a strip up to one mile wide where feasible, and no less than 400 feet wide on each side of Big Sandy-Village Creek from the proposed Profile Unit down to the Neches confluence. Wherever residences have already been constructed, an effort should be made to reach agreement with the owners for scenic easements, limiting further development on such tracts and preserving the natural environment. Pioneer architecture within these areas should also be preserved.

5. Incorporate a squarish area of at least 20,000 acres so that larger species such as black bear, puma and red wolf may survive there. An ideal area for this purpose would be the area southeast of Saratoga, sur-

rounded by Highways 770, 326 and 105. Although there are pipeline crossings in this area, they do not destroy the ecosystem; therefore the National Park Service should revise its standards pertaining to such incumbrances, in this case, leaving them under scenic easement rules instead of acquiring them.

6. Connect the major units with corridors at least one-half mile wide, with a hiking trail along each corridor but without new public roads cutting any forest. A portion of Menard Creek would be good for one such corridor.

The entire watershed of Rush Creek would be excellent for another.

Such additions would form a connected two-looped green belt of about 100,000 acres (there are more than 3 million acres in the overall Big Thicket area) through which wildlife and people could move along a continuous circle of more than 100 miles.

We recommend that the headwaters be in or near the line of the Profile Unit.

We are absolutely opposed to any trading or cession of any National Forest areas in the formation of the Big Thicket National Park or Monument.

In purchasing power, today's dollar is Thicket National Monument, we recommend: (a) the establishment of a National Wildlife Refuge comprising the lands of the U.S. Corps of Engineers around Dam B, (b) a state historical area encompassing communities of typical pioneer dwellings, farms, etc., such as that between Beech and Theuvenins Creeks off Road 1943 in Tyler County, and (c) other state parks to supplement the national reserve.

THE DIME DOLLAR

Mr. COOK. Mr. President, Jenkin Lloyd Jones, president of the Chamber of Commerce of the United States, recently gave a speech, "The Dime Dollar," which illustrates quite clearly the inflationary crisis the American taxpayers face. Mr. Jenkins said:

In purchasing power, today's dollar is worth approximately 27 cents compared to the 1913 dollar. If we hold to the present five per cent rate of inflation, the dollar 25 years from now will be worth a 1913 dime.

I ask unanimous consent that Mr. Jones' speech be printed in the RECORD as another stark reminder of the consequences we must face if we do not stop the spiralling inflation.

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

THE DIME DOLLAR

(By Jenkin Lloyd Jones, president, Chamber of Commerce of the United States)

Five score and six years ago a Kentucky boy from what is now Larue County whom his admirers called "Honest Abe" stood upon a battlefield in Pennsylvania and raised an honest question.

Abraham Lincoln wondered whether this government or any government "of the people, by the people and for the people" could long endure. His immediate concern, of course, was a civil war, brought about by the slavery issue and deep convictions over the sovereign rights of states. That issue was decided in blood.

But today we may still ask his question, and the new issue is whether a free people enjoying unprecedented prosperity will not witness the termination of both their freedoms and their prosperity through their own greed and the demagogic dishonesty of some of their elected representatives.

In short, is America going to get a dime dollar, and if it does what will it do to the American people?

A few days ago, in anticipation of this speech, I called upon the economic section of the Chamber of Commerce of the United States to glean from the most reliable government sources a few statistics. I would rather bore you with some figures than leave you with a comfortable impression that perhaps I have overdrawn the problem.

In purchasing power, today's dollar is worth approximately 27 cents compared to the 1913 dollar. If we hold to the present five per cent rate of inflation the dollar 25 years from now will be worth a 1913 dime.

In the past 20 years the Consumer Price Index has gone up 52 per cent, despite the fact that business profits have declined from 4.3 per cent of sales to 3.3 per cent. It is true that the average weekly earnings of a factory worker have increased far faster—135 per cent to be exact. But even this most fortunate sector of the American economy has seen its real purchasing power rise only 35 per cent after federal withholding taxes. And swelling state and local taxes have cut this net increase even more.

Productivity has gone up 69 per cent, or about half the increase of factory wages, but the average consumer is spending more and more of his income on services, and services deliver not much more per man-hour than they did in 1949. In other words, the 1969 pants presser is not much more efficient than his counterpart of 20 years ago.

Now let's look at federal spending. From fiscal 1960 through the budget estimate for the fiscal year 1970 total federal spending goes from \$92 billion to \$195 billion—an increase of 112 per cent.

Nondefense spending is up 163 per cent—from \$37 billion to \$98 billion.

The government has, naturally, been driven to borrow heavily from the citizens in order to bridge the difference between its income and its outgo. In order to command this money it has had to pay ever-increasing interest. These interest costs are locked in. They cannot be reduced, for they are promised on every government certificate. And in the past 10 years they are up 85 per cent—from \$9 billion to \$17 billion.

In the past 10 years federal payroll costs have gone up 100 per cent. Outlays for community development and housing are up 180 per cent, health and welfare up 200 per cent, and education and manpower spending up 500 per cent.

Congressman Otto Passman of Louisiana has recently pointed out that our national debt exceeds by \$43 billion the total national debt of all other nations of the free world. Many have used our foreign aid to keep their debts low. They have, in effect, conned the American taxpayers into providing services normally chargeable to their own taxpayers.

In the past 10 years Uncle Sam has gone in the hole another \$55 billion. We roll billions off our tongues easily. But that \$55 billion amounted to chucking one \$1,000 bill out the window every six seconds, day and night, for the past 10 years. It would be a good way to draw a crowd.

Worse yet, Washington has developed a system of promising a lot more than it actually spends. Thus, future spending allocations are put beyond the reach of even the most economy-minded incoming administration.

There has been gross underestimation of the costs of many of our foot-in-the-door projects, but the theory is that no one will leave a dam half-finished or a bridge half-built.

Aside from a certain amount of guile on the part of those federal empire builders who gain both in salary and prestige from the burgeoning of their departments, it is now a fact that government is so big that it tends to get away from even the most sincere administrators.

Louis Cassels of UPI recently made a

month-long study of federal budget and spending practices. He obtained estimates, from within government itself, that a minimum of \$10 billion and perhaps as high as \$30 billion of the \$200 billion federal budget is utterly wasted.

The Senate Government Operations Committee recently found 10 agencies dealing in manpower programs; 18 in improving the natural environment and 20 in health. Congressman William Roth of Delaware interviewed agencies for eight months and found 1,050 separate programs providing money to states, cities, institutions or individuals. For higher education, alone, funds are spent through 21 separate agencies.

Obviously, if we're ever going to get government expenditures under control again we are going to have to cool down this one-upmanship between rival and competing agencies trying to do the same thing. We are going to have to appropriate for functions, to make an estimate of what the nation can afford to spend in such broad areas as defense, housing, medicare, conservation, education, highways, etc., and then divide these outlays among the agencies best equipped to handle them. At the present time we are trying to meet agency requests without sufficient regard for the nation's resources and the performance record of the agencies.

All of us who put a charge on our products or our services cut ourselves in on the incomes of those who buy what we make or hire us for what we can do. Most of us have competition. We are limited in what we can charge by what the competition charges. If our prices or fees get out of line we run up against diminishing returns.

This is as it should be. The antitrust laws were passed, for example, to keep combinations of manufacturers from monopolizing manufacture and setting unreasonable prices. Government regulatory agencies were set up to prevent utilities and transportation companies from overpricing essential services where there is no competition.

But under the Wagner Act labor unions were exempted from antitrust action. And the National Labor Relations Board, which is supposed to be an impartial body, has behaved more and more like an agency of the unions.

As a result, one part of the checks and balances theoretically inherent in free enterprise isn't working. The tight monopoly of the building trades unions in many areas has kited the price of construction out of sight. We are seeing \$9-an-hour plumbers and \$10-an-hour brick masons. We see the national economy wracked as the ports of the nation are periodically tied up by dockers and maritime union members. Some of these strikes are designed not to improve wages and working conditions, but to levy penalties against new technologies which would cheapen the cost of shipping for every consumer.

A pistol to the head is not collective bargaining.

The union leadership is not acting irrationally. It is hard for a business agent to counsel moderation if he knows that some member will arise at the back of the hall and say, "Elect me—I can get you more." It is natural that union leadership would press for monopoly, for the right to discipline the membership by levying heavy and capricious fines, for the elimination of state right-to-work laws and the reimposition of the privilege of the secondary boycott.

It does no good to point fingers of scorn at this behavior because a lot of business would behave just about the same way if there were no restraints on cartels, price-fixing and collusion.

But the fact remains that as long as a rigged market can be maintained in labor due to special privilege granted for political advantage it will be possible for certain wages to far exceed productivity. This forces up prices and feeds inflation.

Occasionally you hear a cry of anguish that

the only solution is to reimpose wartime wage and price controls. These have certainly proven necessary when a nation bends all its effort toward all-out war production. But every nation that has maintained these controls in peacetime has tasted the bitter tea of corruption, black-marketing, idiotic shortages and poor quality goods.

A free market is the only market that is in perpetual adjustment to consumer demands. Free markets are simply weakened by monopoly. And a union labor monopoly is no holier than any other.

While we are looking for parties guilty of hastening the erosion of the dollar let us look at ourselves—we chamber of commerce types—for, alas, we are human, too.

We want good things for our cities, and many of these good things cannot be built without heavy federal subsidies. Over the past 30 years the decision-making process governing major city improvements has gradually gravitated to Washington.

Tick them over. Who gets an interstate highway without federal funds? Who gets an expressway? Who gets urban renewal and slum clearance? See how dependent our local universities and colleges have become on federal grants. And our hospitals. We all want bigger and better airports, and who provides subsidies for longer runways and better navigation aids?

Federal taxes have removed much of any city's wealth to Washington, and chambers of commerce struggle to get some of it back. We are acutely conscious that, if Louisville doesn't rattle the tin cup, Long Beach, Las Vegas or Little Rock will get the dough.

We are inclined to judge the quality of our senators and congressmen, not on how well they have thought out solutions to the nation's problems, but on how much chicken and gravy they've brought home.

We in chambers of commerce are going to have to exercise a little self-discipline ourselves. We are in a poor position to yawn about the destruction of the currency as long as we reward best those public servants who have been most willing to loot the treasury.

If we want to save the dollar we're going to have to stretch out our gimmies. We are going to have to be willing to wait another six months for the new bridge and maybe a year for the new hospital wing. And we're going to have to get the word to Washington.

For we in the business community are supposed to be more sophisticated about economic realities than any other general class of citizens. And if we don't demonstrate some prudent regard for America's future, who will?

I speak of America's future. I mean it. There is no such thing as a bankrupt great nation. There is no such thing as a flowering civilization, in industry, in the arts, in the sciences and humanities, if it has swept away the savings of its people.

One of the cruel ironies of our present crisis is that much of the damage has been done in the name of the "welfare state." They called it the "Great Society"—remember?

What welfare is there in old-age pensions paid off in potato chips? What social security is there in a carefully accumulated life insurance program that matures in dust? What honesty is there in government bonds that you eventually might light your cigar with, if you could find a cigar?

This is no uncharted road. The trail of history is lined with the bleached bones of social systems that imagined that prosperity and a money supply are synonymous. This is Pancho Villa economics. But long before poor Pancho worked the Mexican printing presses day and night in an honest effort to make all peons rich, the fallacies were plain.

And the ruination of workers is the surest result. People with cash reserves can find some hedges while the currency still has

value. They can rush to buy land or diamonds or foreign currencies. It is the man who depends upon his weekly paycheck who goes over the falls first and drops the farthest.

Out of the ruination usually comes a loss of liberties. During the great French inflation of the 1790's the desperate Paris mobs, finding their wages would buy no bread, hurried the original authors of the French Revolution to their own guillotines and welcomed the man on horseback, the dictator from Corsica.

The German inflation of the 1920's destroyed what faith and hope the Germans had in democratic processes. When the gentleman bearing the swastika blamed it all on the Jews and said that Germans must submit to harsh disciplines in order to gain the glory that was rightly theirs, we all know what happened.

This is a very great country with very great economic strength. It is also a country blessed by rich resources and a skilled and energetic citizenry. America can have a high degree of general prosperity, a generous uplift program for the ignorant poor, and adequate charity for the unendowed. We can have all this and a sound dollar, too. But we must start listening to the Geiger counters.

Our economy is like an atomic pile. The heat is rising. The Geiger counters are growing noisier. But we are still some distance from the runaway, uncontrollable reaction that will produce utter disaster. We still have time to drive in the graphite rods that will control the fission and deliver, not explosion, but useful energy.

The gentleman from what was Hardin County, who made the great speech at Gettysburg, said that government conceived in liberty was being tested.

That government survived the particular test he had in mind. It has survived many great tests since then. But, beginning with Lord Thomas Macaulay, many political philosophies have wondered whether democracy doesn't carry with it the seeds of its own destruction, whether the people will be able to resist indefinitely the temptation to debase the currency.

This is the great test of 1969. The integrity of Americans is now on trial.

Let no one tell you that the cure for our recent follies will be painless. Let no one tell you that we can turn away from our money jag without withdrawal symptoms, without some squeeze and crunch.

But we must choose between some pain now or agony later.

If we are not honest with ourselves—if we remain carried away by greed—then this great pile could blow.

TESTIMONY OF REGINA FANNIN BEFORE SELECT COMMITTEE ON NUTRITION AND HUMAN NEEDS

Mr. COOK. Mr. President, recently a gentle and great lady from the mountains of Kentucky appeared before the Senate Select Committee on Nutrition and Human Needs, of which I am a member, and produced some of the most thought-provoking testimony we have heard during this session of Congress. Her unselfish devotion to her job and to the people of our State deserve recognition, and her ideas on improving the nutritional habits of elderly people should be read by all Senators. I therefore ask unanimous consent that her remarks be printed in the RECORD.

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

A TITLE IV NUTRITION DEMONSTRATION PROJECT FOR THE RURAL ELDERLY IN SIX NORTH-EASTERN KENTUCKY COUNTIES

(Testimony of Regina Fannin, Project Director, County Gathering, before the Senate Select Committee on Nutrition and Elderly Needs, September 10, 1969.)

BACKGROUND INFORMATION OF WITNESS

My past experience of working with and for the elderly and my knowledge of the area and the special problems thereof stems from nearly a lifetime of living and teaching in the area; however, for the past five years I have had more contact with a greater number of older adults.

I have worked with the local CAP Agency—the Northeast Kentucky Area Development Council, Inc., of Olive Hill, Kentucky—in several positions:

(a) As a Field Worker, I helped conduct a survey of those 60 and over in Lewis County (3,000 persons interviewed) and worked in the Medicare Alert program in two counties (Lewis and Greenup).

(b) As a Director of the Commodity Distribution Program (in Lewis County) we took the allocated food to the home and conducted demonstrations on better use of the items each month to over 450 families, many of them elderly.

(c) As six county Area Coordinator Social Worker (with personal visits in many homes) also as a guest instructor in nutrition to those persons receiving Food Stamps in two counties.

(d) As Acting Director of the Emergency Food and Medical Program in two counties (with demonstrations in preparation of foods and consumer education instruction), and

(e) In my current position as Director of County Gathering (reaching 150-175 elderly each week with anticipation of 60 more members).

I offer this resume of my experience as an indication to the extent of my knowledge of the plight of the rural elderly.

INTRODUCTION

Mr. Chairman, I appreciate this opportunity to talk with this committee concerning the needs of the rural elderly in my area; and, I feel quite certain, these same needs are representative of other areas of our country.

May I begin by explaining briefly a little of the background of the area.

The central offices of the Northeast Kentucky Area Development Council, Inc. are located in Olive Hill (Carter County), Kentucky, and the Council encompasses a six county area namely: Carter, Elliott, Greenup, Lewis, Morgan and Rowan counties—as I have indicated on this map of the state of Kentucky. This is in the Seventh Congressional District. The six counties cover an area of 2,136 square miles and had an estimated population in 1965 of 95,400. The 1960 census figures show that the number of elderly residing here at that time who were 65 or over was 8,152 out of the 93,364 population figure. There were 22,126 families in the area with 10,668 of them with less than \$3,000 income. This represents 48.2% of the families. Of this number 24.1% received Old Age Assistance. There were within the area 17,749 persons over age 25 that had less than an 8th grade education (39%). In the state as a whole about 27% of all low-income families had heads of households who were over 65 years of age while only 16% of all families had heads of households who were even over 65. Nearly 70% of Kentucky families with heads of households over 65 were in the low income group.

Old age, then, is a factor related to low income; and in Eastern Kentucky this is even more apparent. As you will note from the map the people are primarily isolated

from any urban area that would provide needed services.

PROBLEMS OF RURAL ELDERLY

I am not dealing with statistics—I am dealing with people—my people, rural older adults, ranging in age from 60 to 98. Almost all of them needy. They are faced with new problems every day that only perpetuates their existing ones.

Isolation and remoteness are overwhelming obstacles with which to deal. Many of the participants in my program live off the main roads and up the hollows of their counties. For example, we have a participant that must walk one and one half miles out of a hollow to the main road and then must hitch hike a ride thirty-eight miles to the center. This, you may feel, is of no cost to her; however, please consider the fact that she must purchase shoes to walk. In declining weather this necessitates her need for outer protective clothing. It involves a day in her life that in later years seems of greater value to many of the elderly.

In the rural isolated areas such as we have, personal isolation and remoteness is linked with transportation problems and distances involved. To rural people an automobile is a necessity of life and not a luxury. It is needed by a person or family to get to and from work (if they have a job), to the store to purchase the necessities of life, to a doctor (if there is one available) and all the other necessary uses usually attributed to a vehicle.

The small rural stores that were within walking distance no longer exist and it is many miles to the nearest store which is often understocked and high in prices. In order to get from their homes to the county seat or the largest town within the county they have to hire someone to transport them or in some counties where taxis are available they have to pay on the average of \$5 per trip. Since as the statistics point out the income for our area is low, transportation is held at a minimum because of its high cost. Coupled with this transportation and isolation problems, perpetuated by the low income, is the lack of services available within the area.

There is one hospital within the six county area and the majority of doctors are within this town. Some of the counties have one or two doctors for the total population. There are many services available to the elderly that they are not aware of and could not utilize if they were aware of them without some assistance. The lifetime habit of fending for themselves is deeply ingrained in the culture of mountainous people. The educational background of the aged person is a great indicator as to his participation in ongoing programs and services available to him.

These problems facing the elderly have been brought out in my contact with participants of this program. May I expand on these for a moment.

(a) We have in one of our centers a lady who lives alone and draws Public Assistance. She came to several of the meetings wearing the same dress and ragged tennis shoes. She revealed to some of the ladies that she knew that this was the only wearing apparel that she could wear anywhere other than working. The ladies brought her a bag of used clothing at the next meeting. She had asked us to save the used plastic bags and wrapping materials from our meal preparation. It was some time later before she revealed to us why she desired these articles. Gentlemen, it was to cover the cracks in her house to keep out the cold winter winds. The only convenience she has is electricity. She carries her water, wood and coal (if she saves enough for coal). She had only one ragged quilt for her bed. Since she has been coming to the center and been involved with the handicraft portion, she has made three quilts for herself. (This material was donated to the project by one of the garment factories in an adjoining county.) This lady does not use the services

of the Food Stamp program because she can not afford the outlay of cash. During the summer months, she cares for a garden for a neighbor for one-half of the produce. Under circumstances such as these, I do not feel she is receiving anywhere near a balanced diet except for the one meal a week when she is at the center.

COUNTY GATHERING

At this point I should like to expound briefly on the project of which I am Director. The County Gathering program operates with sites located in the areas as indicated on the map.

The County Gathering is a nutrition demonstration Title IV project that provides one meal a week to the participants. The meal is a social setting for a variety of programmed activities including Consumer Education, aging problems, recreational activities, handicraft instructions and time for visiting and talking with one another. At present, we are operating six centers located in five of the counties. They were funded for maximum participation of thirty per center. This varies in different locales with attendance ranging from early twenties to early forties. Our most recent center to be established was funded under this year's program as a special co-operation demonstration between Emergency Food and Medical Program and County Gathering. This center was established for those of the elderly who receive Food Stamps in Elliott County. Cooperation is in the extent that the Emergency Food and Medical Program is providing \$15 per week raw food cost to supplement the demonstration and meal costs in this one center. The operation of this center differs only from the others in that there is a concentration on food value, cost and nutrition requirements to better utilize their food stamp dollar.

The requirements for participation in County Gathering are that the person be sixty or over and a resident of the county in which the center is located. There is no income restriction but very few of our elderly would be eliminated if such a regulation existed.

We conducted a survey at all our centers (one week) and received the following information from those present:

Range of income (per month):	Number of participants in each range
No income	4
\$35-\$58	20
\$59-\$78	22
\$79-\$92	13
\$92-\$210	38

This is total income for the entire family. Some families have children who work living at home but contribute very little, if any, to the household expenses.

When asked, "How many need transportation to do your grocery shopping, do other shopping or go to the doctor?" we received the following answers.

Needs transportation (yes)	132
Needs transportation (no)	48

When asked, "Are you on a special diet?" we received the following answers.

Special diet (yes)	24
Special diet (no)	69

When asked, "Do you have a major illness?" we received the following answers.

Major illness (yes)	53
Major illness (no)	40

When asked, "How far do you live from the center?" we received the following answers.

1 mile	21
More than 1 mile	59

As you may note from comparison of the figures on the following page, not all of the people answered each question.

At the present time we are preparing meals for at least 165 persons each week.

During the time the participants spend at the center they have told us many of their problems in obtaining food. As you would probably surmise a large portion of the problems are income related. However, may I quote to you some of their comments. High on this list is the comment, "There is only me and who wants to cook for one". Other high ranking comments include: "I only eat one or two things each day", "This is the only full meal I eat all week", "I just don't have money to buy very much after medicine, rent, etc.", "I have to charge what I buy and pay as I can", "I draw commodities, that's about all I eat, sometimes something from my neighbor's garden", "Cook and eat one or two things a day—I don't have a refrigerator and things spoil that are left over", "I don't have any teeth—can't chew—so I eat potatoes, oatmeal and stuff like that", "My doctor said I was low on iron and gave me this diet, but I can't buy that to eat—I only draw \$69 a month", "I received Emergency Food Vouchers twice but they wouldn't let me have them anymore." These are a few of the quotes from the elderly concerning their nutrition. The nutrition aspect is one factor drawing the elderly to participate in this program; however, the greatest number of comments and high on the list of reasons for participating is sociability. The isolated elderly are starved for human contact.

We also conducted a Twenty-Four Hour Recall Diet Survey. From those responding, it was found that two-thirds of them had cereal or oatmeal for an evening meal. The majority had beans and potatoes for their noon meal, some just had coffee for breakfast while others had coffee, egg, gravy and biscuits. Very few had meat with their meal. Only two of those surveyed drank a fresh fruit juice that day. As is indicated from this survey they were low in protein content, vitamin C and nutrients essential for good health.

The County Gathering Program has a staff of twelve. Of this number nine are 60 or over. Added to this staff is much needed help of volunteers. Volunteers are used to transport participants to and from the centers and as aides in the kitchens as well as with the scheduled programs. We have two volunteers that are in their 40s, four in their 50s and fourteen who are over 60. The services rendered by these people are a vital part of the success of the program; especially, since the paid workers time has been reduced this year.

Each center has been allowed fifteen hours per week. This includes all activities, such as the outreach work, participation in programs, participant transportation, and the meal preparation and serving. The assistants are paid \$2.05 per hour plus fringe benefits and are reimbursed at the rate of \$.09 per mile traveled in private automobiles.

Based on the last three months food costs, the average cost per meal is \$.55. The cost to the participant that can afford to pay is \$.25.

The project also provides take home and home delivered meals. The take home meals are those meals that a member takes home from the center themselves, while the home delivered meals are those meals taken to a shut-in.

In an attempt to offset the cost ratio per meal, I have tried to get the County Gathering certified from the State Department as an eligible outlet for surplus commodities and I offer my results of this effort as an appendix to my statement.

PROBLEMS WITH FOOD STAMP AND COMMODITY PROGRAMS AS RELATED TO THE RURAL ELDERLY

From the many requests we have had from the older persons, requesting assistance in obtaining food stamps or commodities it appears that the programs are not reaching many of the most needy—those unable to

travel the distances involved to get to the distribution centers—misunderstanding concerning eligibility and certification and the unnecessarily long and embarrassing process. In the counties that have the Food Stamp Program many cannot participate because of the outlay of cash on a specific day along with the transportation problems. These people must continue to purchase from a fixed income while the prices of their needed services increase; thus, making it more imperative that they receive assistance with food.

Unlike the Food Stamp Program that requires a cash payment to increase the purchasing power of the participant, the Commodity Distribution Program is a free gift to those eligible. However, the variety of items received is not left to the discretion of the participant. For example, in 1965 those persons in our area eligible for commodities received the benefit of twelve items consisting of one-third of their basic food needs. This past year the variety of the surplus items has increased to twenty-eight. A more balanced diet can be arrived at now than could in 1965. However, there is still much room for improvement in this phase of the program. Also better use of an item would be made if a variety of recipes, hints and suggestions were offered during the distribution of the food. For example, many people were not using the food simply because it was heavy. This problem could be overcome by stating on the package that the flour should be sifted three or four times.

Another factor that prevents many of those eligible from participating in federal programs is simply pride. This they keep while participating in the County Gathering program.

In helping to solve the transportation problem of the participants in the Food Stamp program, the Northeast Kentucky Area Development Council has brought this problem to the attention of the officials and as a result, in Carter County, office space is being furnished in the agency so that section of the county surrounding the central office.

It is my personal opinion and recommendation that in order to reach more of the needy, eliminate or reduce hunger and offer a better and varied diet to the elderly poor, each county should be allowed the benefits of both of these federal food programs. The Commodity Program to furnish the basic staples and the Food Stamp Program to supplement this with fresh fruit, vegetables, meats and other items not supplied through the Commodity Program.

I should like, if I may, make another suggestion for consideration. That of improving and upgrading Medicare and Medicaid to include not only dentures for better nutritional health but eye glasses and hearing aids. Many of the elderly can not see well enough to read the printed material given them and many do not hear what someone else reads to them.

I feel that it is of utmost importance that a program like County Gathering continue as an outlet for social meetings, nutritional education and meals, as an information center for services, and to provide a way of supplementing the older persons income. Along this same line, I feel that the current program could be made more beneficial to more people by locating small centers in various parts of the counties; by providing transportation for medical purposes and for "shopping pools" to increase their purchasing power; by increasing the number of meals per week and the number of days served; by increasing the number of personnel and the number of hours respectively; and by providing a type of "meals on wheels" idea with a worker to assist those who are confined to their homes so that they might avoid life in an institution. In this last respect please allow me to illustrate the type of case I had in mind.

This lady is 87 years of age, lives alone, and is suffering from crippling arthritis and lives approximately 25 miles from the nearest town (pop. under 2,000). One day last winter I received a call from a neighbor of hers—it seemed she was ill and unable to travel to the doctor. When I arrived she was in bed, the fire out and no wood left to burn, no water in the house and it had been two days since she had eaten. Well, I gathered wood, built the fire, got the water from the well, cooked what little I could find, potato soup, and called a doctor. He could not make a home visit, but would send medicine to her. (He said she had the flu.) I contacted the director of the Commodity program in the county and helped to get her certified and took her issuance to her along with the medicine. She has never really gotten over that bout with the flu and has had to have someone stay with her ever since. She now has a retarded 30 year old girl staying with her and must pay her \$60.00 a month plus her meals. This lady's income is \$69.00 a month. With the remaining \$9.00 she is expected to pay her electric bill, buy food and medicine and hire someone to take her each month to visit the doctor and to pick up her allotment of surplus food. Her life savings are now depleted and she doesn't know how she will survive this winter. This month when I took her commodities to her she said, "I know'd you'd come, you'd bring me food. I jest know'd you wouldn't forget me". All the time she was talking she was hugging me tightly and patting me on the back.

I thank you for the privilege of allowing me to acquaint you with some of the needs of the older adults in my area.

SEPTEMBER 12, 1968.

Mr. THOMAS A. LEWIS,
Director, Division of Commodity Distribution,
USDA Capitol Annex Building,
Frankfort, Ky.

DEAR Mr. LEWIS: The Northeast Kentucky Area Development Council, a local Community Action Agency, has had a program called "Country Gathering" funded by the Administration on Aging.

Briefly stated this program brings together low income persons age 60 and over for a meal once a week to be prepared in local centers of which we will have eighteen for our six county areas. What I should like to know is could we be considered an eligible outlet to receive surplus commodity food items to be used in this program?

Sincerely yours,

REGINA FANNIN,
Project Director.

NORTHEAST KENTUCKY
AREA DEVELOPMENT,
Olive Hill, Ky. July 25, 1969.

Mrs. JEANETTE PELCOVITS,
Research and Development Grants, Department of Health, Education, and Welfare,
Social and Rehabilitation Service, Washington, D.C.

DEAR Mrs. PELCOVITS: Enclosed please find copy of the initial contact with Mr. Thomas A. Lewis, Director, Kentucky Department of Commodity Distribution. Following this letter, we had two extended telephone conversations in which I fully explained Country Gathering and its purposes. During this conversation, he informed me that he would contact the Atlanta Regional office concerning the eligibility of Country Gathering. However, he did say we could use commodity items from local commodity warehouses for demonstration purposes. He did request that when we conducted these demonstrations, we report to him how many were present and what type of demonstration was conducted.

About two weeks later he called me again and told me he was sorry that my program, as it stood, did not qualify because we did

not eliminate the higher income elderly. I explained to him that there were only seven attending our program at that time whose income would disqualify them. He told me at this time that that alone would disqualify Country Gathering.

I have talked with you and Mr. McCreary of the Washing on Department of Agriculture concerning this matter several times and today I received a letter from Neill W. Freeman, Jr., Director, Commodity Distribution Division, Washington, D.C., copy of which I am enclosing herewith.

What I should like to know is, if we are equivalent to eight persons why can't we become certified as an eight member family and use the family allocated items which are more items and greater variety of food than is allocated to institutions as is reflected by the enclosed list? This would be enough items to supplement the meal activity in the centers for one week.

Sincerely,
REGINA FANNIN,
Project Director, Country Gathering.

U.S. DEPARTMENT OF AGRICULTURE,
CONSUMER AND MARKETING SERVICE,

Washington, D.C., July 22, 1969.

Mrs. REGINA FANNIN,
Northeast Kentucky Area Development Council, Olive Hill, Ky.

DEAR Mrs. FANNIN: You will recall that Mr. Donald McCreary of this office promised to inquire into the reason that the "The Country Gathering", your organization's weekly food service program for approximately 175 older persons, had been unsuccessful in obtaining foods donated under the Department's Commodity Distribution Program.

A representative of our Southeast District Office for Consumer Food Programs contacted Mr. Thomas A. Lewis of the State Department of Agriculture in Frankfort, whose agency is responsible for food distribution in Kentucky, regarding this matter. Mr. Lewis had no record or recollection of your application. However, on the basis of information furnished about "The Country Gathering", he believes that the very small amount of assistance for which it would be eligible would not justify his agency's allocating foods to it.

To illustrate this, Mr. Lewis pointed out that serving one meal weekly to 175 persons is really equivalent to serving three meals daily to only eight persons. In this case, as you can see from the attached list of available foods, the quantities which your program could use would be quite negligible. Each commodity is shipped separately every month, and the State agency's policy is not to allocate foods in less than case or carton-sized shipments to individual outlets. Moreover, the agency is unwilling to provide more than one month's supply of food in each shipment so as to avoid the chance of spoilage of perishable items.

While we are most sympathetic to the needs of the elderly persons benefiting from your worthwhile project, we regret that the only advice we can offer is that you increase the number of meals served each week in order to make your participation in the Commodity Distribution Program practicable. We have explained this situation to Mrs. Jeanne Pelcovits of the Administration on Aging, Department of Health, Education, and Welfare, who also informed us about your inability to participate in the program.

Please accept our apology for the delay in providing this information to you and our best wishes for the continued success of your admirable program.

Sincerely,
NEILL W. FREEMAN, JR.,
Director, Commodity Distribution Division.

COMMODITY DISTRIBUTION PROGRAM
DONATED FOODS AVAILABLE FOR INSTITUTIONAL DIS-
TRIBUTION, FISCAL YEAR 1970

Commodity	Suggested monthly rate per person (pounds) ¹	Estimated retail value per person ²
Beans, dry.....	0.50	0.10
Bulgur.....	.50	.10
Butter.....	1.00	.84
Cornmeal.....	1.00	.11
Corn grits.....	.50	.07
Flour.....	4.00	.46
Lard or shortening.....	1.00	.27
Nonfat dry milk.....	1.00	.49
Raisins.....	1.00	.41
Rice.....	.50	.10
Rolled wheat or oats.....	.50	.15

¹ Based on 3 meals daily. All commodities may be given in quantities that can be used without waste during a order period.

² Retail prices were obtained from Bureau of Labor Statistics, March 1969, and Washington, D.C. retail trade sources.

REPORT ON THE EVERGLADES JETPORT

Mr. HART. Mr. President, the Department of the Interior has just released a report of a panel of environmental experts, headed by a most distinguished scientist, Dr. Luna B. Leopold, on the impact of the proposed jetport on the Florida Everglades. Although I have not yet had time to study the report in detail, I am persuaded by the findings and recommendations which it contains, as well as by the brief summary of its contents, that it will provide an extremely useful working document for any person or group interested in this very serious issue.

I ask unanimous consent, therefore, that the findings and recommendations, the summary of environmental impacts, and the conclusions of this report be printed in the RECORD.

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

FINDINGS AND RECOMMENDATIONS

Development of the proposed jetport and its attendant facilities will lead to land drainage and development for agriculture, industry, housing, transportation, and services in the Big Cypress Swamp which will inexorably destroy the south Florida ecosystem and thus the Everglades National Park.

There are three alternatives for future action:

1. Proceed with staged development of training, cargo, and commercial facilities. Regardless of efforts for land-use regulation, the result will be the destruction of the south Florida ecosystem. Estimates of lesser damage are not believed to be realistic.

2. Proceed with final development and use of a training facility of one runway, with no expansion for additional use. Obtain an alternative site for expansion, probably through an exchange of excess lands at the current site for public lands at a new site. Permit no new or improved surface access to the current site. This alternative would not preclude eventual development of lands in the vicinity of the current site. It could, however, reduce pressures for development and secure time for the formation of sufficient public interest in environmental conservation to achieve effective planning and land-use regulation.

3. An alternative site be obtained capable of handling the training operation as well as the fully developed commercial facility; and that when appropriate, the training activities at the present site be abandoned and

transferred to the new site. Permit no new or improved surface access to the current site. This would inhibit greatly the forces tending toward development in Big Cypress Swamp and would give an impetus to developing effective land-use controls which could lead to permanent protection of the south Florida ecosystem.

SUMMARY OF ENVIRONMENTAL IMPACTS

In simplified form, the following represents the views of the study group on environmental impacts of the jetport and its associated developments.

PHASE 1. THE TRAINING FACILITY

1. The construction of each training strip will destroy about 400 acres of natural habitat of the Big Cypress Swamp.

2. No significant problems are expected from sewage, industrial wastes or pesticides in the training phase, since they will be very limited. Air pollutants from engine exhausts will be substantial in an environment which has not previously been degraded by local activity. The effect of such pollutants on a natural aquatic system is almost entirely unknown. There may be adverse effects on the Indians. The introduction of air pollutants may increase the incidence of local fog under some weather conditions.

3. The Miccosukees will suddenly and involuntarily be subjected to round-the-clock noise levels commonly experienced by urbanites who live very near airports in many cities. There will be frequent high level noise intrusion on the wilderness character of the northern part of Everglades National Park and even more on the Big Cypress and Conservation Area No. 3.

4. A severe bird strike problem may develop within the airport boundaries, over Conservation Area No. 3, and in the quadrant southwest from the training strip. This would involve large water birds, including several rare and endangered species at altitudes ranging from ground to 2,000 feet. Small animals which seek refuge on the runways in flood periods will add to this problem when they are crushed and attract carrion-eating birds.

5. With sufficient culverts provided through runways, ramps, roads, and other facilities, interference with overland flow will be negligible.

6. The combination of bird strikes, pest insect problems and incidence of small animals on runways will probably lead to drainage of at least part of the jetport property. This is the Federal Aviation Administration recommendation in wetland areas for control of bird strikes. The Dade County Port Authority has announced no such plans, but has the capability and authority to construct canals for drainage within and without the port boundary, and use eminent domain authority on exterior lands. To be effective, any drainage effort would have to cover a large area using a grid of drainage canals. Drainage canals would, however, almost surely be prohibited in Conservation Area No. 3, on which much of south Florida depends for water; birds would continue feeding there, probably in increased numbers. Drainage would materially increase the occurrence of fires.

7. Construction and imminent operation of the first training strip have elevated surrounding land prices and sales. Economic and social pressures for further development within and without the port property will mount rapidly, the one encouraging the other. Such development for housing, trade or industry will inexorably lead to land drainage outside the jetport property. Land development and drainage will be accompanied by increased nutrients in the water, will alter the hydroperiod, and will promote eutrophication. To the extent and at the rate these changes take place, the south Florida ecosystem will be altered.

PHASE 2. CARGO HANDLING

1. The volumes of aircraft exhaust emissions, and subsequent pollution of the surface waters, will increase according to the air traffic, the extent of which is not known to us.

The advent of heavy auto traffic will add to the air pollution load, and probably will be a more important source of pollutants than aircraft.

Sewage and industrial wastes will no longer be insignificant. A large number of airport employees will be required, as well as flight maintenance operations and, possibly, some aviation-oriented industries. This situation will require the provision of full waste treatment facilities, including removal of dissolved nutrients if the ecosystem is to be protected. A system capable of treating a wide range of materials will be essential at this time, both on-port and for the surrounding area. An analysis of the possible alternative waste treatment systems will have to be made, with initial construction of some essential portion of the total treatment plan (for full development) becoming operational in the cargo phase.

If adequate treatment is not provided, then deterioration of water quality will ensue, including eutrophication and introduction of toxic materials.

With large scale human occupation of the area, heavy use of pesticides and fertilizers, both within and without the jetport, will occur. Further increase in pesticides in the aquatic system would add to the biological magnification problems, and possibly lead to the destruction of several birds which are at the higher levels of the food chain. Extensive use of fertilizers will lead to eutrophication.

2. The numbers of flights will increase and traffic will be in all quadrants. Noise will be a common characteristic of much of the Big Cypress, Conservation Area No. 3, the park, and all Indian lands.

3. Bird strikes will increase because of the added numbers of flights and the flight patterns being extended into all quadrants.

4. An improved highway corridor will be necessary for transport of cargo and personnel. If sufficient culverts and bridges are provided, interference with southward flow of water can be minimized. The corridor will destroy the habitat it occupies, will increase developmental pressures, and will intrude on the social and economic life of the Miccosukees.

5. In this stage, development outside the port will be vigorous. Pressures for land drainage will be administratively insurmountable. The canal systems will be decisive for the ecosystems of the Big Cypress and the western portion of the park. We know of no conventional drainage method which could simulate natural flows and prevent this. Should storage reservoirs be built, the waters they contain would be subject to such intense competition—economically and administratively—and to such high evapotranspiration losses, that there would be little likelihood of maintaining the hydroperiod of the Big Cypress and of the western park.

In this phase, the adverse effects on the ecosystem of massive technological intrusion and general inability to implement plans for protection of environment will become evident. Since the Big Cypress is actually a portion of the Everglades ecosystem, the effects of its deterioration will be reflected over a much larger area.

A given ecosystem cannot indefinitely be reduced in size and complexity and still survive. As parts are successively removed or altered, biologic balances are continually changed and the stability of the system is undermined. The degree and rate of land drainage, eutrophication and alteration of the hydroperiod will be greater than similar changes brought about by the airport as a training facility. Thus the degree and rate

of destruction of the ecosystem will be increased.

PHASE 3. FULL DEVELOPMENT

All environment problems will be at maximum with full development. Noise levels will be excessive throughout the ecosystem. Auto traffic will be very dense along the corridor, and parking facilities for thousands of automobiles will be in use.

The high-speed ground transport system will be in full operation, with individual units traversing the Everglades at very frequent intervals. Thus, the roar of jet engines will be added to the noise background at ground level, and their exhaust materials will be trailed across the landscape.

Sewage waste volume from the jetport would be in the order of 4 million gallons per day; industrial wastes would be about 1.5 mgpd. Surrounding urban areas would vastly increase the volumes of daily wastes. Despite the availability of adequate technology, there is no precedent which would indicate that legal, administrative, or social practice would in fact result in the maintenance of water control and water quality necessary for continued operation of the natural ecosystem.

Any resemblance of the new hydroperiod of the entire Big Cypress drainage to the present one would be accidental and incidental. Thus, the single most significant element of the natural, complex, and highly diverse environment—the hydroperiod—would be lost. The interaction of water, plants, and animals would bear little resemblance to its present condition and the south Florida ecosystem as it presently functions would be destroyed.

The Miccosukee tribe will be totally absorbed in the intensive development, with virtual elimination of their social customs and way of life.

CONCLUSIONS

The construction of the airstrip for training in south Florida presents an issue in the public interest. Public interest consists of two general aspects, a monetary consideration and a nonmonetary one. The monetary or financial gains which result from development in the modern sense—urban, agricultural, and industrial—are monetary gains which redound primarily to the locality and, to some lesser extent, to the adjoining region and the Nation. The public interest in the preservation of an environment is primarily a nonmonetary one; it is one that affects a large part of the whole society and in a diffused way.

The south Florida problem is merely one example of an issue which sooner or later must be faced by the Nation as a whole. How are the diffused but general costs to society to be balanced against the local, more direct and usually monetary, benefits to a small portion of the society? Concurrently, the society must ask itself whether the primary measure of progress will indefinitely be the degree of expansion of development, such as housing, trade, and urbanization, even at the expense of a varied and, at least in part, a natural landscape.

Some benefits to society flow from failure to develop, but this entails a cost. To reap the benefits of nondevelopment—benefits which accrue generally to a broad part of society—may often put a burden on a small segment of society. Under such circumstances, public policy must be so restated or redefined that the equities are redistributed. At the present time, the operation of public policy in dealing with redistribution of such equities is inconsistent and ill-defined.

The second main conclusion of this report is that the benefit to society accruing from the maintenance of an ecosystem is of a different order than that due to the preservation of a few species. The effects of the jet-

port and the surrounding development should not be thought of in terms of the possible elimination of some rare and endangered species such as alligator, wood stork, and others. These, however, can be thought of as indicators or touchstones as to what is happening to the total ecosystem. Unfortunately as it would be to lose some of these rare species, the problem is a larger one. Society has an interest in the functioning of an ecosystem as a whole. The substitution of a controlled state of a biologic community for a naturally functioning ecosystem leads to one or more of the following consequences: (a) More controls and increased management are necessary to keep the new unnatural system in reasonable balance; (b) unforeseen consequences are usually costly and often long continued; (c) these costs are usually borne by the public through the expenditure of tax revenue from a large part of society to compensate for unforeseen consequences of actions taken to benefit a small segment of a society.

The third main conclusion is that ecosystem destruction in south Florida will take place through the medium of water control, through land drainage and changed rates of discharge. It will come about through decrease in quality of water by both eutrophication and by the introduction of pollutants, such as pesticides.

The fourth main conclusion is that the training airport is intolerable, not because of its flight operations, but rather because the collateral effects of its use will lead inexorably to urbanization and drainage which would destroy the ecosystem. The development in the surrounding land is already beginning, as a result merely of the probability that the airport will grow in size and importance. Assuming the present types and operation of land-use controls, this development tendency will proceed uncurbed. Planning procedures and their application are presently not sufficiently uniform, sophisticated, effective, or enforceable to provide any optimism that use of the jetport for training would proceed without concomitant land development and thence by stages to destruction of the ecosystem. So long as the training airport is in use, pressures and plans for its expansion will continue and will inexorably and surely lead to ecosystem destruction completely. Elimination of the training airport will inhibit land speculation and allow time for formation of public awareness of environmental degradation which is the prerequisite for effective and practical action in the field of planning and land-use control.

"AIRLINES' VIEWPOINT ON THE AIRPORT/REGION INTERFACE"—ADDRESS BY MARION SADLER, VICE CHAIRMAN, AMERICAN AIRLINES

Mr. GORE. Mr. President, I ask unanimous consent to have printed in the RECORD an address entitled "Airlines' Viewpoint on the Airport/Region Interface," delivered by Marion Sadler, vice chairman of American Airlines, at the International Symposium on Air Transportation on August 21, 1969.

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

AIRLINES VIEWPOINT ON THE AIRPORT/REGION INTERFACE

(By Marion Sadler, vice chairman, American Airlines)

You were kind enough to ask me to talk with you this afternoon about the airport/region interface.

This word "interface" seems to be quite popular today. Not too many years ago, I used

to be invited quite regularly to talk about the challenges and opportunities of air transportation. Then, about the time John Kennedy became President, as I recall, I began to get invitations to contribute to a "growing dialogue." Soon thereafter, invitations cautioned me to make my contributions to this dialogue not only meaningful but also relevant. Today, everyone seems to want to talk about some kind of interface.

I am not wholly sure that I know exactly what this word "interface" means. But I do welcome this opportunity to talk about some of the problems which arise as we establish large airports designed to serve wide regions, rather than limited communities. I shall try to describe some of these problems and suggest certain solutions.

It should be remembered, however, that I speak from a rather limited point of view—that of the airline operator. I am engaged in the airline business, and, quite naturally, I view these problems of airport/region interface from the airline perspective.

First, what do we mean by a regional airport, or a regional system of airports? Mr. Homer Anderson, who greeted us so warmly this morning, has said: "Changes will soon begin with communities moving toward a 'system of airports' concept, by decentralizing. In the late 1970's most communities will operate one large airport for air carrier purposes, with several peripheral airports for general aviation and feeder purposes."

Mr. Anderson might well have used the word "region" rather than the word "community." Because he has described quite well the trend towards regional airports which is already underway in the United States, and which I believe will continue far into the future.

It has become obvious in recent years that every city or town cannot have its own gigantic airport offering a wide choice of trunk airline service to every point on earth. The economics of air transportation simply will not allow this. The only answer seems to be in constructing, in a region, one large trunk airport which will support the long haul services required by the region, and at the same time constructing small, peripheral airports which will meet the needs of general aviation and feeder services.

We have already begun to move in this direction. The new regional airport which is now being constructed to serve the Dallas-Fort Worth area is an example. The great new airport now being planned to serve the region surrounding Cleveland, Ohio, is another example. The peripheral airports now being constructed around Los Angeles further illustrate this trend.

We are going to have regional airport systems, but the coming of these airport systems will bring major problems which will have to be defined and solved. And, it is these problems that I want to talk about today.

What happens when a gigantic new airport, surrounded by satellite airports, appears in a region?

It is obvious that many individuals and groups will be affected—some favorably, some unfavorably. The impact of this change will be felt by the air travelers, the users of air cargo services, the citizens who live near these new expanded airports, the owners of private aircraft, the operators of air-taxi services, the various governmental bodies which have jurisdiction over the area served by the airports—and lastly, the commercial airlines themselves.

The needs of all these groups will have to be met if this trend towards regional airport systems is to be a success. All have a stake in this success, and the needs of no one group can be ignored. The problems here are many, and I suppose that we could spend fifteen minutes or more listing them. There is the problem of adequate accommodations

for general aviation; there is the community noise problem; there is the problem of air traffic control; there is the problem of airport access; the problem of on-airport congestion; the problem of adequate terminal facilities. In many communities there is the problem of finding adequate suitable land convenient to the homes and businesses of those who will use the airport. One could go on almost forever.

But in the final analysis, I see only one basic problem. And if that one problem can be solved, all of the other problems will disappear. *This overall problem is the problem of costs.* We can build regional airport systems throughout the nation and make them work—if we can find a way to pay for them. We live in a society which has just placed men on the moon and returned them to earth. We can do almost anything if we can find a way to pay for it. I agree wholeheartedly with FAA Administrator Shaffer's recent comment to the effect that "overall, aviation's problems are fiscal rather than technical."

In looking at this problem of paying for these new regional airport systems, we must first face the hard fact that these facilities will, on the whole, have to be paid for by the users. And by "users" I mean airline passengers, shippers, the owners of private aircraft, air taxi passengers and others who use the airport system. The day is here when air transportation can no longer look to the taxpayer for any substantial amount of subsidy, either direct or indirect. These new airport systems will have to be self-sustaining—and they *should* be self-sustaining. Otherwise they run the risk of falling into the political and economic chaos which surrounds such transportation systems as the New York subways, the Long Island Railroad, and even our Merchant Marine.

The airlines have a great stake in seeing that these new airport systems are economically viable. If the taxpayer has to support these airports, the taxpayer—through his government—will ultimately run them, and the airlines as well. Nothing could be worse for the country as a whole. The United States today is the world's only major country in which air transportation has not been socialized, and it is no coincidence that the United States has the most efficient and economical air transport system on earth—and the American traveler enjoys the lowest fares on earth.

I think it becomes clear, then, that we must find a way to develop a nationwide regional airport system without relying heavily upon the taxpayer—and this means simply that we must not let the cost of these facilities outrun the user's abilities to pay for them.

Can this be done? And if it can be done, how do we go about it?

I believe it can be done if we approach our problems with plain common sense, and if we will put behind us some of the foolish notions which have plagued air transportation in the past.

First, we must plan further into the future so that we have room for growth in all phases of the airport activity. One of the greatest burdens which the industry has to bear today results from the fact that our past planning has been inadequate. Property, ground facilities—airport, terminals, and related facilities—are having to be abandoned because they are outgrown, and we have no way to expand them. In looking at this new generation of airports, we must make certain that these facilities can grow in such a manner as to meet our needs in 1990 and beyond.

I do not mean by this, that in 1970 we should build to meet 1990's needs—or even 1980's needs. That we could not afford. What I do mean is that we should build in 1970 to meet that year's need, but we should build in such a manner that we can easily expand

to meet the needs of 1980, 1990, and even beyond.

This can be done if we are willing to abandon some of our past thinking.

One important area to which we need to apply new thinking is that of airport site selection. We must make sure that the requirements for convenient ground access are met; that there is sufficient land to provide for future expansion and to protect airport neighbors from noise. At the same time, we must guard against excessive costs in acquiring and developing the airport site. The terrain and geology of the site must permit economical construction. In many metropolitan areas, conveniently-located and adequate land for a major airport is increasingly difficult to find. And the cost of acquiring such tracts is skyrocketing year after year.

In anticipating the region's future airport requirements, it may well be prudent to purchase the airport site now and place it in a land bank. This may be the most economical procedure. It may also be the only practical means of assuring that land for airports will be available when needed—at any price.

Today, in some of our heavily populated regions, there are "exotic" proposals to build airports in lakes and oceans, where the cost of site development alone would exceed a billion dollars.

A principal attraction of the satellite airport concept is that the smaller sites needed for general aviation airports are still generally available and can be developed at relatively low cost. And, by tailoring the facilities to the specific needs of the user, we can drastically reduce capital requirements and increase the efficiency of the airport system.

For our part, the airlines must think of airports and terminals as functional devices, designed to move passengers and cargo, not as prestige installations designed to give the airlines an image of opulence and luxury. We will have to rethink what we are doing at airports, and see that each dollar spent meets a real need of the passenger or shipper, a need which could not be otherwise met.

We at American Airlines have already begun this rethinking process, and we are systematically examining everything we do at airports and every facility we require at airports. We are asking ourselves: Is this function really necessary? Could we do away with this function, or this structure? Could this job be done adequately in a less costly or less elaborate facility?

For example, the notion that every flight gate has to have a waiting lounge of its own is pretty well entrenched. But we at American Airlines are convinced that a pleasant and properly sized area serving up to six gates can be provided for passengers and will be fully accepted by them. Such a system should allow us to reduce radically the square feet of terminal space required to serve a flight, thereby reducing the size and cost of terminal buildings, and, at the same time, making more space available on the airport for the handling of aircraft.

Our studies have also convinced us that the very nature of airport construction itself must be re-examined. In the past, we have built terminal buildings and other airport facilities with the idea of using these facilities over long periods—20, 30 years, or even more. Yet, experience has shown us that almost every airport facility we have built in the last 30 years has been either outgrown or outmoded in ten years or less. The dynamic growth and technology of air transportation has been such that we are faced with constant change. This dictates that future airport structures must be built in such a manner as to allow for their early expansion or early abandonment. Instead of thinking in terms of costly, permanent structures, we must think in terms of low-cost, prefabricated, modular construction. Only

by doing this can we possibly construct the airports and facilities which will be required at a cost which can be borne by the users.

Here I have given only a few examples of the kind of rethinking which will be required by the airlines and others concerned with airport development. However, we must rethink the many other problems which will confront us as we develop this required system of regional airports.

For example, we must find economically viable solutions to the problems of airport access, airport congestion, air traffic control, etc. Here again, we must break with the past and seek new and radical solutions for our problems.

Take, for example, the problem of airport access. Most of us have been mentally wedded to the idea that passengers and cargo must come to and depart from airports in motor vehicles. And the result has been chaos around our major airports. We are going to have to face up to the fact that we can go longer accommodate all of these vehicles on the airport itself.

Most patrons of New York's Grand Central railroad station recognize that they cannot drive their cars in and park them until they return. Yet most airport users somehow expect to drive to the field and park their automobiles within walking distance of their flight gates. Several U.S. airports already have their parking stalls saturated and there is no land available for additional parking. And, even if expensive multi-level parking facilities were built, there is no land available for an adequate on-airport roadway system.

The simple fact is that some type of rapid transit—or people-moving system—will have to be developed. We will have to face this fact because the air transport industry cannot afford the cost of constructing the roadways and parking spaces which will be required if we are to continue doing business as we have done in the past.

So far, I talked mainly about the necessity for the airlines to rethink these airport problems. But the airlines can only make a contribution to the overall solution. Town, city, county, state and federal governments are also deeply involved in this matter. Planning for a new airport or a new system of airports requires inputs across a broad spectrum of interests and expertise. It requires hundreds of new interfaces, where the problems are, involving government officials, aircraft manufacturers, architects and designers, land-use specialists, financiers, ecologists and many others. The federal government obviously is in an overview position to help shape and guide a national effort, but I see the need for new regional bodies to come into existence. These regional bodies are logical vehicles to bridge the gap between the impersonal federal bureaucracy and the various narrow-gauge, parochial elements in our society that bitterly oppose progress.

I suggest to you, then, that the first step in solving the problems connected with creating a regional airport system is to bring into existence regional planning bodies which have the responsibility for creating in their regions adequate and economically viable airport systems. This must be done.

But to create planning bodies is not enough. We must bring into existence planning bodies which will take a creative approach to the many problems which confront us. As I pointed out earlier, anyone can build an adequate airport if he has enough money at his disposal. We can solve almost any technical problem with dollars. The task here is to solve our problems within the limitations placed upon us by the dollars available to us.

It seems that in the past we have approached our airport problems in three steps. First, we determined what we would like to have. Second, we have built our airports; and lastly, we have tried to find the money required to run and expand them.

This approach has not worked. Airport costs have become so high that we are rapidly approaching the point where the users can no longer afford to use these airports. If we continue down this same road in the future, we will soon reach the point where airport and terminal costs are so high that the growth of air transportation will be hindered, and its usefulness to society will be limited.

I suggest to you today that the airport planners of the future should no longer simply determine what they think is needed and then try to find ways to pay the bills. They should first carefully determine, year-by-year into the future, the users' ability to pay, and then find ways to construct satisfactory and adequate airport systems within these means. Simply stated, this means that we should first determine how much money we will have, and then do our planning within that constraint.

I know that it will be argued by some that this is a short-sighted point of view—that placing these severe economic restraints on airport planning will tend to inhibit the growth of air transportation. In actuality, however, the reverse is true. There is an old saying that "necessity is the mother of invention." If we are to bring real creativity into airport planning, we are going to have to force invention by making creativity necessary. If we are to find creative solutions to our problems, we are going to have to say to our planners: You cannot solve your problems with dollars alone. You are going to have to find new ways of doing things. You are going to have to find new and radical solutions which will allow us to serve the public—and still live within the dollar limitations which the hard facts of economics have placed upon us.

If planning is done in this atmosphere, I believe it will, of necessity, be creative, and I believe that we will find the solution we require.

When a speaker discusses the getting and spending of money, the tone of his remarks tends to get unduly serious, even ponderous, and perhaps a little grudging. So I hope that in reviewing for the past few minutes this matter of airport costs, I have not appeared unduly negative or bearish in attitude. I hope that I have not sounded as though I thought we might not succeed in solving all of our problems.

On the contrary, I find stimulation and encouragement in knowing that what should be done for the future of aviation is within our current technological ability, and within our ability to pay—if we will introduce real creativity into our planning.

In summary, I feel that we must do the following if we are to develop in this country a real system of regional airport facilities which will serve the needs of the country:

First, we must accept the principle that these facilities will be paid for by the users. We must not rely upon governmental subsidy to any appreciable extent in the financing of these facilities.

Second, we must bring into existence regional planning bodies which can coordinate the overall airport effort in the regions and act as bridges between the federal government and the local interests concerned.

Third, and most important, we must place upon the planners economic restraints which will force creativity, and assure us of facilities which will be both adequate and economically viable.

If we do these three things, I believe the problems of the regional airport systems will be solved, and we can look to the future with confidence.

The world has just witnessed how the American people mobilized the human resources and hardware needed to put a man on the moon. Having successfully met this challenge, we should have little doubt of our

ability to meet the challenges of moving people and goods swiftly and efficiently by air within a democratic, private enterprise framework.

JETPORT DEVELOPMENT NEAR EVERGLADES NATIONAL PARK

Mr. NELSON. Mr. President, the Department of the Interior has released a report which should leave no further doubt that airport development at the present site 5 miles from Everglades National Park will mean the end of the park.

The report, prepared by Dr. Luna B. Leopold, chief scientist of the U.S. Geological Survey, concludes that:

First. A training airport, already constructed at the Everglades site, will be an "intolerable" threat to the park, because it will lead inexorably to urbanization and drainage which would destroy the fragile Everglades ecosystem;

Second. Handling cargo at the training airport would bring even more vigorous development and urbanization, and "insurmountable pressures for land drainage," and would bring a "massive technological intrusion" of the Everglades system;

And finally, developing the site as an international jetport, as has been proposed, would destroy the Everglades subtropical wilderness system that is the very basis of the park.

With this devastating evidence, the judgment is inescapable: In order to save Everglades National Park in perpetuity as Congress intended, another, safe site must be found for the airport development.

I am heartened by the Secretary of the Interior's position, as announced September 10, that immediate steps should be taken to study alternate sites for the international jetport.

With this Department of Interior posture, with the administration's expressed concern, and the State of Florida's willingness to help find an alternate site, we appear to be on the way to a solution that will remove the airport threat to the national park.

If there is the cooperation of the Dade County Port Authority, which is building the airport, and the airlines, who are helping pay for and will be using it, there should be little difficulty quickly arriving at a solution which not only will protect the park, but will assure that the air transportation needs of Miami and south Florida will be met.

A settlement of this situation would be a giant step in this country toward a national commitment to protect the quality of our environment.

There is one other immediate danger to the Everglades which we must face, however: That is assuring an adequate water supply to the park from the Corps of Engineers central and southern Florida flood control project, on which the park's future is now dependent.

When the House passes and sends to the Senate the public works appropriations bill, I will introduce an amendment which would assure this water supply. Under the amendment, no further Federal funds would be expended for the

corps flood control project until the corps and the Department of Interior report to Congress that they have reached a mutually satisfactory arrangement for water supply to the park.

Such an agreement was reached last year, and confirmed in writing by the corps. But now, the corps refuses to implement it, contending it does not have the necessary authority.

On this point, an opinion by the Solicitor of the Department of the Interior late last year is revealing: It says:

In conclusion, it is my opinion that the Secretary of the Army not only has the statutory authority but also a Congressional mandate to issue, unilaterally, regulations for the delivery of project water to the park, and that the regulations must grant the park a priority over all future uses of water within the project area.

Without such an agreement, new southern Florida water users in coming decades will be able to draw on the park's portion of the corps project's water supply until the Everglades dries up, and the wilderness dies. It is essential that Congress and the administration act now to prevent such a disaster.

If the groundrules for the project's water use are not adopted and implemented now, the pressures from the new water users that are certain to come with urbanization and industrial development will assure that there will never be an equitable solution for the park.

Since 1948, \$170 million in Federal money has been spent on the corps' project and the corps will be asking for \$160 million more in the future, including \$9 million for fiscal year 1970.

Conservationists have supported the corps project only on the understanding that it would be regulated to provide the water needed by the park to survive. And the Department of the Interior in both the present and the last administration has taken a firm stand that such an agreement be established. We should not spend another dollar on the corps' flood control project until such an agreement is assured and implemented.

As a witness before the Senate Appropriations Subcommittee on Public Works in late June, I submitted a memorandum on the Everglades water supply amendment which I will propose, and I have also written the President's Environmental Quality Council to request that the Council take leadership in resolving this important matter.

I ask unanimous consent that the Leopold report summary, my memorandum to the subcommittee, my letter to the Council, and the Interior Solicitor's opinion on the water supply question be printed in the RECORD.

There being no objection, the items were ordered to be printed in the RECORD, as follows:

LEOPOLD REPORT RELEASED

An environmental research report by Dr. Luna B. Leopold concerning a proposed Jetport near Everglades National Park in Florida was released today by the Department of the Interior.

Dr. Leopold, scientist and ecologist with the Interior Department's Geological Survey, headed a team of environmental experts from the Department and the State of Florida which prepared the report for the

use of the Department and the Joint Committee of the Departments of Interior and Transportation in their studies of the proposed Jetport.

FINDINGS AND RECOMMENDATIONS

Development of the proposed jetport and its attendant facilities will lead to land drainage and development for agriculture, industry, housing, transportation, and services in the Big Cypress Swamp which will inexorably destroy the south Florida ecosystem and thus the Everglades National Park.

There are three alternatives for future action:

1. Proceed with staged development of training, cargo, and commercial facilities. Regardless of efforts for land-use regulation, the result will be the destruction of the south Florida ecosystem. Estimates of lesser damage are not believed to be realistic.

2. Proceed with final development and use of a training facility of one runway, with no expansion for additional use. Obtain an alternative site for expansion, probably through an exchange of excess lands at the current site for public lands at a new site. Permit no new or improved surface access to the current site. This alternative would not preclude eventual development of lands in the vicinity of the current site. It could, however, reduce pressures for development and secure time for the formation of sufficient public interest in environmental conservation to achieve effective planning and land-use regulation.

3. An alternative site be obtained capable of handling the training operation as well as the fully developed commercial facility; and that when appropriate, the training activities at the present site be abandoned and transferred to the new site. Permit no new or improved surface access to the current site. This would inhibit greatly the forces tending toward development in Big Cypress Swamp and would give an impetus to developing effective land-use controls which could lead to permanent protection of the south Florida ecosystem.

SUMMARY OF ENVIRONMENTAL IMPACT

In simplified form, the following represents the views of the study group on environmental impacts of the jetport and its associated developments.

Phase 1. The training facility

1. The construction of each training strip will destroy about 400 acres of natural habitat of the Big Cypress Swamp.

2. No significant problems are expected from sewage, industrial wastes or pesticides in the training phase, since they will be very limited. Air pollutants from engine exhausts will be substantial in an environment which has not previously been degraded by local activity. The effect of such pollutants on a natural aquatic system is almost entirely unknown. There may be adverse effects on the Indians. The introduction of air pollutants may increase the incidence of local fog under some weather conditions.

3. The Miccosukees will suddenly and involuntarily be subjected to round-the-clock noise levels commonly experienced by urbanites who live very near airports in many cities. There will be frequent high level noise intrusion on the wilderness character of the northern part of Everglades National Park and even more on the Big Cypress and Conservation Area No. 3.

4. A severe bird strike problem may develop within the airport boundaries, over Conservation Area No. 3, and in the quadrant southwest from the training strip. This would involve large water birds, including several rare and endangered species at altitudes ranging from ground to 2,000 feet. Small animals which seek refuge on the runways in flood periods will add to this problem when they are crushed and attract carrion-eating birds.

5. With sufficient culverts provided through

runways, ramps, roads, and other facilities, interference with overland flow will be negligible.

6. The combination of bird strikes, pest insect problems and incidence of small animals on runways will probably lead to drainage of at least part of the jetport property. This is the Federal Aviation Administration recommendation in wetland areas for control of bird strikes. The Dade County Port Authority has announced no such plans, but has the capability and authority to construct canals for drainage within and without the port boundary, and use eminent domain authority on exterior lands. To be effective, any drainage effort would have to cover a large area using a grid of drainage canals. Drainage canals would, however, almost surely be prohibited in Conservation Area No. 3, on which much of south Florida depends for water; birds would continue feeding there, probably in increased numbers. Drainage would materially increase the occurrence of fires.

7. Construction and imminent operation of the first training strip have elevated surrounding land prices and sales. Economic and social pressures for further development within and without the port property will mount rapidly, the one encouraging the other. Such development for housing, trade or industry will inexorably lead to land drainage outside the jetport property. Land development and drainage will be accompanied by increased nutrients in the water, will alter the hydroperiod, and will promote eutrophication. To the extent and at the rate these changes take place, the south Florida ecosystem will be altered.

Phase 2. Cargo handling

1. The volumes of aircraft exhaust emissions, and subsequent pollution of the surface waters, will increase according to the air traffic, the extent of which is not known to us.

The advent of heavy auto traffic will add to the air pollution load, and probably will be a more important source of pollutants than aircraft.

Sewage and industrial wastes will no longer be insignificant. A large number of airport employees will be required, as well as flight maintenance operations and, possibly, some aviation-oriented industries. This situation will require the provision of full waste treatment facilities, including removal of dissolved nutrients if the ecosystem is to be protected. A system capable of treating a wide range of materials will be essential at this time, both on-port and for the surrounding area. An analysis of the possible alternative waste treatment system will have to be made, with initial construction of some essential portion of the total treatment plan (for full development) becoming operational in the cargo phase.

If adequate treatment is not provided, then deterioration of water quality will ensue, including eutrophication and introduction of toxic materials.

With large scale human occupation of the area, heavy use of pesticides and fertilizers, both within and without the jetport, will occur. Further increase in pesticides in the aquatic system would add to the biological magnification problems, and possibly lead to the destruction of several birds which are at the higher levels of the food chain. Extensive use of fertilizers will lead to eutrophication.

2. The numbers of flights will increase and traffic will be in all quadrants. Noise will be a common characteristic of much of the Big Cypress, Conservation Area No. 3, the park, and all Indian lands.

3. Bird strikes will increase because of the added numbers of flights and the flight patterns being extended into all quadrants.

4. An improved highway corridor will be necessary for transport of cargo and personnel. If sufficient culverts and bridges are provided, interference with southward flow

of water can be minimized. The corridor will destroy the habitat it occupies, will increase developmental pressures, and will intrude on the social and economic life of the Miccosukees.

5. In this stage, development outside the port will be vigorous. Pressures for land drainage will be administratively insurmountable. The canal systems will be decisive for the ecosystems of the Big Cypress and the western portion of the park. We know of no conventional drainage method which could simulate natural flows and prevent this. Should storage reservoirs be built, the waters they contain would be subject to such intense competition—economically and administratively—and to such high evapotranspiration losses, that there would be little likelihood of maintaining the hydroperiod of the Big Cypress and of the western park.

In this phase, the adverse effects on the ecosystem of massive technological intrusion and general inability to implement plans for protection of environment, will become evident. Since the Big Cypress is actually a portion of the Everglades ecosystem, the effects of its deterioration will be reflected over a much larger area.

A given ecosystem cannot indefinitely be reduced in size and complexity and still survive. As parts are successively removed or altered, biologic balances are continually changed and the stability of the system is undermined. The degree and rate of land drainage, eutrophication and alteration of the hydroperiod will be greater than similar changes brought about by the airport as a training facility. Thus the degree and rate of destruction of the ecosystem will be increased.

Phase 3. Full development

All environmental problems will be at maximum with full development. Noise levels will be excessive throughout the ecosystem. Auto traffic will be very dense along the corridor, and parking facilities for thousands of automobiles will be in use.

The high-speed ground transport system will be in full operation, with individual units traversing the Everglades at very frequent intervals. Thus, the roar of jet engines will be added to the noise background at ground level, and their exhaust materials will be trailed across the landscape.

Sewage waste volume from the jetport would be in the order of 4 million gallons per day; industrial wastes would be about 1.5 mgpd. Surrounding urban areas would vastly increase the volumes of daily wastes. Despite the availability of adequate technology, there is no precedent which would indicate that legal, administrative, or social practice would in fact result in the maintenance of water control and water quality necessary for continued operation of the natural ecosystem.

Any resemblance of the new hydroperiod of the entire Big Cypress drainage to the present one would be accidental and incidental. Thus, the single most significant element of the natural, complex, and highly diverse environment—the hydroperiod—would be lost. The interaction of water, plants, and animals would bear little resemblance to its present condition and the South Florida ecosystem as it presently functions would be destroyed.

The Miccosukee tribe will be totally absorbed in the intensive development, with virtual elimination of their social customs and way of life.

CONCLUSIONS

The construction of the airstrip for training in south Florida presents an issue in the public interest. Public interest consists of two general aspects, a monetary consideration and a nonmonetary one. The monetary or financial gains which result from development in the modern sense—urban, agricul-

tural, and industrial—are monetary gains which redound primarily to the locality and, to some lesser extent, to the adjoining region and the Nation. The public interest in the preservation of an environment is primarily a nonmonetary one; it is one that affects a large part of the whole society and in a diffused way.

The south Florida problem is merely one example of an issue which sooner or later must be faced by the Nation as a whole. How are the diffused but general costs to society to be balanced against the local, more direct and usually monetary, benefits to a small portion of the society? Concurrently, the society must ask itself whether the primary measure of progress will indefinitely be the degree of expansion of development, such as housing, trade, and urbanization, even at the expense of a varied and, at least in part, a natural landscape.

Some benefits to society flow from failure to develop, but this entails a cost. To reap the benefits of nondevelopment—benefits which accrue generally to a broad part of society—may often put a burden on a small segment of society. Under such circumstances, public policy must be so restated or redefined that the equities are redistributed. At the present time, the operation of public policy in dealing with redistribution of such equities is inconsistent and ill-defined.

The second main conclusion of this report is that the benefit to society accruing from the maintenance of an ecosystem is of a different order than that due to the preservation of a few species. The effects of the jetport and the surrounding development should not be thought of in terms of the possible elimination of some rare and endangered species such as alligator, wood stork, and others. These, however, can be thought of as indicators or touchstones as to what is happening to the total ecosystem. Unfortunate as it would be to lose some of these rare species, the problem is a larger one. Society has an interest in the functioning of an ecosystem as a whole. The substitution of a controlled state of a biologic community for a naturally functioning ecosystem leads to one or more of the following consequences: (a) More controls and increased management are necessary to keep the new unnatural system in reasonable balance; (b) unforeseen consequences are usually costly and often long continued; (c) these costs are usually borne by the public through the expenditure of tax revenue from a large part of society to compensate for unforeseen consequences of actions taken to benefit a small segment of a society.

The third main conclusion is that ecosystem destruction in south Florida will take place through the medium of water control, through land drainage and changed rates of discharge. It will come about through decrease in quantity of water by both eutrophication and by the introduction of pollutants, such as pesticides.

The fourth main conclusion is that the training airport is intolerable, not because of its flight operations, but rather because the collateral effects of its use will lead inexorably to urbanization and drainage which would destroy the ecosystem. The development in the surrounding land is already beginning, as a result merely of the probability that the airport will grow in size and importance. Assuming the present types and operation of land-use controls, this development tendency will proceed uncurbed. Planning procedures and their application are presently not sufficiently uniform, sophisticated, effective, or enforceable to provide any optimism that use of the jetport for training would proceed without concomitant land development and thence by stages to destruction of the ecosystem. So long as the training airport is in use, pressures and plans for its expansion will continue and will inexorably and surely lead to ecosystem destruction

completely. Elimination of the training airport will inhibit land speculation and allow time for formation of public awareness of environmental degradation which is the prerequisite for effective and practical action in the field of planning and land-use control.

JUNE 12, 1969.

To: The Chairman and members of the Senate Appropriations Subcommittee on Public Works.

From: Senator Gaylord Nelson.

Subject: Central and Southern Florida Flood Control Project and the Everglades National Park.

This memorandum proposes that in the appropriations bill or in the committee report accompanying the bill, the committee require that no part of the proposed \$9 million appropriation for the Central and Southern Florida Flood Control Project shall be expended until the appropriations committees have been advised the Secretary of the Interior and the Secretary of the Army have made a mutually satisfactory arrangement to provide water to the Everglades National Park.

In 1934, Congress authorized the Everglades National Park. Fourteen years later, in 1948, the Congress authorized the Corps of Engineers to construct the Central and Southern Florida Flood Control Project.

Congress did not place these projects in conflict with each other, and yet, the experiences of the Everglades National Park since the advent of the flood control project have been such that the very life of the park, which is dependent upon an assured supply of water, is being continuously threatened. As a result, the intent of Congress in 1934 to preserve a unique area in its pristine state has been and continues to be frustrated.

Water is the life blood of the park. Its normal inflow is absolutely essential, if the extraordinary life processes which in themselves provide the uniqueness of the Everglades National Park are to be maintained. Fish populations swell with the rising waters of summer and fall, and as the water runs off to the sea, these millions of fish concentrate to the densities required by the hundreds of bird species, including some that are rare and endangered, that depend on the park for food and habitat. The water which runs off to the sea greatly influences the food production of the estuaries by providing salinity changes needed to accommodate the great fishery resources which the park supports. It is hardly a coincidence that the pink shrimp, newly spawned in the Gulf of Mexico, arrive at the park estuaries when these salinities are at their optimum. Within these nurseries, the shrimp grow to maturity and leave to return to the Gulf where they are harvested.

In 1948, when the Department of the Interior provided its comments to the Corps of Engineer report (H.R. Doc. 643, 80th Congress, Second Session), it wrote that the park's problem was not one of too much water but of too little water. The Department had misgivings about the project in 1948 because it recognized then that the park's vital water supply could be cut off. However, it was recognized that timely releases of water from the project could be complementary to the park.

As the project progressed, releases were anything but timely, and the National Park Service has been hard pressed to preserve the park as the Congress intended. If the park is to last forever, then so must its water supply. To date, long range efforts to ensure that supply have been thwarted.

In 1962, a levee was constructed by the Corps of Engineers across the Shark River, the principal drainageway which brings water to the park from the great Everglades region to the north. The flow was blocked and no water released for the next two years, and then only meager amounts until 1966, when heavy rainfall outside the park brought re-

lief. The consequence was a systematic dehydration. The park has now become critically dependent on releases from the project for its water supply, and can not survive on the rain falling within its boundaries. It must have the historic pattern of inflow across these boundaries. It is for this reason that the supply to the park must be resolved.

Water shortages have destroyed multitudes of fish and wildlife and encouraged an unnatural succession of vegetative changes which may forever alter the unique ecology of this subtropical park. Securing an assured supply of water is the single most critical element in meeting the intent of Congress when it authorized the park.

Last year the Corps of Engineers completed a new study to improve the water supply for the park, and these improvements were authorized by Congress. The 1968 report indicates that water to meet the park's needs will be available and could have been made available in the past had certain operational practices been met.

However, the evidence is clear and amply supported by the report (House Doc. 369, 90th Congress, Second Session) that in the future, conflict between all water users is inevitable.

The plan acknowledges that by the year 2,000 the increased growth of southern Florida largely encouraged by this project will, in effect, use the park's minimum requirement of 315,000 acre feet per year as a pool from which all further growth and new water demands may draw upon.

The disastrous consequence is inevitable: the park will be destroyed by gradual but positive dehydration, and what was once one of the wettest places in the world will become the Death Valley of Florida.

Included in the Corps of Engineers' 1968 report is a June 12, 1968 letter from the Department of the Interior to the Corps which stated that the Department of the Interior could not recommend the Corps' plan without written assurance from the Secretary of the Army that he would provide the water supplies required by the park unaffected by reductions caused by future demands of urban and agricultural growth.

In his reply of June 14, 1968, Major General F. J. Clark, as acting Chief of Engineers, acknowledged the condition required for Department of Interior approval and went on to say:

"The concept expressed in the report and in the graphs is to provide a supply of water to the Everglades National Park that will not be diminished as the requirements to support growth and new development increase. Accordingly, under authority of the Secretary of the Army, the Chief of Engineers will insure the project is regulated to deliver the water requirements of the Everglades National Park as so set forth in the report."

The 1968 report itself is based on the requirements of the water users. The requirements for the park were furnished by the National Park Service and were used in the development of the plan of modifications of the Central and Southern Florida Flood Control project, justified by the report. And the report further shows that had the plan been in operation throughout the period of rainfall record, which reaches back to 1930, the water supply to the park could have been provided in all years with only one exception.

Despite this exchange of correspondence, however, and the apparent agreement therein, a mutually satisfactory arrangement for protecting the park's water supply from future demands still does not exist.

There can be no reasonable doubt that the Corps has the power to regulate the project. The original 1948 authorization of the flood control project specifies that the project will be managed in accordance with House Document 643, which states that the works may be turned over to the responsible local interests for operation but that they will be

operated "in accordance with regulations prescribed by the Secretary of the Army . . ."

Testimony presented before the Senate Interior Committee's informational hearings on Everglades National Park matters June 3 and June 11 by the Corps of Engineers, the Department of the Interior and conservation organizations makes it very clear that the question of adequate water supply for the Everglades National Park remains unresolved notwithstanding any of the commitments which have been made. I ask unanimous consent that an opinion by the Solicitor of the Department of the Interior on this matter be included in the hearing record.

Your committee, in its responsibilities for programs constructing the great public works of this country, should seek to bring the Department of the Interior and the Corps of Engineers together and require of them that they bring back a satisfactory arrangement for the review and approval of this committee before any further funds are expended on the Central and Southern Florida Flood Control Project.

In the absence of such an agreement, the expenditure of further funds adds to the confusion and conflict in the administration and the management of the park and the flood control project.

Over the past 20 years, the Federal government has expended some \$170 million on this project. We are being asked to expend nearly \$160 million more in years to come, \$9 million in this appropriation. In all, we will be making somewhat more than three million acre feet of water available for Florida water users, including the park. The park requires from the project but a small fraction of that total amount, far less proportionally than the amount of Federal investment. There seems to be little purpose in spending millions to acquire and protect the park and even more millions to develop the water project, a principal purpose of which is to provide the park with water, without requiring a satisfactory arrangement for supplying the park with waters now and in the future.

Therefore, I propose that language be added to the appropriation bill or to the committee report which states that: "No part of the proposed \$9 million appropriation for the Central and Southern Florida Flood Control Project shall be expended until the appropriations committees have been advised that the Secretary of the Interior and the Secretary of the Army have made a mutually satisfactory arrangement to provide water to the Everglades National Park."

I would like to add that it is my understanding that Senator Jackson, Chairman of the Interior Committee, and with whom I have co-chaired the Everglades informational hearings, will be submitting a letter shortly to the Appropriations Committee for the hearing record supporting my general position in this matter.

I very much appreciate this opportunity to appear before the committee to propose this language and discuss this matter with you.

JULY 21, 1969.

DR. LEE DUBRIDGE,
Executive Secretary, Environmental Quality Council, Office of the President, The White House, Washington, D.C.

DEAR DR. DUBRIDGE: Enclosed is a copy of a letter and a memorandum I have sent to all members of the Senate Appropriations Subcommittee on Public Works regarding the water supply difficulties faced by Everglades National Park.

Since 1948, the federal government has spent \$170 million on the Corps of Engineers' Southern and Central Florida Flood Control Project. From the beginning, Congress and conservationists have supported the project on the assumption that it would provide the park an adequate or even enhanced water supply.

And last year, as the enclosed material indicates, the Corps and the Department of the Interior worked out a formula for water supply to the park to which the Corps agreed in writing. The formula would assure that new water users would not be brought into the picture on the assumption that they could take water from the park's supply.

Now, however, the Corps is refusing to implement the agreement, and instead, is taking the position that it should wait until a squeeze is on from new water demands before it takes action. By then, it will be too late. As we pointed out at a recent Congressional hearing, the practicalities will be that without the adoption of effective regulations now, people will come first, agriculture will come second, and the park will come last in any crunch on water supply.

As the enclosures indicate, I have asked the Senate Appropriations Committee to require that before any further funds are expended for the Corps project, the Corps and Interior must reach mutually satisfactory arrangement on water supply to the park. Senator Jackson, chairman of the Interior Committee, has also written the subcommittee members in support of this position. However, there is no assurance that the committee will require such action.

It seems to me that the park's water supply is a problem that is uniquely subject to settlement by the President's Environmental Quality Council. It is a classic case of the lack of coordination and cooperation between federal agencies which has contributed to one environmental disaster after the other. Yet as last year's agreement between Interior and the Corps demonstrated, a proper water management plan can be arranged, and it can be implemented administratively.

In my judgment, the Council could solve this matter very readily by using its authorities and responsibilities for interdepartmental coordination to bring the Corps and Interior together to get agreement on water supply plan that will protect the park and to assure that the plan is implemented.

In this regard, I was pleased to see that in the May 29 press conference announcing the establishment of the Council, you took note of the President's deep interest in the preservation of the Everglades. You also noted that through the Council, necessary action could be taken at the top levels of government to resolve the tough environmental problems that come up.

Everglades is just such a problem. It is a test of whether or not we are really committed in this country to protecting our environment. And I am convinced that if we don't act now, we are going to allow the destruction of the park.

I urge the Council to take the leadership in this important matter, and I would be happy to be of any assistance that I can.

Sincerely yours,

GAYLORD NELSON,
U.S. Senator.

U.S. DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SOLICITOR,
Washington, D.C., October 8, 1968.

To Secretary of the Interior.
From Solicitor.
Subject: Authority and responsibility of the Secretary of the Army to deliver water to the Everglades National Park.

In the course of negotiations between this Department and the Department of the Army regarding the delivery of water to the Everglades National Park from the Corps of Engineers Central and Southern Florida Flood Control Project, the Department of the Army has asserted that although it recognizes the desirability of delivering water from the project to the park, the Secretary of the Army must, as a matter of law, obtain the concurrence of the State of Florida in promulgating any regulations which would accomplish this objective.

In view of this position and the frequent droughts which have plagued the park, you have requested my opinion on the following question:

"Does the Secretary of the Army have authority to issue, unilaterally, regulations for the delivery of project water to the Everglades National Park?"

At the threshold it is necessary to review the establishment of the park, the water problems affecting the park, and the authorization and modification of the Central and Southern Florida Flood Control Project.

In 1934 Congress authorized the establishment of the Everglades National Park by the act of May 30, 1934, 48 Stat. 816, as amended, 16 U.S.C. 410 (1964), in order to preserve a variety of subtropical ecosystems found nowhere else in the world. On October 22, 1934, President Roosevelt, by Executive Order 6883, withdrew from settlement, location, sale or entry all unappropriated and unreserved public lands within the established park boundary. The park was formally opened on June 20, 1947. (12 F.R. 4189).

Under natural conditions, which predated the establishment of the park, water flowed into the park area from a hydrologic drainage way beginning in the Kissimmee River Basin 100 miles north of Lake Okeechobee, through the lake into the broad expanse of everglades south of the lake. Earliest efforts at drainage began in the 1880's, but were largely ineffective. The major works began after 1907 by the Everglades Drainage District. In the early 1920's dikes were constructed along portions of the southerly shore of Lake Okeechobee. These developments, which are more fully summarized in House Document No. 643, 80th Congress, 2nd Session, interfered, in only a limited respect, with the water supply of the park area.

The increased drainage works, however, affected normal flow conditions and increased flood hazards. Occasionally, flood waters caused severe damage to local communities. To alleviate flood damage and conserve water for other uses Congress, in the Flood Control Act of 1948, 62 Stat. 1175, authorized the Corps of Engineers to construct the Central and Southern Florida Flood Control Project, in accordance with the Corps of Engineers comprehensive plan presented to Congress in House Document 643, *supra*.

In the initial authorization of the project the Corps of Engineers represented to Congress in House Document 643 that water would be released from project storage facilities to assist in restoring and maintaining natural conditions within the park by reducing damage due to drought. H.R. Doc. 643, *supra*, pp. 4, 35, 56. House Document 643 also stated:

"In dry periods it would be possible, because of the proposed conservation areas, to release water into the park area which would assist in reducing fires and other damages [sic] which accompany periods of drought. In brief, it is believed that this comprehensive water-control plan and the national park plan are complementary features of Federal activity necessary to restore and preserve the unique Everglades region." (*Ibid.*, p. 56.)

The concern of this Department was never a question of too much water for the park, but rather an assurance that there shall not be too little water. *Ibid.*, p. vi.

Recent events have proven this concern of the Department to be well justified. The construction and operation of the project facilities have had a detrimental impact upon the Everglades National Park. The extent to which the authorized project facilities interfere with the natural flow of water into the park can be readily observed from the attached map of the project. The project intercepts and retains almost all of the water which once flowed into the park from the north. As a result, the park has become directly dependent upon the project for its water supply.

On many occasions the project has been

operated in such a manner that surplus project water was wasted to the ocean, even though there was a critical need for the water in the park. In addition, the project has been operated so that other water demands were given a priority over the Federal water needs of the park. In summary, the survival of the ecosystems, which were intended to be preserved by Congress by the establishment of the park, are today dependent upon the park receiving an adequate supply of fresh water from project storage and distribution facilities.

In view of the manner in which the project has been operated, serious water shortages which plagued the park in the 1960's and their devastating effect on the park ecology, Congress directed the Corps of Engineers to restudy the project for the purpose of modifying the project and its operation. (See attached resolutions of House and Senate Public Works Commission). The 1968 modification of the project was intended to resolve, among other things, the delivery of sufficient water to the park.

As a result of the restudy of this project and its operation, the Corps of Engineers proposed to reauthorize the project and modify its operation. This modification, which is presented in House Document 369, 90th Congress, 2nd Session, restates the fact that the supply of water to the park is a project purpose and commits the Secretary of the Army to regulate the project in a manner so as to provide 315,000 acre-feet of water annually to the park in accordance with a monthly distribution schedule. (See paragraphs 67, 105, 127(b) of the District Engineer Report, H.R. Doc. 369).

The District Engineer's Report, however, went on to say:

"b. Project purposes.—The specific purposes that are to be served by the works of the authorized project plus those of the plan here recommended are summarized as follows:

"(4) Use a system-sharing concept of meeting any unsatisfied water demands in the area from the Lake Okeechobee water service area. * * * In extremely dry periods, when all demands outlined above could not be met, the water available would be shared in order to meet the purpose of the project to the extent possible. (Section 127(b) (4) of the District Engineers Rept. H.R. Doc. No. 369).

"(5) * * * In addition, a supply of water for present and projected other water uses to permit continuing urban, agricultural, and other development is also recognized as a project purpose." (*Ibid.*, section 127(b) (5)).

The Department of the Interior took exception to sharing water shortages with new water users resulting from increasing urban, agricultural and other water uses. This Department was of the opinion that the total project must be operated to assure that the minimum water requirement of 315,000 acre-feet for the park would not be diminished by the new developments which may occur within the project area. To require the park to share water with these new developments would result in the park sharing water with an ever increasing number of new water users. The consequence of this course of action could only be the eventual loss of the park and its unique water-based ecology.

In commenting on the project, as proposed by the District Engineer in House Document 369, Assistant Secretary of the Interior Cain stated by letter of June 12 (copy attached), to the Chief of Engineers:

"... but there does remain, however, a major deficiency in the report in that it fails to clearly and unequivocally establish that the basic water supply to the park will be unaffected by reduction caused by future demands of urban and agricultural growth. As we noted above, the basic supply to the park must not be diminished if

this park is to survive. We, therefore, cannot recommend the plans without the written assurance by the Secretary of the Army that he will provide the water supplies as set forth in the report, undiminished by new incursions."

By letter of June 14, 1968, the Acting Chief of Engineers acceded to the requests of the Department of the Interior and corrected the deficiencies by providing the requested assurance. (Copy attached). This letter stated that the Chief of Engineers would assure that the project is regulated so as to provide the water requirements of the park and that these water requirements would not be diminished as the requirements to support new developments or water uses increase.

The exchange of correspondence also accompanied and became a part of the report of the Chief of Engineers, which was transmitted to Congress as House Document 369.

The understanding reflected by this exchange of correspondence was reconfirmed by representatives of the Secretary of the Army in a meeting with the Secretary of the Interior. (See attached copy of July 24, 1968, letter from the Secretary of the Interior to Special Assistant to Secretary of the Army (Civil Function)).

This correspondence, in my view, removed any doubt as to operation of the project in water short years. The assurances of the Acting Chief of Engineers to the Assistant Secretary constitutes a modification of the recommendations of the District Engineer.

Under the provisions of the Flood Control Act of 1968, *supra.*, the report of the Chief of Engineers, including the exchange of correspondence, was incorporated into the Congressional authorization of the project. This act, as did the 1948 Flood Control Act, directs that the project be prosecuted in accordance with the plans contained in the reports of the Chief of Engineers and subject to the conditions set forth therein. (See section 203 of the Flood Control Act of 1968, 82 Stat. 731, 739). The specific section of the 1968 act modifying the project provides:

"The project for the Central and Southern Florida authorized by the Flood Control Act of June 30, 1948, is further modified in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 101, Ninetieth Congress, at an estimated cost of \$8,072,000 [this is the Martin County plan], and in accordance with House Document Numbered 369, Ninetieth Congress at an estimated cost of \$58,182,000." (82 Stat. 740).

It follows that the project modification by the Flood Control Act of 1968 requires the Secretary of the Army to manage the project for the purpose of meeting the water requirements of the Everglades National Park in such a manner that the water requirements of the park are not subjected to reduction as the water demands to support new growth and developments within the project increase. Any other type of operation would be a departure from the scope of the project as now authorized.

What may have been the rights of the park vis-a-vis other water users under the original authorization, the project was modified by the Congress in 1968, with the result that the park shares water only with present water users, but has a priority over new users.

Against this background, I now turn to the question presented.

Initially, it seems obvious that by making provision for the water supply of the park as a project purpose and that purpose being superior to other uses subsequently arising, it follows that the Secretary of the Army possesses the necessary authority to operate the project or to direct its operation to accomplish that objective without resort to approval of the State of Florida. It is fundamental constitutional law under the supremacy clause of the Constitution that

the various states may not interfere with or regulate an authorized Federal activity. U.S. Const., art. VI, clause 2; *McCulloch v. Maryland*, 4 Wheat. 316 (1819); *Ohio v. Thomas*, 173 U.S. 276 (1899); *Johnson v. Maryland*, 245 U.S. 51 (1920); *Arizona v. California*, 283 U.S. 423 (1931); *Mayo v. United States*, 319 U.S. 441 (1943); *Federal Power Commission v. Oregon*, 349 U.S. 435 (1955).

Moreover, far from imposing a requirement that the Secretary of the Army secure the consent of the State of Florida to his operating regulations, the Congress has, in fact, imposed the opposite requirement. That is to say, the Congress has made it a condition of the project that the State or any local authorities involved give assurances that they would comply with the Army's operating regulations.

The Congressional authorization of the Central and Southern Florida Flood Control Project in 1948 and the modification of the project in 1968 are expressly subject to the provisions of section 3 of the act of June 22, 1936, 49 Stat. 1571, as amended, 33 U.S.C. 701(c) (1964). [See section 201 of the Flood Control Act of 1968, 82 Stat. 731, 739]. Section 3 provides, *inter alia*, that no money "shall be expended on the construction of any project until States, political subdivisions thereof, or other responsible local agencies have given assurances satisfactory to the Secretary of the Army that they will . . . (c) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of the Army."

Nothing in the legislative history of the 1936 act, the Flood Control Act of 1968 or House Documents 643 and 369 supports a contrary conclusion. [See H. Repts. 1223, 2918, S. Rept. 1963, 74th Cong. 2nd Sess., and H. Rept. 1709, 90th Congress, 2nd Sess., 132]. The plain language of these acts supports the regulatory authority of the Secretary of the Army.

It may be noted that in recognition of this requirement of the Federal law, Florida has enacted legislation which empowers local flood control districts to cooperate with the United States and furnish the assurances concerning the maintenance and operation of project works after completion. Fla. Stat. Ann. section 378.07 (1960).

There can be no question of the power of Congress to authorize the Corps of Engineers to construct, operate and regulate a project of this type in accordance with the terms and conditions of the Congressional authorization and of the administering agency. This power stems from its authority under both the commerce and general welfare clauses of the Constitution. U.S. Const. art. I, section 8, clauses 1 and 3; *Ivanhoe Irr. Dist. v. McCracken*, 357 U.S. 275 (1958); *United States v. Gerlach Livestock Co.*, 339 U.S. 725 (1950); *United States v. Commodore Park Inc.*, 324 U.S. 386 (1945); *Oklahoma v. Atkinson*, 313 U.S. 508 (1941).

In conclusion, it is my opinion that the Secretary of the Army not only has the statutory authority but also a Congressional mandate to issue, unilaterally, regulations for the delivery of project water to the park, and that the regulations must grant the park a priority over all future uses of water within the project area.

EDWARD WEINBERG,
Solicitor.

OVERSEAS PRIVATE INVESTMENT CORPORATION

Mr. JAVITS. Mr. President, the Committee on Foreign Relations will begin the markup of the foreign aid bill of 1969 in the near future. The Senate will then vote on this legislation.

It is, therefore, important to note that

the prestigious Committee for Economic Development in its September 1969 national policy statement entitled "Assisting Development in Low-Income Countries: Priorities for U.S. Government Policy" has strongly endorsed the establishment of "a new Government corporation to take over the private investment guarantee and promotion activities, and limited lending authority, now lodged in AID's Office of Private Resources." This is the major innovative object of the new foreign aid bill.

I ask unanimous consent that this recommendation of the council be printed in the RECORD.

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

A REORGANIZATION PROPOSAL

A proposal has recently been made by the Administration for the establishment of a new government corporation to take over the private investment guarantee and promotion activities, and limited lending authority, now lodged in AID's Office of Private Resources. Finance for the corporation could initially come from three sources: repayments of principal and interest from prior AID loans to private borrowers and industrial development banks; fee incomes from present investment guarantee programs; and local currencies earmarked under the Cooley Fund provisions of Public Law 480.

We see a number of advantages in the establishment of a corporation that would provide freedom from annual budgetary limitations; greater flexibility in handling personnel and making contracts; and freedom from many of the restrictive provisions now applicable to AID's use of public funds. In addition, the creation of a specialized institution might well have a favorable impact in stimulating increased interest in opportunities for new U.S. private investment in the low-income countries.

We recommend the establishment of a government corporation that would absorb the present functions of AID in guaranteeing and otherwise promoting private foreign investment. In any such corporation the Administrator of the U.S. aid agency should have a sufficiently strong voice to insure that its operations are fully consistent with the overall program of U.S. assistance to developing countries. After the new organization has had some experience, it might be desirable to expand its activities.

ALASKA AT THE CROSSROADS

Mr. STEVENS, Mr. President, last week the distinguished senior Senator from Illinois (Mr. PERCY) spoke to the Press Club at Anchorage, Alaska. He addressed himself to the problems and prospects of my State at a time when solutions to the problems are possible and prospects for the future never brighter.

Senator PERCY has made a series of suggestions which deserve review and serious consideration.

I ask unanimous consent that his remarks be printed in the RECORD.

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

ALASKA AT THE CROSSROADS

That Alaska may soon advance from an impoverished stepchild, heavily dependent upon Federal subsidies, to a new-found status as an affluent member of the Union is to me both an exhilarating and sobering prospect.

You have long had your ample share of superlatives; highest mountain, longest coastline, biggest game, longest and shortest days—but most of these are not bankable.

That is why it is exhilarating to be with you to discuss some of the issues and some of the problems and some of the opportunities facing Alaska at this moment—just three days before the very bankable North Slope oil lease sale—a sale that may revolutionize life, for better or worse, within the largest state in the Union with the smallest population.

It is also a sobering prospect because mistakes arising from the current mineral development in the delicate environment of the Arctic will undoubtedly be visited upon generations to come. In the process of the impending and, in my judgment, irreversible Alaskan development, every American has the right to expect that Alaskans will summon the wisdom and courage to accommodate progress without destroying those special qualities and flavors that have long made Alaska a unique place on earth.

Headlong and heedless development of the tundra can severely damage, if not altogether destroy, Alaska's wilderness—a priceless heritage of nature that belongs not only to Alaskans but to all Americans.

You are all too familiar with past mistakes, in this state and elsewhere, for me to dwell any further upon them here. From the vantage point of a former businessman and a United States Senator normally working thousands of miles away, it seems to me that a nation able to land men on the moon within a decade of making the decision to do so can find a way to develop the Arctic with a minimum of environmental disturbance.

The success of the moon landing was due in large measure to the cooperation of industry and government in building the hardware and training the men who performed this historic mission. Such cooperation between the private and public sectors will be equally necessary in the successful development of the oil treasure that lies buried beneath the Alaskan permafrost.

I would propose that, as a matter of policy, a generous fraction of the proceeds from this oil lease sale and subsequent sales should be earmarked for essentially conservation measures that are directly related to development.

It is not too late. The Alaskan wilderness sprawls across 586,000 square miles—20 percent of the area of the rest of the United States. Some of it is barren, yet much of it reflects nature at her most beautiful.

There are still two square miles of land for each of your people. It is still possible to walk 500 miles in a straight line without meeting a fence or a road or an airstrip—or a man.

In preserving the beauty of the land while tapping her vast wealth, Alaskans should muster both the financial resources and imaginative leadership necessary to protect the Arctic ecology from permanent harm. For it is in Alaska that American expertise on the Arctic must be developed, that a body of knowledge must be concentrated and that existing data must be sifted, tested and disseminated.

For years, the nation as a whole has virtually ignored Arctic science, Arctic resources and the indigenous Natives of the North. The stunning discovery of Arctic oil should serve to provide a national focus on other pressing economic and social values of this truly new national frontier. Meaningful development will be retarded so long as Alaska and the rest of us leave unfinished the problem of making a group of underprivileged Americans—the Alaskan Native—full-fledged members of our society. The result of this general neglect is acute poverty among most of the native Eskimos, Indians and Aleuts living in your potentially wealthy land.

As your able Governor, Keith Miller, told the Senate Committee on Interior and Insular Affairs last May, the average life span of the

Alaskan Native is slightly more than 34 years. They depend on the land for their very existence; if the hunting or fishing season is a poor one, then many are near starvation. I am told that the sanitary conditions in the villages are deplorable. Sewage facilities and drinking water are usually linked to a common polluted source. Consequently, the Alaskan Native death rate is three times higher than that of White Alaska. The death rate for influenza and pneumonia is 10 times that of white Alaskans while the suicide rate is double that of white Alaskans. This is one major reason why we in the Congress have set ourselves a high goal for the immediate future; to enact a legislative solution to the long-standing Native claims dispute.

When the United States acquired title to Alaska from Russia more than 100 years ago, we also acquired certain moral responsibilities along with our legal ones.

What is needed is a fair, honorable and generous settlement of the Native claims that will enable the Native population to catch up with the national standard and that will lay the groundwork for orderly development of Alaska's riches. As you know, last April Senator Jackson of Washington introduced S. 1830 which is cosponsored by your two Alaskan Senators, Ted Stevens and Mike Gravel. The legislative settlement envisioned in this package encompasses cash, land and a share in future oil revenues.

Since this bill was introduced, Interior Secretary Hickel has proposed that the Natives of Alaska receive 46,000 acres—twice as much as originally proposed—as well as a fixed sum of \$500 million to be appropriated by the Treasury over 20 years. Moreover, Secretary Hickel further recommended that the land rights include mineral deposits below the surface, although his proposal does not include revenue sharing from the oil discovery.

For 102 years, the Congress has been promising to enact a settlement of these claims and end a situation under which more than 40,000 people, most of them quite poor, live on land to which they have no legal title.

I wish I could assure you today that the present Congress will once and for all dispose of this issue equitably. But in all honesty, I can only report that the \$500 million monetary settlement proposed by Secretary Hickel, plus the land settlement that is envisioned, has a fine chance of passing in the Senate this year but only a fair one of passing in the House. It is simply too difficult to predict ahead what the House may do next year if the issue remains unsettled.

You may be sure that in the months to come I will be working closely with Alaska's representatives—particularly with your able and distinguished senior Senator, Ted Stevens, in trying to achieve an equitable solution to the Native Land's issue.

Larry Fanning, your colleague and my good friend for so many years, pointed out in a recent letter to me that Alaska has long been regarded as a colony, rather than a state, largely because its economic development has been basically exploitative rather than productive in terms of jobs for Alaskans—Natives and non-Natives alike.

I am informed that the annual jobless rate in Alaska is 9.1 percent of the work force during the summer months and above 12 percent during the sun-short fall and winter months. This is about three times the national average.

The rural areas of Alaska, with chronic unemployment rates of 80 to 100 percent are not even included in these compilations. Some 12,000 Alaskan natives are not even attached to the work force. Thus, the true picture of the annual seasonally adjusted jobless rate in Alaska is about 25 percent. During the fall and winter months this rate doubles for Alaska's native population.

The harshness of these unemployment statistics is underscored by the fact that living costs in Anchorage average 25 percent more

than in the Pacific Northwest, which itself is considerably higher than the national average. It is to be hoped that development will dampen, rather than feed, the current Alaskan inflation.

I agree with Ted Stevens when he emphatically says that Alaskans must be trained and prepared to take the majority of the newly available jobs in the booming oil fields.

And I agree with your former great Governor, Walter Hickel, when he says that the Jones Act must be amended so that coastal ferries like your own \$7 million *Wickersham* may sail unimpeded directly to the U.S. mainland.

All these steps will make development of Alaska not only proceed more quickly but, what is perhaps more important in the long run, provide for a great deal of stability as well.

For a long time, Alaska has always been on the threshold of something big. Well, now something big is really happening in just three days.

I am certain that your vision, spurred by this breakthrough, will spur to your often hostile latitudes the kind of industry, jobs and people that will insure your progress and development and will go far toward eliminating poverty in your midst.

With a determined and coordinated effort, I know you can succeed.

A LOOK AT THE BRIGHT SIDE OF THE NURSING HOME PICTURE

Mr. MOSS. Mr. President, as chairman of the Subcommittee on Long-Term Care of the Special Committee on Aging, I have become increasingly concerned with reports on the poor quality of care received in nursing homes across the country.

These reports describe the outrageous treatment of elderly patients who must reside in these facilities. The complaints range all the way from misuse of patients' funds to outright neglect.

It is unfortunate that accounts such as these presents a discouraging overall picture of conditions in nursing homes when there are many excellent facilities that offer the finest care, along with very innovative and therapeutic programs.

An article entitled "Nursing Homes for People, Not Profit," written by Sid Ross and Herbert Kupferberg, and published in the September 14 issue of *Parade*, presents the other side of the picture, and describes some nursing homes that are offering the kind of care that should be provided in all such facilities. The authors sound a positive note, and they should be heard.

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:

NURSING HOMES FOR PEOPLE, NOT PROFIT (By Sid Ross and Herbert Kupferberg)

Are there any good nursing homes in the U.S.? It's a question that is being asked more and more frequently by thousands of old people moldering in institutions which often provide inadequate, indifferent care, and by sons and daughters who pay large sums to keep them there.

The answer to the question is: "Yes, but far from enough." Many nursing homes fully deserve their notoriety as "elephants' graveyards" where old people come to die in hopelessness and despair. But there exists a handful of excellent establishments which disprove the theory that nursing homes have to

be cold, callous and cash-oriented. These good nursing homes constitute maybe 5 percent of the 25,000 which exist today. But there's no reason why they couldn't total 95 percent, provided they regarded their residents basically as people to care for rather than "bodies" to make money from.

"We want our elderly residents to live out their lives as independently and happily as possible." That's the policy enunciated by Mother Bernadette, the administrator of St. Joseph's Manor in Trumbull, Conn., and it's the philosophy that motivates the better nursing homes throughout the land, most of which are affiliated with religious or philanthropic groups.

OBJECTS OF LOVE

St. Joseph's, where 265 men and women are living out their years in comfort and contentment, is one of a number of old-age establishments run by the Carmelite Sisters for the Aged and Infirm. The Roman Catholic order regards old people as objects of love, not charity, and considers it just as important to have a first-rate pastry chef to serve them as a gleaming, up-to-date clinical laboratory. Although many of the residents at St. Joseph's are ill, they're never called "patients." They live in cheerful rooms with private baths, they have a broad range of social activities available, but they're not pushed into doing anything. They don't even have to eat in the pleasant dining room—if they prefer, they can take meals in their rooms or get a snack in the "Wedgewood Room," a comfortable lounge that has a cocktail bar tucked away in the corner.

The average age of the dwellers in St. Joseph's is 82, and some of them have spent time in other institutions before coming there. "I've never seen another place like it," says one 84-year-old woman. "There's no pressure, everything is right where I want it, and the sisters are marvelous." Smiles St. Joseph's administrator, Mother Bernadette: "Our philosophy rests on respect for the human being—respect for his soul and spirit as well as his body."

The one problem with a place like St. Joseph's is the difficulty of getting in. Most of its residents come from Fairfield County, Conn., and the majority are Catholics, though other religions are represented. There's a long waiting list. Unlike some institutions, St. Joseph's and similar homes demand no life contracts, assignments of assets or other money-grabbing arrangements. The base rate paid by its occupants is \$463 a month. It operates at a loss, of course, which is made up by donations from the Bridgeport Diocese and by the devoted services of the Carmelite Sisters.

Deficits—and services—also are the stories of such excellent institutions as the Isabella Geriatric Center of New York City, affiliated with the Federation of Protestant Welfare Agencies, and Golden Acres of Dallas, Tex., which has the support of the Dallas Jewish Welfare Federation.

The administrators of these institutions call them places "to live, not to die." The elderly residents themselves describe them even more eloquently.

Says Miss Bessie Bishop, an 85-year-old retired New York City schoolteacher who pays \$321.50 a month for one of the 231 cheerful apartments in Isabella House, a beautiful new 17-story edifice in upper Manhattan: "I get everything here. A beautiful apartment, good meals, and a wonderful feeling of security. I don't have to worry about getting sick at night. I just press the buzzer. I stay cheerful and enjoy myself. I go out every day, visit friends, go to the theater. I wouldn't be anywhere else."

OBJECTS OF LOVE

Adds a 91-year-old woman who lives down the hall: "I love it here. They don't let you rot away. They make you feel that you not only have a brain but that you should use

it as long as you're alive. They help give you the grit to keep on living. That's why I won't ever give up."

Director Herbert Shore of Dallas' Golden Acres agrees that a good home should have as its prime objective to preserve social and intellectual skills, as well as bodily well-being. "We want to treat the total person," he says, "not just a broken hip or cardiac condition."

Golden Acres, which gives its 164 residents keys to their rooms and to the front door, and lets them come and go as they please, will run risks to help foster a spirit of independence. It once sent a busload of its elderly residents 250 miles to the HemisFair in San Antonio. "We decided we'd take the risk of someone dying on the trip," explains Shore. "At that age, they could die suddenly in bed. On an enjoyable outing, at least it's with their boots on."

Shore also has an unexpected word of understanding for families who want to send aged parents or grandparents to a nursing home. Most families, he says, haven't got the know-how, to say nothing of the money, to care for the aged. "Children," he contends, "shouldn't give up their lives just for an old parent, especially when this care can almost never be as full as it should be."

A 76-year-old man living at Golden Acres agrees with him: "I have seven daughters and I could live with almost any one of them. But they have their own lives to lead, and so do I. With them, I'd feel left out and in the way. I'm better off here."

At Golden Acres and at Isabella, as at St. Joseph's, there are hundreds waiting to get in. For though homes such as these can and do operate throughout the country, there simply aren't enough of them. Instead the U.S. has seen a tremendous upsurge in recent years of private, proprietary, profit-making nursing homes—their growth abetted largely by Medicaid and Medicare payments from the government. It's estimated that federal expenditures for nursing home patients amount to \$750 million a year. Concurrently, new nursing home issues have burgeoned on the stock market, with the magazine *Harvest Years* reporting that such securities "are hotter than they've been for years."

A FUNCTION TO PERFORM

Officials of places like St. Joseph's, Isabella and Golden Acres acknowledge that the private nursing homes have a function to perform—they only wish that some of them would perform it better.

Parade visited one of the better private nursing homes, Hillhaven of Orange, Calif., one of a chain of such institutions. It's a pleasant, modern one-story building with a 112-bed capacity. Fees are \$35 a day for a private room, \$22 for two in a room, \$17 for three. Anything above basic services costs extra.

Unlike St. Joseph's, Isabella and Golden Acres, Hillhaven isn't a geriatric center operating at all levels of old age care, accommodating those in good health and bad alike. It's strictly for sick people, and since a great deal of medical care is often required, bills can soar. The average length of stay is seldom more than 90 days. Explains Hillhaven's administrator, Mrs. Florence Kirkland, a registered nurse: "A place like ours can't take all long-termers. We'd become a warehouse. Also, we'd lose money."

GOOD EATING

To a visitor, a Hillhaven hasn't got the heart or the warmth of an Isabella, a St. Joseph's or a Golden Acres. But its staff is ample, its administrators patient, its upkeep meticulous, and its meals excellent. Most of the patients seem to be reasonably content as they sun themselves outdoors, watch TV in their rooms, or chat with visitors in lounges. To relatives of old people who might have guilt feelings about send-

ing them "away," places like Hillhaven are a paradise compared to many nursing homes.

But do they provide an adequate answer in a country whose over-65 population now is over 18 million, and is rising rapidly as new advances in medicine and science expand the average span of life? Many responsible authorities are of the opinion that while the private establishments should continue to play an important role in meeting the problems of our aging population, a much more comprehensive, systematic, and communally supported approach is needed. Sums up Isabella's Lawrence E. Larson: "Laws and regulations must be changed to recognize that this kind of care is not a function of charity, but a public responsibility."

CONCLUSION OF MORNING BUSINESS

Mr. MANSFIELD. Mr. President, is there further morning business?

The PRESIDING OFFICER. Is there further morning business? If not, morning business is concluded.

AUTHORIZATION OF APPROPRIATIONS FOR FISCAL YEAR 1970 FOR MILITARY PROCUREMENT, RESEARCH AND DEVELOPMENT, AND FOR THE CONSTRUCTION OF MISSILE TEST FACILITIES AT KWAJALEIN MISSILE RANGE, AND RESERVE COMPONENT STRENGTH

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the unfinished business be laid before the Senate.

The PRESIDING OFFICER. The bill will be stated by title.

The LEGISLATIVE CLERK. A bill (S. 2546) to authorize appropriations during the fiscal year 1970 for procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, and to authorize 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.

The PRESIDING OFFICER. Is there objection to the request of the Senator from Montana? The Chair hears none, and it is so ordered.

UNANIMOUS-CONSENT AGREEMENT

Mr. MANSFIELD. Mr. President, after discussing the matter with the distinguished Senator in charge of the bill and the ranking minority member, and in view of the situation which developed on the conference report, I ask unanimous consent that, apart from the time allowed, the distinguished Senator from Wisconsin (Mr. PROXMIER) be recognized for a period not to exceed 15 minutes; and that at the conclusion of his remarks, the time begin to run.

The PRESIDING OFFICER. Is there objection? The Chair hears none, and it is so ordered.

THE FIGHT TO CUT MILITARY WASTE

Mr. PROXMIER. Mr. President, as the debate over the military procurement authorization bill draws to a close, I think it is useful to say a word or two about the meaning of the debate and its implications.

WHAT WE DID NOT DO

Let me say first of all what the debate was not.

It was not an endeavor to reduce the security of the United States, to pull back into a "shell of isolationism," or an attack on the brave men and women who serve in the Armed Forces of the United States. Such a charge is utter nonsense, and those who make such charges have both little perception and almost no sensitivity to the real purposes of this debate.

MILITARY MIGHT

This country has over 1,000 land-based intercontinental missiles. It has 650 nuclear armed strategic Air Force bombers. It has 41 Polaris submarines with 656 submarine-launched ballistic missiles. With 16 missiles each and with each missile soon to be armed with three to 10 warheads, our submarine fleet alone could destroy the world.

In addition to this, we have tactical nuclear weapons in place in various spots throughout the world. Medium-range bombers and missile sites encircle the frontiers of our potential enemies.

From public sources it is known that the United States has over 6,500 nuclear warheads.

We have a military budget, including related NASA and AEC military requirements, of almost \$80 billion. There are 3.4 million men and women under arms; 1,300,000 civilians work for the Defense Department. And 100,000 companies, employing 3.8 million civilians, fill defense orders.

The military and civilian personnel not only work at home, but also, many are stationed at the 429 major and 2,972 minor bases scattered throughout 30 countries of the world.

NO NEW ISOLATIONISM

The idea that the amendments our group offered, merely to bring this vast complex under some form of critical review, is the "new isolationism" is utter, blatant nonsense. Such a proposition takes the prize for silly sayings of the year.

If the effort we have made was clearly not an attack on the military forces or an attempt to withdraw into a shell of isolationism, how can it be characterized?

AN EXERCISE OF CRITICAL FUNCTIONS

It was an attempt, for the first time in almost two decades, to get Congress and the country to exercise its critical faculties over defense spending.

We have seen excessive spending on weapon systems. We have routinely witnessed a doubling and tripling in the cost of major weapons, long delays in delivery, and vast quantities of equipment which does not function.

We have seen rifles for infantrymen and cannons for tanks which do not work. We have spent huge funds from our exchequers for planes which do not fly and helicopters which do not function. We have stood by while ships have sunk in harbor.

COUNTRY CAN BE STRONGER

Our fight to right these wrongs can make this country stronger and more

secure. I believe that is both the intent and the effect of our effort.

In addition to bringing greater security to the country by exercising our critical functions, this fight was a fight to stop excessive spending and to bring inflation under control.

FIGHT ON INFLATION

In the fight on inflation, it is the almost \$80 billion in defense spending which is the root cause of the trouble. Those who stood up and were counted to reduce funds and to take a second look at the 4th wing of the C-5A, the AMSA, the carrier, the main battle tank, excessive research, and chemical and biological warfare are the front line troops in the fight on inflation.

The Whittaker Report on the C-5A indicated that only 40 planes were needed to carry out the special military mission of that plane—to carry the outsized equipment of an armored division during the first 10 days of an emergency. That is its only and unique purpose. Troops can be carried for about half the cost in other planes. After 10 days or so, ships can carry military equipment at far less cost. According to the military request itself, we needed 40 planes to do the military job.

WE BLEW A BILLION BUCKS

We authorized and funded 58 of those planes. Some of us tried to stop at 58—18 more than its military mission requirements. But the Senate disagreed. The minimum cost of that decision before all the costs are in will be \$941 million dollars. Shortly, it will be higher. In my judgment, we blew a billion dollars for 23 planes we do not need.

That does not strengthen our country; it weakens us. That does not stop price rises. It fuels the fires of inflation. That does not increase the well-being of the American people. It contributes to the relative decline in their earnings and in their prosperity. It hurts the aged, the weak, the wage earner, and those on fixed incomes.

HIGH COST TO TAXPAYER

The \$2 billion overrun on the C-5A airplane was more money than all the individuals in Wisconsin paid in Federal income taxes in 1968.

In fact, the \$2 billion overrun on the C-5A is more money than the taxpayers in each of 40 States paid in Federal income taxes in 1968.

But instead of learning from that lesson, and examining the matter more critically, we blew a billion dollars on the 4th squadron of the C-5A, the first plane of which is not even scheduled to be delivered for almost 2 years.

THE "LOOK BEFORE WE LEAP" FIGHT

Another description can be applied to our effort. Our fight should be called the "look before we leap" fight. That is fundamentally what we asked the Senate to do. Stop. Look. Listen. Do we need it? Is it necessary? Have we asked the right questions? Do we have the answers?

RESULTS

What were the results of the efforts which took place here on the floor, which came from the hearings which my

Economy in Government Subcommittee held, the publication of the Peace Through Law group's fine critique of weapons systems, the fight to postpone the deployment of the ABM, and the ferment these and other efforts aroused in the country?

Let me list some of the results.

WEAPONS SYSTEM QUESTIONED

For the first time in two decades, a major weapons system was challenged on the floor of the Senate. By a margin of only two votes, the ABM is to be deployed. For the first time, questions were raised, critics testified, a real debate took place. The country is healthier because of that effort.

THREE BILLION DOLLAR CUT

Second, the bill we have before us is \$3 billion less than originally requested. The general critical effort made by a wide variety of groups has, in my opinion, brought a \$3 billion cut in this military authorization bill.

Seldom do budgets get cut by direct amendment on the floor of the House or Senate. We have made some notable successes there, but that is not the fundamental way it happens.

EFFECTIVE PUBLIC OPINION

What happens is that the country gets involved because of hearings, debate, and questioning. President Johnson asked for \$23 billion for military procurement. As a result of public opinion and fiscal pressures, President Nixon cut that by a billion. Then, when the force of public opinion and the spotlight of attention was focused on military waste, the Department itself took action—an action I am convinced they would never otherwise have taken. MOL was canceled. It was announced that the Cheyenne helicopter was to be stopped. Troops were cut back. Old ships were placed in moth balls.

All this was the indirect result of our effort.

SUBCOMMITTEE FUNCTIONED

Then the Armed Services Committee itself went to work. The chairman, the Senator from Mississippi, broke down his committee into subcommittees. In some crucial areas, testimony was sought from supporter and critic alike. The Senator from New Hampshire (Mr. McINTYRE) made major reductions in the research and development funds—reductions which in my judgment were long overdue and which will strengthen rather than weaken us.

Altogether, almost a billion dollars was cut by the committee. And this, too, was the result of the general critical attitude which was fostered in the Nation. It was the result of the attitude of an informed electorate. That is all to the good.

FLOOR SUCCESSES

Finally, we have had some excellent results here on the floor. On procedural matters, our attempts to improve procurement and contracting, and our efforts to get more and better information in the future, this debate has resulted in a vital first step toward control of military spending. Virtually every legislative recommendation made last May by my subcommittee is being carried out.

In our efforts to cut and delay the de-

ployment of particular weapon systems, we have not had great initial success. But I predict that as time goes on and as public opinion is aroused more against waste and inefficiency, the President, the Secretary of Defense, the Members of Congress, and public opinion will in fact make further cuts in those areas which we have criticized and on which we have focused.

FURTHER CUTS WILL COME

All of this will not be done directly on the floor of the Senate, although some of it will. But because of our fight it will be done at the Budget Bureau, at the White House, and in the executive sessions of our committees.

And the weapons we have criticized, the procedures we have brought under examination, and the practices which are unacceptable will, in my judgment, be changed over time as a result of our effort.

HISTORIC FIGHT

This has been an historic fight to control military spending, to stop inflation, and to return the critical decision over what weapons are deployed, how much is spent, and what policies we pursue to the people of the United States.

Mr. President, I do not mean to imply for a minute that this fight is over. Obviously, it is just the beginning; obviously, many people will feel it has been lost. I think it is beginning; it is a good beginning; and with this new beginning we can go on to what I think is going to be by far the most critical attempt in the Senate and in the House of Representatives, over the next few years, on American priorities; whether we have to devote this enormous sum, what appears to be perhaps an increasing sum, to the military, or whether we can have a stronger military force, a fully and completely adequate military force, and meet our priorities at home, including some measure of tax relief, including fighting inflation, and including meeting what we recognize as our serious domestic needs for education, fighting poverty, and so forth.

We have made the fight. The results speak for themselves. But this is merely the beginning shot in a larger effort. The critical review will go on.

Mr. HARTKE obtained the floor.

Mr. MANSFIELD. Mr. President, will the Senator yield?

Mr. HARTKE. I yield.

Mr. MANSFIELD. Mr. President, I suggest the absence of a quorum, apart from the time under the agreement.

The PRESIDING OFFICER (Mr. HOLINGS in the chair). 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.

The Senator from Indiana is recognized.

Mr. HARTKE. Mr. President, I yield myself 12 minutes.

The PRESIDING OFFICER. The Senator from Indiana is recognized for 12 minutes.

Mr. HARTKE. Mr. President, those of us who have offered amendments to the pending military procurement authorization bill share with every other Member of this body a determination to keep America's defenses overwhelmingly powerful. Every one of us recognizes how vital it is, not only to the United States but to all the people of the non-Communist world, that our military power remain sufficiently great to deter potential aggressors. There is not a Member of the Senate who does not understand the bitter principle of 20th century international politics—that weakness does not prevent war, it invites it.

Our efforts during these long weeks of debate have in every case been directed toward the elimination of what we believe to be waste and inefficiency. We have proceeded on the assumption that 5, 10, 20 billions of dollars expended on unnecessary or gravely questionable weapons systems is that much money wasted—and America weakened by precisely that amount. In short, Mr. President, the issue has never been between those who favor a strong America and those who favor a soft, flabby debilitated America. The issue has always been one of differences of judgment among the 100 U.S. Senators every one of whom is passionately dedicated to keeping America powerful, proud, and free.

It is in that spirit that the distinguished senior Senator from Oregon and I offer our amendment to the pending bill.

Mr. President, the military authorization bill before us contains \$450 million for the Navy F-14 fighter. This is only the first installment on an enormous program. The 10-year cost to buy and operate F-14's for the Navy and Marine Corps has been estimated at \$25 billion—over three times as much as the administration estimated for the ABM program. The F-14 program has been the center of controversy within the Department of Defense for the past 2 years. The issue is not whether the Navy should develop a new fighter to replace the F-111 and F-4; there is widespread agreement that they should. Rather the controversy revolves around the type of fighter that should be developed.

It would hardly seem that the floor of the Senate is the appropriate place to discuss the design of a new Navy fighter. However, there is much more involved in this debate than the shape of the wing and the size of the engine. The issues involved in the F-14 decision range from broad national policy regarding the type of wars we want to prepare to fight, to crucial assessments of the nature of air warfare in the future. The decision that is made will have profound effects on both the capability and cost of our tactical air forces in the 1970's.

In just a moment, I will discuss these issues in more detail. For the present, I can illustrate the magnitude of the decision by pointing out that critics of the F-14 program claim that the Navy can develop a much better air-to-air fighter and at the same time reduce the 10-year costs by as much as \$15 billion.

Just who are these critics? First, and most important, there is a host of critics among the Navy fighter pilots who will

have to fly the new aircraft. The question of the fighter design has been the subject of heated debate within the Navy for several years. It is an open secret that the Navy pilots did not like the F-111B. When the F-111B was canceled, many of the fighter pilots tried to get the admirals to develop the small, simple, and very maneuverable fighter that they believed would be essential to meet the type of fighter the Soviets can develop in the mid 1970's. The pilots were overruled, however, by Navy management. Instead of a single-place, 30,000-pound maneuverable fighter, they got a two-place, 55,000-pound missile launching platform. Pilots operating fighter squadrons are disappointed by this decision.

When the pilots were stifled within the Navy, their cause was taken up by a group of civilians in the Department of Defense. However, these civilians have been no more successful at convincing the top level of DOD management than the pilots were at convincing the admirals.

In view of the magnitude of the issues involved in this dispute, both in terms of our capability to fight successfully in future wars and in terms of cost, it would seem that the issues should be subjected to widespread public debate. Yet, while the amount of money involved is almost twice as much as that associated with the ABM program, there has been no public debate. The primary reasons for this are the lack of knowledgeable individuals outside of the Defense Department who are free to speak up and express the alternatives and the cloak of secrecy placed around military programs. It is in the national interest that both of these constraints be removed in the future. The first can be removed by fostering the establishment of competent research groups which do not depend on the Department of Defense or the aerospace industry for financial support. The second can be removed by insisting that only essential information be withheld from the public on the basis of security classification. The recent ABM debate indicated how far it is possible to go in declassifying essential information without endangering national security.

We should insist on similar openness in other areas as well. If there has been no public debate of these issues, at least we could hope that the Armed Services Committee would carefully scrutinize the issues before reporting out the authorization bill. I am sorry to say that despite the fact that our colleagues must have been aware of the controversy over the F-14, the Armed Services Committee did not call one single witness to present the arguments against the F-14. In the absence of critical review in either the public press or in the Senate committees, I have asked the Secretary of Defense to release seven specific documents which present the other side of the story. I have yet to receive the requested material.

Mr. President, it is unwise for Members of this body to vote authorization for such a huge sum of money without thoroughly exploring the alternatives available. Some may argue that the issues are too complex to be understood by the lay person. The issues in this case, however, are considerably less complex than

those in the ABM dispute; and the costs and impact to our national security are just as large. Even if the administration refuses to cooperate—indeed especially since the administration refuses to cooperate—we should thoroughly air the pros and cons of the F-14 program. While I would have liked to have more evidence, I will try to outline the case for an alternative to the F-14 program.

There are two basic issues that must be addressed in deciding on the type of fighter the Navy should develop to replace the F-14. These are the types of wars we wish to be prepared for and the nature of air warfare in the future.

The F-14/Phoenix concept has evolved from longstanding Navy interest in protecting the carriers in a nuclear war. The concept originated in the 1950's when we were planning our forces primarily for a nuclear war with the Soviet Union. At that time it was quite clear that a single nuclear weapon delivered anywhere in the vicinity of a carrier would wipe out an entire task force. Thus, to protect their nuclear attack mission, the Navy desperately needed a weapon that would destroy 100 percent of the Soviet missile-launching bombers in a massed attack against the task force. The original proposal was called Eagle/Airee or Missileer—it consisted of a low performance, long loiter, missile platform and an air-to-air missile of unprecedented size and complexity.

The Eagle missile program was canceled in the early 1960's due to technical infeasibility. However, the Navy never gave up on the missile. It resubmitted the idea, renamed the missile—appropriately enough, "the Phoenix"—and tied it to the ill-fated F-111B airplane—again with the idea of providing a platform of launching long-range multishot missiles at formations of enemy bombers.

The Navy realized that the F-111B, overburdened with the complex electronic systems needed to launch and control the Phoenix, would not meet its needs for an air-to-air fighter in the 1970's. Even in the early 1960's it had proposed another, smaller fighter to perform the essential air combat or dogfight job.

In 1968 the Navy finally divested itself of the F-111B. The reason it offered was that the F-111B, while adequate for fleet defense, could not perform the air-to-air combat task adequately. It could not dogfight on even terms with a Mig 21, let alone the more advanced Soviet fighters of the late 1970's.

After offering this rationale for canceling the F-111B, the Navy again tied the Phoenix missile to its so-called new "Fighter"—the F-14. The Phoenix missile, with its associated two or three tons of supporting equipment, is the primary reason why the F-14 is as large, heavy, unmaneuverable and expensive as it is. Once again the Navy has designed a low-performance, long-loiter time, missile-launching platform instead of a fighter. The ex-Secretary of the Navy, Mr. Ignatius, indicated that the F-14A would only be "comparable" to the current Mig 21 in a dogfight. My information indicates this is a decidedly optimistic assessment. Obviously, the F-14A will be much worse than the Soviet aircraft we can expect

to face in the mid and late 1970's. Nevertheless, the Navy is planning to buy 67 of these inferior F-14A's at a total cost which would be as high as \$1.4 billion.

The Navy argues that the F-14B, which will have an advanced engine with more thrust, will be a better dogfighter than the F-14A. The F-14B, however, will be just as heavy and have the same undersized wing as the F-14A. Thus, it will be considerably less maneuverable than it could be without the Phoenix and all the associated fleet air defense compromises. We know it will not be as good a dogfighter as the Air Force F-15. Nor can it match the even better performance that the Soviets can build into their next fighter generation.

Quoting Navy Captain Holmquist:

Modern technology and the wonders of Avionics will certainly allow us to combine all of the functions and weapons of an all-weather attack aircraft, a fighter, and an interceptor into one aircraft. However, such an airplane would be expensive, complicated, difficult to maintain, and training a pilot and crew would present formidable problems. More important, if we allow the enemy the same technology, he can build single-purpose aircraft which would be superior to our multi-purpose aircraft in each of the missions it performs.

In view of this history it is important to examine the justification for the Phoenix in some detail.

Since the nuclear attack mission of the carrier has lost its credibility, the primary justification for the Phoenix is now defense against the same massed raids of Soviet naval bombers launching the same missiles, but armed with conventional rather than nuclear warheads. It is essential to realize that no Communist nation in the world beside the U.S.S.R. has even the beginnings of a naval bomber fleet. The Soviet naval bomber fleet itself, as Representative MAHON has pointed out, never materialized into the massive forces the Navy has been predicting for years. Thus, the Phoenix must be justified for defending the carrier in waters adjacent to the Soviet Union in a massive conventional war, with U.S.S.R. forces fully involved. Yet, under these improbable circumstances, the Soviet bombers are by no means the worst threat.

The irony of the situation is that large Soviet submarine forces make it impossible for our carriers to operate in either the North Sea or the Mediterranean, with or without Phoenix. Some here will remember that it was impossible in World War II for either British or American carriers to launch strikes from the North Sea against Germany. The situation for the carrier today is much worse; its speed has barely increased while the submarine's speed has increased by a factor of five with commensurate reductions in noise and detectability. Not only is the carrier far more vulnerable, it is also not needed since there are over 100 airfields of 8,000 feet or longer in central Europe. The Air Force has indicated that this is more than enough to handle all the tactical air needed in Europe. Since the F-4's are more than adequate against the few nonmissile-launching bombers available to the less-developed Chinese or the East Europeans,

we find ourselves in the paradoxical position of incurring the enormous cost and the fighter deficiencies of the F-14/Phoenix combination in order to defend the fleet in a theater of war where it cannot and need not be used.

The overemphasis on fleet defense that has led to the F-14/Phoenix has taken our attention away from a much greater need to develop a truly superior air-to-air fighter. If the Soviets follow their traditional policy of developing small, simple, maneuverable fighters, they can produce an aircraft in the mid 1970's that will be significantly better than our F-4's. Although we have not yet seen a Soviet fighter that is a better dogfighter than the Mig 21, we need to prepare against such a threat since the leadtime to develop a new U.S. fighter is much longer than the intelligence leadtime we will get when the Soviets produce theirs.

The Navy has, in effect, argued that the day of the dogfight is over; that in the future we can count on missiles to shoot down enemy fighters at long range. The fighter pilots have been hearing this story for a long time. They simply do not believe it. The R. & D. community has been promising better missiles for 20 years. Yet, the fact remains that fighter-to-fighter engagements have changed little since World War II. Despite very optimistic estimates and costly modifications before the Vietnam war, virtually all fighter pilots feel strongly that fighters must have guns and that the guns will be used for the majority of kills. They believe that missiles, particularly complex ones, will be unreliable, easy to outmaneuver and easy to countermeasure. We have not shot down any aircraft in air-to-air combat with missiles used outside of visual range. The position of the fighter pilots is summed-up in the following quote, again from Capt. Holmquist:

For the fighter role, speed, excess thrust, buffet boundary, roll rate, maneuverability, and altitude must be maximized, since the style of fighter-to-fighter engagements has changed little since the days of World War II and Korea.

The Navy claims that the F-14 is also optimized for air-to-air combat role as well as for fleet defense. This assertion is absurd on the face of it. First, the Air Force F-15, which will have to face the same enemy aircraft, weighs much less than the F-14 and is much more maneuverable. Clearly, the F-15 will be a better aircraft for air-to-air combat.

More important, however, there have been a series of reports in the trade journals about an alternative fighter that could be developed which would be much better, as well as much cheaper, than even the F-15. This aircraft, which has been called the F-XX or the VF-XX in the Navy version, has been described as a simple, uncompromised, single seat, single engine, under 30,000-pound fighter which derives maximum benefit from the advances which have been made in aerodynamics and engine technology to achieve an unprecedented level of agility. In addition to a gun, the aircraft would be armed with simple heat-seeking missiles, which have been by far the most effective missiles we have used in Vietnam.

There is no doubt that an aircraft of this type would completely dominate the F-14B in air-to-air combat. If we could build it, we certainly must be concerned that the Soviets might, since it is quite similar in concept to their traditional approach. Given the past performance of the missile developers, fighter pilots are simply not willing again to put their hopes and their lives on aircraft of inferior performance which rely on untested "paper" weapons for survival and victory. They want a fighter, not a missile-launching platform.

So far, I have only spoken about performance. However, not only would a simple fighter like the F-XX outperform the F-14, it would also be very much cheaper. Rough estimates indicate that the 10-year cost for this type of aircraft would be less than \$10 billion as opposed to \$25 billion for the F-14. The difference in cost between the two programs is twice as much as the total cost estimated by the administration for the ABM program.

The questions I have raised merit further study. Accordingly, the amendment we have proposed to the authorization bill would require that Congress undertake a study prior to April 30, 1970. This study would be an investigation of the requirements to be fulfilled by future carrier-borne aircraft and the projected capability of the F-14 to fulfill these requirements in the most effective and efficient manner.

This study will not delay in the slightest way the introduction of a new fighter into the Navy.

There is one final issue that concerns me about this program, Mr. President. The administration is proposing to use the total package procurement—TPP—concept with token modifications for procuring the F-14. Once again, we are undertaking a very complex technical development program based on "paper" estimates made by the contractor for the performance, risks, and costs for a new airframe, new fire control, and new missile. The DOD has arranged development and procurement so highly concurrent, that we will have to appropriate as much as \$3 billion before we find out whether the F-14 even comes close to meeting specifications, much less whether it has any usefulness as a fighter.

It seems hardly necessary to stress the obvious problems with this approach to aircraft development. TPP has led to the extreme cost overruns in the C-5A program. Already, independent cost estimates have been made which predict as much as 50-percent overruns for F-14.

TPP has also led to the technical disaster with the Cheyenne helicopter. The same people in the Pentagon who are telling us that there is little risk in the F-14 program, told us the same thing about the Cheyenne based on the same type of "paper" studies by the contractor.

Despite promises to reform the procurement procedures and to insist on testing prior to production commitment, the very first major aircraft program proposed by the new administration fails to meet these promises.

I completely concur with the very sensible recent study prepared by GAO for Senator HART on parallel undocu-

mented development. Given the technical risks associated with a complex fighter development, it would seem reasonable to insist on competitive fly-off of prototype aircraft prior to a selection of aircraft for production. While this approach may seem more costly and time-consuming at first, it will assuredly lead to a better end product, and, in the long run, is likely to produce a usable fighter at less total cost and in a shorter period of time. When faced with a competitive fly-off, the contractors have the incentive to get every ounce of performance possible out of their designs. They do this by keeping their best people on the job throughout—as opposed to the usual practice of assigning the good people to the program only until the contract is awarded and then taking them off to bid on the next one.

The competitive prototype approach permits meaningful cost estimates for the production aircraft since the contractor's bids are based on hardware rather than paper. Since the R. & D. costs are only about 4 percent of the 10-year cost, even small savings in production and operating costs can far outweigh any extra R. & D. costs that might be incurred.

In addition, the aircraft might even be available sooner since the competitive prototype approach would reduce the probability of needing extensive changes to meet performance goals—as on the F-111B and Cheyenne helicopter programs.

Finally, Mr. President, I again find it ironic that the services have complained bitterly about the lack of aircraft development programs in this country. We are told that we have not built a new fighter since the F-4 was flown in the 1950's. They stress the fact that the Soviets have flown about one new prototype each year and that this approach gives them a wide range of alternatives from which to choose a production aircraft. Yet, despite these claims, neither the Navy nor the Air Force has proposed the competitive prototype development approach for their new fighters.

These are questions and concerns that merit the special and specific attention of Congress. To gain that attention is the purpose of the amendment which Senator HATFIELD and I offer today.

The PRESIDING OFFICER. Who yields time?

Mr. STENNIS. Mr. President, I yield to the Senator from Nevada (Mr. CANNON) such time as he may desire.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. CANNON. Mr. President, I yield myself 10 minutes.

I wish to respond to the statement of the Senator from Indiana. I want to emphasize from the outset that the Armed Services Committee, charged with the responsibility for the Senate as a whole with authorizing major military weapons systems, reviewed the justification for the F-14 program in detail, which is apparently what the Senator from Indiana is attempting to have done again.

In that connection, I would like to point out that already there are over 48 studies that have been completed in con-

nection with the F-14 program. I ask unanimous consent to have printed in the RECORD at this time a "Sampling of F-14 Phoenix Applicable Studies" for the past several years, covering the F-14, engine problems, and the associated problems of the Phoenix missile, totaling 48 studies.

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

SAMPLING OF F-14/PHOENIX APPLICABLE STUDIES

"Navy Fighter Study" Vol I 28 March 1968.—Analysis of costs, performance, and schedules of alternative aircraft and their capabilities in Fleet Air Defense and other fighter roles.

"Navy Fighter Study" Vol II Threat Analysis 28 March 1968.—Analysis of anticipated threats and likely tactical situations for U.S. Naval Forces during the mid 1970's.

Chief of Naval Operations Secret Report "The Navy Fighter Program" May 1968.—This report presents the entire rationale for the VFX (now the F-14) fighter program. It includes threat assessment, consideration of alternatives, force level and cost effectiveness implications, etc.

Chief of Naval Operations Secret Report "Navy Fighter Study—Phase II" 20 May 1968.—This study reexamined the operational effectiveness contributions of the AWG-9/Phoenix and the AWG-10/Sparrow systems and again concluded that the AWG-9/Phoenix capabilities are essential to meet the broad spectrum of threats.

Research Management Corporation Report No. S-02094 of 20 March 1968.—Independent cost estimates for the F-14 based on statistical analysis of the cost of high performance aircraft produced over the past several years.

Development Concept Paper for VFAX of 23 Jan. 1968.—Analysis of the pros and cons for developing a multi-mission VF and VA aircraft for the mid 1970's.

"VFX Weapons System Proposal (U)" The Vought Aeronautics Division of the LTV Aerospace Corporation Ser 2-71200/BL-193 of 30 Sep. 1968.—In 28 Volumes. An exhaustive and complete technical proposal for the VFX aircraft containing design philosophy, management methods, risk analysis, cost effectiveness studies, service suitability, and comprehensive reports of studies, wind tunnel tests, laboratory experiment, and construction methods. The proposal included studies of advanced version and effectiveness.

"Model 225 Proposal for Engineering Development and Production (U)" Ser 747-07 2695 of 1 Oct 1968. The McDonnell Aircraft Company.—In 33 volumes with material as described for the LTV proposal. For the VFX.

"Proposal for VFX High Performance, Carrier Based Fighter Aircraft Weapon System, Contract N00019-69-C-0047 (U)". The Convair Division of the General Dynamics Corporation, Report No. GDC-ACV-68-001 of 30 Sept 1968.—In 23 Volumes with material as described for the LTV proposal.

"Proposal for High Performance Carrier Based Fighter Aircraft Weapon System VFX (U)". The North American Rockwell Corporation Serial ADO-68-32 dtd 28 Sept 1968.—In 32 Volumes with material as described for the LTV proposal.

"Contract Definition Report and Engineering Development Proposal for the VFX Weapon System (U)". Grumman Aircraft Engineering Corporation, Serial FSR-303 dated 1 Oct 1968.—In 37 Volumes with material included as described for the LTV proposal.

"The Air Target", Vol. I of Rationales for Exploratory Development Goals. (U) By the Exploratory Development Division of the Naval Material Command Headquarters dated 11 June 1968. (Secret).—Development goals

for air target threat counter in the 1980 time period are exhaustively analyzed to derive parameters and values.

"Potential Effects of Defensive Electronic Countermeasures in Fleet Anti-Air Warfare (U)" by AM Salyberg. Center for Naval Analyses NAVWAG Research Contribution No. 79 dtd February 1968. (Secret).—The report discusses the use of missile in an ECM environment.

"Advanced Navy Multi-mission aircraft Vulnerability Study (U)". The McDonnell Aircraft Company Report G095 dated 1 June 1968 (Secret).—The study analyzes aircraft design considerations, including cost trade-offs, for reducing vulnerability to combat damage.

Passive Ranging in the PHOENIX Missile System (U) Final Report in AirTask A05-510-C49/202-1/A10700-00 dated 19 Sept 1968 (Secret).—The report concerns the analysis of passive ranging techniques used by the Phoenix in an ECM environment.

"Phoenix Performance Data Report (U)," January 1968 (Confidential).—This report presents the current estimates of the trajectory and miss distance performance of the AIM-54A missile, and describes in detail the basis for these estimates. The missile configuration and its parameters are described, and studies performed since December 1963 that led to this configuration are presented.

"Air Attack Threats for the Evaluation of the F-111B/Phoenix Weapon System—1970-1976 Time Period (U)," NADC-AW-6617, 22 December 1967 (Secret).—This report presents detailed estimates of a spectrum of potential enemy threats to task force and beachhead operations and enemy airborne defenses against friendly strike missions. The report is intended to be used as a source of information on hostile capabilities in the 1970-1976 time period for use in air warfare simulations of the F-111B/Phoenix Weapon.

"Fighter System Studies Operation Analysis" Grumman Aircraft PDR-OP-174 June 1967.—Generalized aircraft designs used in conjunction with analytical evaluations to define pertinent design areas for development of point designs, which are then evaluated through the analytical and simulation methodologies.

"VFAX Increased Fighter Performance Boeing Report" PD 7026-3 of 17 January 1967.—Evaluation of threat, operational usage of VFAX, aircraft design characteristics, and performance capabilities.

"VFAX Summary Description of Aircraft Design and Engine Recommendations" Vought Aeronautics Division Report No. 2-55400/TR-2473 of 15 December 1967.—A six volume report containing the design philosophy and substantiating data for an airframe and engine combination fulfilling the requirements of TDP 11-06R1 for VFAX aircraft.

"VFAX Aircraft Design Study" McDonnell Douglas Report C-125395 of 15 December 1967.—Performance considerations and design criteria leading to the selection of a VFAX engine to meet the requirements of TDP 11-06R1.

"FAX-1 Study" North American Aviation TPA-049, Task 1 (NA-67-685) dated 8 September 1967 (Secret).—An evaluation of the potential cost effectiveness of various aircraft systems in the performance of tactical fighter and fighter/bomber missions. (Four volumes).

March-May 1967, NAVAIRSYSCOM "Fighter Comparison, F-4J, F-4 (VS) VFAX, F-111B."—A comprehensive technical, cost and delivery comparison of several alternative fighter aircraft programs conducted in-house and presented within the Navy.

12 October 1967, Grumman Technical Presentation, "A Cost Effective Approach to meeting the 1970-1980 Fighter Force Level Requirements."—Grumman's analysis and proposed solution to the fighter problem.

"Advanced Fighter Aircraft Design Studies" by four (4) major airplane producers. December 1967—

(a) Grumman Model 303 submitted by letter dated 28 December 1967.

(b) Vought Aeronautics Division (LTV) Model 505 by letter dated 28 December 1967. This was followed by a letter submittal dated 26 April 1968.

(c) North American Rockwell Model 323 by letter dated 29 December 1967.

(d) McDonnell Douglas Model 225A informally presented on 19 December 1967 and submitted on 31 December 1967.

Foregoing studies verified the Navy's in-house fighter studies and provided the backup technical and cost data for the Navy Fighter Study of early 1968.

"VFAX Technical Development Plan (TDP)" dated 31 May 1967.—An updating of the total development plan originally issued in 1966.

"NASA Presentation to Defense Science Board on Advanced Fighter-Attack Aircraft, LWP-447" dated 11 July 1967.—Study of FX and VFAX aircraft requirements with state of the art.

"Lockheed and Vought Aeronautics Presentation to Defense Science Board. Tactical Aircraft Task Force Meeting" 11 August 1967.—Study of FX and VFAX aircraft requirements.

"The 1975-1980 Fighter/Attack Aircraft Advanced Planning Study, Final Report (U)", (Six Volumes) by the McDonnell Aircraft Corporation. Report B151, Vols. I to II dated 11 March 1966 (Secret).—The study develops the threat, appraises the technology, compares the effectiveness of concepts and recommends development toward optimized systems.

Tactical Aviation Study—Progress Report Phase I 12 May 1966.—Develop an analytical rationale for the composition of future carrier air wings, for the ratio of carrier air wings to carrier decks, and for total carrier force level.

"Air Attack Threats for the Evaluation of Weapon Systems in an Anti-Air Warfare Simulation (AAWS), 1968 to 1975 Time Period (U)," NADC AWRD TM-2-66, 18 January 1966 (Secret).—The purpose of this memorandum is to define selected enemy threats in sufficient detail to permit their use in comparing weapon system effectiveness in an anti-warfare simulation. Three battle situations are provided: a fleet anti-air mission; a beachhead air superiority mission; and a strike-escort mission.

A VFAX Parametric Aircraft Design Study Report ASR-415-3 of 11 November 1966.—Tradeoffs between engine size, wing area, takeoff gross weight, and costs for VFAX type aircraft.

The Fighter Gap—Naval War College by Capt. F. T. Rooney May 1966.—Evaluation of the nature of fighter aircraft, the mission, and operational criteria with resultant aircraft design requirements.

Boeing Preliminary design and Trade Study, High Performance Multi-Mission Fighter/Attack aircraft. Acceleration Trade Study. Contract NOW 65-0491-C dated April 1966.—One of the contract studies conducted to determine the sensitivity of requirements prior to a competition for a new fighter covered effect of performance requirements on size, cost, and effectiveness; compared several design approaches with foreign threat designs.

1966 FAX Study Review Team.—A DDR&E sponsored group investigating Air Force and Navy fighter requirements for the FX and VFAX, respectively.

"Air Defense Expected Kill (U)," Veda Memo CRV-18/551, 30 September 1966, (unclassified).—This memo consolidates the explanation of the statistical technique used for determining the expected kill for a sequence of interceptors each carrying a mixed missile load against a wave raid.

"Warhead Lethality Comparison (U),"

COMNAVMISEN letter to COMNAVAIR-DEVCON, serial no. 00183 of 4 August 1966 (Secret).—This letter presents the results of a lethality analysis of the AIM-54A missile against three selected threat targets using specified initial conditions and fuze/warhead parameters. (4 pages)

"Warhead Lethality Comparison (U)," COMNAVMISEN letter to COMNAVAIR DEVCON, serial no. 00183 of 21 October 1966 (Secret).—This letter compares lethality estimates for the AIM-7F, AIM-9D, and AIM-54A missiles. It also revises some data presented in reference 2 above. (5 pages)

Hughes Conf. Report B1940 "Phoenix/VFAX Study" 28 Sept 1966.—This study was performed after the need to replace the F-111B became increasingly evident. The study demonstrated the feasibility of reconfiguring the AWG-9/Phoenix system to make it compatible with a tandem, smaller, high performance fighter of the VFAX class.

Grumman Conf. Report ASR-415-2 "VFAX/AWG-9 Integration Study" dated 13 October 1966.—Study performed under Contract NOW66-0567-C, investigated the feasibility of integrating a reconfigured version of the AWG-9 weapon control system and the Phoenix Missile into the VFAX class of fighter aircraft.

Anti-Air Warfare Study Contracts.—
(a) McDonnell Aircraft, NOW65-0667-f dated 13 Aug 1965.

(b) Grumman Aircraft, NOW65-0613-f dated 18 June 1965.

Contracts covered the analysis and preliminary design of fighter aircraft to replace the F-4 and F-111B airplanes. The McDonnell study covered an improved version of the F-4 while Grumman investigated major redesigns of the F-111B, new airplanes, and A-6 modifications.

BuWeps Secret Report No. R-5-65-5 "Cost Effectiveness Comparison of F-111B with Selected Alternatives (U)" dated March 1965.—This study concluded that contingent upon the F-111B being a good carrier based aircraft, it was a cost effective system but dominated by the superior characteristics of the AWG-9/Phoenix system.

NASA Evaluation of F-14, 7 Aug 1969.—Independent evaluation of the F-14 performance substantiated by extensive wind tunnel tests and analytical evaluations. Report verified NAVAIR evaluation of F-14 capabilities.

VFX Development Concept Paper, June 1969.—Reviews the threat, methods of countering the threat, alternatives, cost effectiveness, and OSD decision to proceed with the VFX concept.

BuWeps Secret Report No. R-5-65-1, Jan. 1965 "An Evaluation of Attack and Attack Fighter Aircraft for the 1970's (U)".—A comprehensive systems analysis of a wide variety of alternative systems and force mixes. This study provided the basis for the SOR (Specific Operational Requirement) for the VFAX program which later evolved into the VFX program.

BuWeps Confidential Report No. R-5-61-14/2 "Factors Determining the TFX (N) Weapon System Characteristics" dated September 1962.—An early weapon system trade off study that led to defining the AWG-9/Phoenix weapon system characteristics and clearly demonstrated the need for a long range, multi-shot missile system for fleet air defense.

Project Stone Final Report Hughes Report PMS 86-1/2141 21 February 1969.—Comprehensive analysis of Phoenix capability against cruise missiles and their launchers.

Phoenix Performance against Multiple Barrage Jammers Hughes Report 2143.20/17 21 February 1967.—Study results with three encounters with multiple jammers.

Comparison of Multi Mission Aircraft in a Seven Day Limited War Campaigns Analysis (U) Final Report Secret NADC—WR-

6528 Naval Air Development Center, Johnsville, Pa. 30 Dec. 1965.—A computerized escort-self escort comparison of the proposed VFAX aircraft and existing aircraft. Mix ratios were examined for combinations of attack and multi-mission aircraft. The VFAX/A1B combination carrier loading was superior to the F4J/A7B and unescorted A7B.

"One versus two-can crew study final report (U)" North American Autometrics Report C6-94/312Q DCN 66AN 511581. Dated 31 Jan. 1966 (Secret).—This study, performed under Bureau of Naval Weapons contract, investigates crew size requirements for a 1970-1975 time span multi-mission (air-to-air/air-to-ground) type aircraft.

"Evaluation of Expected Kill of Mixed Loadings Against A Wave Raid (U)," Veda Memo CRV-15/551, 20 July 1966, (Unclassified).—The memo develops a generalized statistical technique for determining the expected kill for a single interceptor carrying a mixed missile load against a wave raid. This computational technique yields a precise value of expected kill as a function of interceptor combat time (generated by STAB II) and missile firing doctrine.

"Expected Kill for a Cluster of Targets Protected by a Jammer (U)," Veda Memo TEM-2/551, 26 August 1966 (Confidential).—This memo explains a preliminary statistical technique for determining the expected kill when several missiles are launched against a cluster of targets which are screened by a single ECM aircraft.

Mr. CANNON. As a matter of fact, Senator STENNIS appointed me chairman of a special Tactical Airpower Subcommittee on February 28, 1969. Distinguished colleagues serving with me on this subcommittee were Senators SYMINGTON, JACKSON, YOUNG, THURMOND, TOWER, and GOLDWATER.

Senator STENNIS asked specifically that we concentrate on the justification for both the F-14 and the F-15 fighter aircraft programs.

Members of the Tactical Airpower Subcommittee spent several weeks reviewing 15 major tactical weapons and weapon systems. As a result of our deliberations we recommended the denial of fund authorizations in the amount of \$558.5 million in various tactical weapon systems.

After extensive briefings, the subcommittee recommended that the F-14 and F-15 programs be supported by the full committee. All of our recommendations were subsequently adopted by the full committee. Therefore, I want to positively assure the distinguished Senator from Indiana that the Senate Armed Services Committee did not give, as he has stated "blank check approval of that—F-14—weapon system which is found in the bill as it reads today."

As chairman of the Tactical Airpower Subcommittee, I would like to review briefly the compelling reasons that led the Tactical Airpower Subcommittee to the unanimous recommendation that the F-14 program should be fully supported and authorized. I shall be happy to expand or discuss with any Member any particular point after concluding my remarks.

THREAT

Whether any new air superiority fighter is required or not depends on the threat to our national security. If there is no threat, then we can rely on or make do with older less effective weapon systems. If there is a threat, then in good

conscience we must recommend those actions necessary to protect our national security. Is there a threat in the tactical air superiority area? I believe unquestionably that the evidence conclusively demonstrates there is a distinct and serious threat. I believe that if we do not pursue both the F-14 and the F-15 air superiority aircraft programs the United States will be inferior to the Soviet Union by 1975. Why is that so? The only aircraft in our inventory today with an acceptable air-to-air combat capability is the F-4. This aircraft has been and is an excellent weapon system. However, it is critically important to recognize that its technology dates back to 1954. In an age of rapidly advancing technological achievements the F-4 could not cope successfully with Soviet aircraft in the mid-1970's.

Today the most likely enemy air superiority aircraft is the Mig-21. Expert testimony has established that the F-4 is considered equal in performance to the Mig-21 at normal fighting altitudes. We then must determine whether the Soviet Union has improved upon the Mig-21. The Soviets since 1954, when the F-4 was designed, have flown 18 new models of modern-type fighter aircraft. Obviously not all of these different models have gone into production or become operational. However, it afforded the Soviets with many modern flying prototypes from which it could select the very best for production.

Seven of the 18 new models were seen for the first time by the free world at the July 1967 Moscow airshow. At this airshow, we first saw the Foxbat, the present holder of the world's speed record. Intelligence sources estimate at least three of the new fighter aircraft seen for the first time then are currently in production or will be shortly.

During the past decade the Soviet Union has introduced at least one new type operational fighter every 2 years. A total of six, with 11 models; namely, five models of the Mig-21 Fishbed; two models of the Fishpot; and one model each of the Fitter, Firebar, Fiddler, and the Flagon.

The Soviet Union has concentrated on tactical aircraft specifically oriented for the air superiority role. In contrast, the United States has developed and relies on the F-4 for the air superiority role.

It is fundamental that the new Soviet aircraft flown in 1967 will be superior to the Mig-21. Further, when they are operational they will be superior to the F-4. A nation with its eyes on the future, and what potential adversaries may do, obviously will not develop and deploy new weapon systems inferior to existing models.

Our informed experts agree the F-4 aircraft, designed on a 1954 technology, will be totally inadequate to cope with the highly sophisticated aircraft of potential enemies in the mid-1970's.

A modern fighter takes several years to develop and produce. This is an inevitable and inescapable fact. Therefore, it will be 1975 before our new air superiority fighters are operational, with the exception of the F-14A which will be operational in early 1973.

It is well recognized that if the air space is controlled, then the battle area

and surrounding terrain is controlled. If the air space is not controlled, then other tactical aircraft designed for air-to-ground missions will be relatively ineffective. Even modern aircraft designed for air-to-ground roles require a "permissive" environment, that is, no heavy enemy fighter opposition if they are to be successful. Yet, in the face of this unquestioned fact, the United States for the last few years has concentrated on the development of air-to-ground aircraft for the interdiction and close air support missions.

F-14

Now I would like to discuss the F-14 program and whether it will be able to meet its primary mission requirement—to achieve air superiority. The Navy and its aeronautical experts have stated it will be fully capable for this vital mission. Inasmuch as carriers are deck limited and can carry only a limited number of aircraft, the F-14 must also perform the fleet air defense mission. Otherwise we would have to buy two different types of aircraft—one for the air superiority mission and one for the fleet air defense mission. Many people, including myself, were initially concerned as to whether the F-14 would be unduly compromised in the performance of its air superiority mission by virtue of the added responsibility of performing the fleet air defense mission carrying the Phoenix missile system.

Dr. Foster, and his technical experts in the Department of Defense, also had this concern. Therefore, they requested the National Aeronautics and Space Administration to determine if the performance characteristics established by the Navy were reasonable and capable of attainment. NASA, after reviewing all of the major data and conducting tests on its own, advised Dr. Foster that the multi-mission performance estimates of the Navy were attainable without any significant degradation of the pure fighter capability of the F-14. The Department of Defense Research and Engineering Office has also concurred with the Navy's estimates. I was reassured by the findings of these aeronautical experts and I do not think anyone, therefore, without proper qualifications should make findings to the contrary.

I feel it is important to understand that an air superiority aircraft is not dependent for its success on any one feature, such as speed. An air superiority aircraft to be successful must be a "balanced" aircraft capable of speed, acceleration, climb, maneuverability, and so forth. This involves consideration of weight, thrust to weight ratios, wing loading, and so forth. The design experts must review all of these requirements and put them in proper balance in order to achieve a true air superiority aircraft.

I would like to say a few words about the Phoenix missile system. This is the main armament for the F-14 in the Fleet Air Defense role. The present program calls for "palletizing" the vast bulk of the equipment associated with the Phoenix missile. This means that when the aircraft is configured in the air superiority role the Phoenix missile and most of its associated equipment will be removed. I have with me today a model of the F-14

which shows how this will work in practice.

The subcommittee was advised that if the F-14 was designed exclusively for the air superiority role—without any Phoenix weapon system capability—that it would weigh only 600 pounds less than the present F-14 design. Let me make this point very clear. The Navy experts have stated that if they designed an aircraft exclusively for the air superiority role without considering any other mission it would weigh only 600 pounds less than the present F-14. The Navy feels, and I agree, that the 600 additional pounds the F-14 will weigh in order to give it the capability of carrying the Phoenix missile system is an insignificant penalty when we consider the great value realized; namely, the ability to perform the Fleet Air Defense mission.

The development of the Phoenix missile system has been a very complicated risk. However, 21 of the planned 26 test launches have been fired and 16 were extremely successful. This is an impressive record when one considers the tremendous advance in the state-of-the-art represented by the Phoenix. For example, Mr. President, the Sidewinder air-to-air missile which has enjoyed a very enviable record over the past few years, had great difficulties early in the R. & D. phase. Nearly all of the first 50 R. & D. firings of the Sidewinder missile were failures. Therefore, I think everyone should understand and appreciate that research and development is an essential phase every major weapon system must go through. Obviously any program has its temporary problems and not all test firings are successful during that period.

COST

The distinguished Senator from Indiana has stated the F-14 program will ultimately cost \$25 billion. I have no information to support that figure.

The Navy has contracted with the Grumman Corp. for 469 F-14 aircraft—six R. & D. and 463 production aircraft—subject to the approval of the Congress. The information I have shows the program will cost \$6.4 billion. This includes all 3 models, the F-14A, the F-14B and the F-14C. It includes \$1.3 billion for R. & D. and \$5.1 billion for production. Most importantly, these figures are based on escalated dollars which means that provision has been made for a 4-percent compounded annual increase in cost for inflation from 1970-76.

I previously stated in my speech on the Senate floor on July 10, 1969, that the estimated unit cost per aircraft would be \$15 million each. It is exceedingly important for every member to recognize that this unit cost includes spare parts, ground support equipment, and a proper share of all R. & D. expenses. To my knowledge this approach by the Tactical Air Power Subcommittee has not been used previously. In the past we have always talked about "flyaway" costs. This is the cost of an aircraft sitting on the runway ready for takeoff. This cost excludes ground support equipment, training, spare parts and a proper share of R. & D. Obviously, our method gives a higher cost figure. However, I believe our cost basis is more realistic

because it includes all associated costs with an aircraft and not merely those costs associated with equipment physically on the aircraft.

The Navy has recently advised me that it uses \$13.6 million per aircraft for the F-14A and F-14B programs. It did not include estimated costs for the F-14C because it is so far down the road. The F-14C would ultimately provide for new micro-miniaturized avionics. No funds have been requested or spent on the F-14C to date. However, the \$6.4 billion figure referred to previously includes the estimated R. & D. costs of the F-14C of \$326 million.

The \$13.6 million per aircraft includes \$8.5 million flyaway costs, \$1.1 million support costs, \$2 million for spares, plus \$2 million for a prorated share of R. & D.—a total of \$13.6 million per aircraft. This is for 469 aircraft. If the Navy were to purchase 716 F-14's—the Navy's present force level requirements—it would cost \$12 million each.

Mr. President, I yield myself an additional 5 minutes.

The PRESIDING OFFICER. The Senator from Nevada is recognized for an additional 5 minutes.

Mr. CANNON. Mr. President, obviously when more aircraft are purchased the unit cost is substantially reduced.

For example, Senator HARTKE compares the \$15 million costs of the F-14 to the \$3 million cost for the F-4. This is comparing apples and oranges. The costs for the F-14 as computed by the Tactical Air Power Subcommittee, includes all costs, that is, flyaway, ground support costs, spare parts costs, and a prorated share of research and development. The \$3 million figure for the F-4 is "flyaway" cost only.

The flyaway costs for the F-14 is \$8.5 million in escalated dollars for 463 aircraft. If we used 1970 dollars—without allowing for future estimated inflation—it would be \$7.5 million each. The cost of the first 463 F-4 aircraft was \$3.6 million each. This was between 1955-63. If we escalate this to 1970 dollars based on actual Bureau of Labor Department statistics the first 463 F-4 aircraft "flyaway" costs would be \$3.9 million each. Therefore, to make a fair and accurate comparison we should compare the \$7.5 million cost for the F-14 to the \$3.9 million flyaway cost of the F-4 using 1970 dollars. Also it is important to realize that the F-14 will use 1969 technology versus the 1954 technology of the F-4.

I want to reemphasize that these costs are in escalated dollars. This allows for a 4-percent cost compounded annually for inflation. If we used 1970 nonescalated dollars, the \$13.6 million per aircraft would be \$12.4 million per aircraft for 463 aircraft. If we purchased 716 aircraft, the unit cost would drop from \$12 million to \$10.4 million per aircraft.

I certainly am not attempting to convince any Member of the Senate that the F-14 is a cheap aircraft. It is not. No new modern weapon system in this day and age cost a few dollars. We must pay for the drastic inflation encountered in this country since 1964. Unfortunately, we cannot go down to the local dime store and procure complicated weapon systems containing the highest sophistication.

Personally, I have weighed in my own mind the requirement for the air superiority aircraft for the Navy versus the cost to be encountered. It is my conclusion that these costs must be incurred because of the paramount importance of properly providing for our national security.

Mr. President, before I close my remarks I would like to tell the Senators why I feel it is important to proceed with the F-14A, using the TF-30-P412 engine and the Phoenix weapon system developed for the F-111B, rather than waiting for the F-14B which will incorporate the advanced technology engine—ATE. If we canceled the F-14A and waited for the F-14B, it would cost the American taxpayer \$340 million additional. Of equal importance is the fact that we would delay the introduction of the F-14 into the fleet more than 2 years—from early 1973 until 1975. No one can predict what national security risks we may encounter between 1973 and 1975. I do not feel we can afford to run such a risk.

TF-30—P-412 ENGINE

I would like to advise the Senate, Mr. President, that the TF-30/P-412 engine for the F-14A is not an "old" engine as stated by my distinguished colleague from Indiana (Mr. HARTKE). This engine is the first afterburning turbofan engine developed in this country. It has the highest thrust, the highest thrust to weight ratio, and the lowest fuel consumption of any fighter engine in the Free World. The P-412 engine is the same as the P-12 engine for the F-111 aircraft after adapting the P-12 inlet for the F-14. Initial deliveries of the P-12 engine were only made last year. Not even in a remote sense can it be stated that the TF-30/P-412 is an "old" engine. Further, the F-14 airframe has been specifically designed for the TF-30 engine and the advanced technology engine. Hence, there is no "mismatch" between the F-14 airframe and its engines.

In conclusion, Mr. President, I would like to briefly mention the source of several documents mentioned by Senator HARTKE that he has requested of the Defense Department. These documents, for the most part, were prepared by personnel in the Office of Systems Analysis in the Department of Defense. I do not know what contribution, if any, these documents will provide. I do not know their contents. However, I do think it is extremely important to recognize the key and influential role in the weapon system decisionmaking process played during the 7-year reign of Secretary McNamara by the Office of Systems Analysis. Not once did this Office to any knowledge recommend the United States undertake the development of a new air superiority fighter system. They were always interested in conducting cost-effectiveness studies. While this is fine and has merit as a general rule, the results of these cost-effectiveness studies relative to tactical aircraft, concentrated on carrying iron bombs over long ranges on air-to-ground missions. They stressed such items as "cost per ton mile." It led to the conclusion that as

long as we could carry a large amount of bombs over long ranges that we had tactical aircraft superiority over the Russians. While these type missions are important it resulted in a complete failure to develop a new air superiority fighter. In addition, Systems Analysis successfully resisted all efforts by the Navy and the Air Force to initiate a new air superiority fighter program. I must say, for my part, that I do not look very sympathetically or understandably on data prepared by this Office who, after a long record of resistance, now propose that they can develop a better air superiority fighter.

Mr. President, I could talk at much greater length about the F-14 program. However, I recognize the very busy schedule presently confronting the Senate. I will be happy now to respond to any questions.

Mr. President, I yield 2 minutes to the Senator from Maine.

Mrs. SMITH of Maine, Mr. President, I thank the able Senator from Nevada (Mr. CANNON), a colleague on the Committee on Armed Services, and wish to express my appreciation for the contribution he has made in this area. He and his subcommittee have done a very effective piece of work in this area throughout the long hearings.

Mr. President, my remarks on amendment No. 164 will be very brief.

The Senate has already undertaken the task of making a comprehensive study of the carrier fleet. It stands to reason that any study on the future of the carrier must include the aircraft which represents its principal weapon.

That study would necessarily require a thorough examination of the five items set forth in the amendment.

Mr. President, this protracted debate which began on July 7 is now drawing to a close. This amendment should be summarily rejected because it represents a duplication of effort that we have already committed ourselves to accomplish.

Mr. CANNON, Mr. President, I yield 4 minutes to the Senator from South Carolina.

Mr. THURMOND, Mr. President, it is my intention to vote against amendment No. 164 which calls for a study of the need and capability of the F-14, the Navy's planned air superiority aircraft.

Early this year the distinguished Senator from Mississippi (Mr. STENNIS) named an ad hoc Tactical Air Power Subcommittee under the chairmanship of the distinguished Senator from Nevada (Mr. CANNON) to conduct just such a study.

Not only was this subcommittee, of which I was a member, charged with the study of the F-14 but they also undertook an investigation and review of 14 other major tactical air weapons systems.

This subcommittee held numerous briefings on the tactical airpower situation. It concluded its work by making a set of recommendations to the full Senate Armed Services Committee. Although these recommendations called for the discontinuance of a number of tactical aircraft programs, the seven members of the committee unanimously supported the F-14 program.

The full committee also conducted its own investigation into the F-14 program as it did on other major weapon systems. This Navy air superiority aircraft designed to meet our naval air power needs in the mid-1970's received the support of the full committee.

Mr. President, only last year the Preparedness Investigating Subcommittee of the Senate Armed Services Committee conducted a thorough study into the status of our tactical airpower programs. This investigation included hearings and the issuance of a report which is available to all Members of this body. One of the key recommendations of this report was the need to press forward with the development of air superiority fighters for both the Navy and the Air Force if we are to protect our men, ships, airbases, cities, and other targets in any future conflict.

As recently as July 10, Mr. CANNON, chairman of the ad hoc committee who made the tactical airpower study, made a lengthy speech here in the Senate in which he detailed the findings of this subcommittee and in which he laid particular stress on the comprehensive study made by this group. At this time he emphasized the great need for the F-14 and the F-15.

Mr. President, it is abundantly clear this entire area as well as the F-14 specifically have already been studied carefully by the Congress. Amendment No. 164 is calling for another study.

The import of this amendment is that the Senate Armed Services Committee has not done its job. The very opposite is true. It has not only done its job, but has done it thoroughly. Furthermore, I am confident the committee, under the able leadership of the distinguished Senator from Mississippi, will continue to study and review the F-14 and other programs as they progress.

We do not need legislation to tell this committee how to do its work. This amendment amounts to a legislative mandate to the Armed Services Committee. Where is this sort of thing to stop? If some in the Senate feel we do not need the F-14 then let us have an amendment to that effect and we can vote it up or down.

The Senate has already attached an amendment to this bill calling for a study of the Navy carrier program and as the principal weapon of the carrier the F-14 would presumably be a part of such a study. Also, it should be noted the Navy Department has conducted 46 studies in the area of what type plane is required for our aircraft carriers.

Mr. President, we are forgetting this is an authorization bill. It has already become a Christmas tree bill with amendments dangling from every branch. It appears now the Armed Services Committee no longer has a membership of 18 but rather a membership of 100. We are witnessing an attack on the committee system.

This amendment will not receive my support on the grounds I have just stated. It is my hope other Members of this body will feel likewise.

THE PRESIDING OFFICER. Who yields time?

Mr. HATFIELD. Mr. President, I yield myself 7 minutes.

Mr. President, during the discussion of our tactical airpower requirements it has frequently been asserted that the Soviets have developed 18 new models of aircraft since 1955. Not all of these models, however, have been put into production and become operational. Nevertheless, it is claimed that in the past decade the Soviets have introduced five new operational fighter aircraft.

Further, it is asserted that by contrast, the United States is still relying on the F-4, a plane designed in 1955 which became operational in 1961, as our best and only air superiority fighter. Thus, the need for a new air superiority aircraft has been strongly urged upon Congress.

Those who have raised questions and criticisms of the proposed defense authorization bill have never, to my knowledge, disputed the need for a new air superiority fighter. There may be significant differences of opinion regarding the strength and capability of our present tactical airpower in relation to that of the Soviet Union. Also, there may not be complete agreement over the urgency of this need. But, fundamentally, no one has proposed that we should abandon all plans to develop any new air superiority fighter for the future. I trust it is perfectly clear that this is absolutely not the intention or motivation of the amendment being offered by the Senator from Indiana (Mr. HARTKE) and myself.

This amendment focuses particular attention on the F-14 aircraft. It questions whether the variety of missions the F-14 will be designed to fulfill are necessary, feasible, and can all be accomplished by one aircraft. Missions of this plane include defense of the carrier fleet against attack from the air, air superiority, and the capability to deliver certain bombs and missiles on ground targets.

The amendment is offered because of doubts we hold concerning the basic requirement of an aircraft for the fleet air defense mission and the ability of the F-14/Phoenix system to carry out that role.

The Phoenix missile system is being designed for the F-14's fleet air defense role. This highly complex missile is being developed to destroy sophisticated attacking enemy aircraft at long distances. This seems to imply, however, an attempt to provide a defense of our carriers in the event of a major conventional war with the Soviet Union. This raises certain questions in my mind. First, what is the probability of a conventional war with the Soviet Union that would not escalate into a nuclear war? Second, if there should be such a conventional exchange, what would be the role of our carriers? Would carrier-based airpower be necessary or useful to attack targets within the Soviet Union? If not, what role would there be for carrier-based tactical airpower in such a contingency? Finally, given this circumstance, would not the carriers be highly vulnerable to various submarine and surface launched missile attacks?

Thus, I ask whether it is realistic and necessary to provide for the highly sophisticated fleet defense that is the in-

tended function of the F-14's Phoenix missile system. The question is crucial to the development of the F-14. The capability to carry the Phoenix is, in my understanding, the primary reason for the potentially massive expense of the F-14 program. Further, it is the Phoenix requirement that has raised strong doubts about the F-14's capabilities as a true air superiority fighter, as the Senator from Indiana (Mr. HARTKE) has pointed out. I am aware the Navy strongly denies that the air superiority mission of the F-14 is compromised by the fleet air defense requirement. But it seems evident that there is strong, authoritative opinion to the contrary which leaves this question unresolved.

The Phoenix missile will be extremely costly. Original estimates put the price at \$219,000 per missile. Now, I am told that reliable estimates figure the cost at \$400,000 per missile. Each F-14 will be able to carry one load of six Phoenix missiles. Thus, one load of Phoenix missiles for one F-14 would cost \$2.4 million. I have not been able to discover precisely how many Phoenix missiles the Navy intends to buy. But this should indicate the tremendous expense of just this missile system, in addition to the cost of the aircraft.

The PRESIDING OFFICER (Mr. SAXBE in the chair). The time of the Senator has expired.

Mr. HATFIELD. Mr. President, I yield myself 5 minutes.

The PRESIDING OFFICER. The Senator is recognized for 5 minutes.

Mr. HATFIELD. Mr. President, it is estimated that the total systems cost of the F-14, including the extensive expense of operation and maintenance over a 10-year period, could be \$25 billion. Because the F-14 would be one of the most expensive weapons systems ever procured by our Defense Department, I believe we must be absolutely certain about the requirement for an aircraft with the multimission capability of the F-14 and the capacity of this proposed aircraft to effectively perform all these missions.

At present, it seems as though doubts and questions remain which have not been fully answered. Thus, our amendment proposes that these issues be carefully studied by the Congress between now and April 30, 1970, and that no decision regarding the future procurement of F-14's be made until such a study can be carefully evaluated. Our amendment would not affect the 12 F-14's authorized in the current bill and other long lead-time items. It would require that the most careful scrutiny be given to this matter before we embark on the massive, costly procurement of an aircraft that might not be a wise or necessary component of our Nation's defense. There are many crucial questions and issues which such study should focus upon. Our amendment suggests a few specific considerations.

First, for instance, we believe the congressional study should examine in detail the character of the airborne threat to our carrier task forces. In House Appropriations Committee hearings in 1968, Chairman MAHON, in reference to the Soviet bomber threat, said:

The bomber threat against the fleet, as you know, has been predicted by Navy officials for some time. It has, of course, not developed to date.

Has the threat increased since Congressman MAHON made this comment?

Second, just what are the capabilities of the Soviet aircraft which threaten our fleet?

Third, it is also important to examine the cost effectiveness of the F-14/Phoenix system. We should analyze in detail its ability to protect the carrier fleet against the threat which is likely to exist in the relevant time period.

We should look at the threat from aircraft, from submarines, from ships, and from shore-based missiles. We should then determine which of these can be countered and at what cost. If it turns out that at great expense we can cope with the airborne threat, but that no matter how much we spend we would not be able to deflect significantly other types of attack, then it would seem not useful to spend great sums to counter the bomber threats.

Fourth, the study should look into the question of how much performance in any specific mission requirement is comprised in order to provide the F-14 with a multimission capability. The Senator from Indiana (Mr. HARTKE) and I have already commented on this issue.

Finally, I would hope that such study would focus attention on the cost-effectiveness and feasibility of alternative programs to the present F-14/Phoenix plans. The Senator from Indiana, for instance, mentioned reports of proposals for the development of a fighter aircraft not encumbered with the Phoenix missile system. If such an aircraft could actually be built and operated for as much as \$15 billion less than the F-14, as the Senator from Indiana has maintained, then all the facts and considerations concerning such an alternative should be openly studied by the Congress before an irreversible commitment is made to the F-14/Phoenix system.

In summary, our amendment requests only that this highly complex matter be carefully considered before the next defense authorization bill. This would make it possible for all the Members of Congress to increase their knowledge and perfect their judgment on such a costly and crucial issue. I trust that the very distinguished chairman of the Armed Services Committee and the committee members will understand the cooperative spirit in which this amendment is offered. We want to increase our understanding of these complex matters in order to better exercise our responsibilities as Members of Congress. It is for this purpose that we offer our amendment and urge its adoption.

Mr. HARTKE. Mr. President, I yield myself 1 minute. I send to the desk a modification of the amendment.

The PRESIDING OFFICER. The Senator has a right to modify the amendment.

Does the Senator wish the modification to be stated?

Mr. HARTKE. Mr. President, I ask that the modification be read.

The assistant legislative clerk read as follows:

On page 1 of amendment No. 164, beginning with line 1, strike out all down through line 5 on page 3, and insert in lieu thereof the following:

"SEC. 403. Prior to April 30, 1970, the Congress shall complete a comprehensive study and investigation of the requirements to be fulfilled by future carrier borne aircraft and of the projected costs of the F-14 aircraft and the capabilities of such aircraft to meet these requirements in the most effective and efficient manner. The results of this comprehensive study and investigation shall be considered prior to any authorization or appropriation for the production or procurement of any F-14 aircraft. This limitation shall not apply in the case of funds authorized by this Act for such aircraft."

Mr. HARTKE. Mr. President, I ask for the yeas and nays on the amendment.

The yeas and nays were ordered.

Mr. HARTKE. Does the Senator from Mississippi wish to speak at this time?

Mr. STENNIS. The Senator may proceed.

Mr. HARTKE. I was going to ask a series of questions of the Senator from Nevada.

Mr. STENNIS. If the Senator from Indiana would permit me to say a few words at this point on behalf of the committee, I would appreciate it.

Mr. HARTKE. I am happy to yield to the Senator from Mississippi.

Mr. STENNIS. Then, the Senator could interrogate the Senator from Nevada.

The PRESIDING OFFICER. The Senator from Mississippi is recognized.

Mr. STENNIS. Mr. President, with reference to the amendment which has been proposed, I know the good faith of the authors of these amendments and I accept at face value everything they say about their intentions.

I do wish to bring out what the committee has done. In this case I believe the authors reached the wrong conclusion. This year I specifically requested the Senator from Nevada to explore the F-14 program in detail and he performed his job with the thoroughness that is characteristic of him. This was done in a fine way and we had the benefit of other talent on the committee that is well versed and has long experience in understanding the problems of a plane, the problems connected with its mission, and making a valid judgment. We had other advice and counsel, of course but in the committee we did have men of experience. They are here to be cross-examined.

The fact of the matter is that the subcommittee of the Senator from Nevada spent the greatest portion of its time on the F-14 and F-15 aircraft programs because of their cost and importance. It reported in considerable detail to the full Committee on Armed Services on the results of its inquiry and study into the F-14 program and the full committee itself also explored this program in detail when the appropriate witnesses appeared and testified.

These were not casual matters. It just is not true when it is said they just take these things as a matter of course and accept what is said by some general or admiral about it. Those accusations are not true. I do not say they are corruptly made but they do not represent

the facts as they occurred in the marking of the bill, particularly with respect to these programs that are in the making and projecting into the future because we know how important it is for the need to be supplied and we know how important it is in the workability—I will use that term—and also the cost.

Therefore, I am most concerned by the fact that this amendment suggests by implication that no one up to the present time has reviewed the program and, more specifically, as Senator HARTKE suggested in an earlier speech, that the committee gave blank-check approval to the F-14 program. Such is definitely not the case.

The Tactical Air Power Subcommittee unanimously recommended after their thorough and intensive review of the program that the funds requested be authorized. The full committee, after conducting its own review, agreed with this recommendation.

Furthermore, Mr. President, the Preparedness Investigating Subcommittee, of which I am chairman, spent several months during 1968 conducting a most thorough and exhaustive review of all of our tactical air programs. Needless to say, due to the high importance of the F-14 program, it received detailed consideration. Extensive hearings were held and the Preparedness Investigating Subcommittee issued a unanimous report on October 4, 1968. In that report we recommended that the Air Force and the Navy's air superiority fighter programs proceed with maximum effort in light of the current and foreseeable Soviet threat.

By way of background here, the Navy's version of the TFX had been hanging on and hanging on and it was not working out. It was too heavy. It was still in the budget though, when the Preparedness Investigating Subcommittee reported on it. It was still in the budget in March of 1968 when we last considered it and the first time consideration was given in committee as to whether to build the F-14. We took out the last remnants of the Navy version of the TFX as being proven to be totally inadequate and put in, instead, the case for the F-14. I have already outlined what we did this year.

Next year, the matter will be considered by the committee, and not in any casual way, but right down to the very heart of the matter, weighing it again—if it is recommended and I feel sure it will be—in the bill, and we will go into it from its development at that stage.

Frankly, as a practical matter, I believe that we are capable of coming up with a judgment. We will do that. I do not like to put any date tag on this thing. It has been grinding out now for 15 years, trying to get a proper fighter plane for the Navy. We went along with one that was not adequate. Now this one has started going, after 15 years of effort.

Now we say by next March 31 we have got to come up here with something in the way of a survey. I do not like the idea at all, particularly with this long bill of particulars and guidelines written by someone in good faith, perhaps—I am sure it was in good faith—but I do not believe they had any more knowledge, perhaps not as much, as the men who sit on the committee and pass on these

matters. I am not including myself in that.

So I think we are about at the end of the road in considering this bill. I think as a measure of the history of this legislation and the headway we are making, if anything should be discovered down the line as to the run with engine A or the run with engine B, why, of course, we will take advantage of it.

Mr. HATFIELD. Mr. President, will the Senator from Mississippi yield for a question?

Mr. STENNIS. I yield.

Mr. HATFIELD. I appreciate the comments the chairman of the Armed Services Committee has made relating to the work of the committee. I want again to go on record, as I have in the past, my support for the committee's work. The chairman has also referred to the ad hoc committee that was chaired by the distinguished Senator from Nevada (Mr. CANNON). I am quoting from the Cannon report in the RECORD of July 10, 1969, and I would like to ask the Senator to respond to this question as it relates to the F-14.

On page 19056, I read as follows:

The committee is compelled to point out that for the last few years the United States has concentrated on the development of "multipurpose" missions, including air-to-air combat and air-to-ground missions. The requirements for an aircraft to be capable of performing "multipurpose" missions unquestionably compromises an aircraft in the performance of its primary mission, irrespective of the nature of its primary mission. It is the committee's judgment that we now concentrate on the development of the fighter aircraft specially configured and confined to the "air superiority" role. We have long neglected undertaking a new program in this area, relying exclusively on the capability of the F-4.

My question to the Senator is: Is not the F-14 designed to carry the Phoenix missile which makes it a multiple-mission type of aircraft?

Mr. STENNIS. Yes; that is correct. It makes it a multiple-mission aircraft for an aircraft carrier, as the Senator from Mississippi understands it. They must have some multiple-mission planes whereas the Air Force, operating from the ground with longer runways, can concentrate on one thing, and that is speed, climbing power—a single mission. But we have a mixed type of plane on an aircraft carrier and we have to have some multiple-purpose planes.

I really think that the Senator from Nevada (Mr. CANNON) is the gentleman that should answer that question. I gave a layman's point of view. The Senator from Nevada really knows that subject.

Mr. CANNON. I would be happy to respond to that question. It is a good one. The Navy has a dual requirement for this type of aircraft. One is for the defense of the fleet, and two, the aircraft superiority role itself. So what they have tried to do is have one aircraft perform both missions since they do not have the luxury of being able to have two aircraft, because they just do not have the space for them on a carrier. As a result, they have come up with a design in which they have optimized this development.

I show the Senator a model of the pro-

posed F-14 now on my desk, if the Senator would care to look at it. It should be noted that the Phoenix weapons system which is to be used in the air defense role—is so optimized that the whole weapon systems package can be removed. That is everything including the guidance except the part which is in the pilot's cockpit—can be taken off, when it is used in the air superiority role; and it can be reinstalled if the aircraft is to be used in an air defense role. On this role, however, it is configured for both. It has as can be seen on this model some of the Phoenixes and also Sparrows which permits it to go into a dual role capability and be able to perform in either environment, as required.

I stated in my speech that because of the design features that have been built into this proposed design, there is only a difference of 600 pounds in total weight over and above what the airplane would weigh if it were designed solely for an aircraft superiority role. So the Navy is only paying a 600-pound penalty to give them an aircraft having a dual role. The aircraft, true, as the Senator from Indiana indicated, might probably be outperformed by the F-15. But the F-15 cannot land on an aircraft carrier. This requires a much heavier structure for the airplane, and the landing gear, too, must take the shock of being catapulted off and must again take the shock of coming in for an arrested landing.

So if you could transport a runway around with the carrier, the type that an F-15 needs, then it is true you would be able to reduce the weight and get perhaps a higher performing aircraft, because the oversimplification is that it depends on the thrust-to-weight ratio for the type of performance you are going to get.

Mr. HATFIELD. Will the Senator yield for a further question?

Mr. CANNON. I am happy to yield.

Mr. HATFIELD. I appreciate the analysis and explanation as given of the F-14 model on the desk. I would like to have the opportunity of looking at it in more detail later. But I refer again to this question, because it seems to me the Senator from Nevada again reiterated what he said in his report, that it is a multimission plane, because he uses the word "compromises":

The requirements for an aircraft to be capable of performing "multipurpose" missions unquestionably compromises an aircraft in the performance of its primary mission, irrespective of the nature of its primary mission.

Irrespective of its primary mission, it compromises. What I want to know is where we compromise in this aircraft. Where do we make the compromise, which means less than full effectiveness or efficiency?

Mr. CANNON. The compromise is the 600-pound difference in weight. So we have that feature on this aircraft. We have a 600-pound heavier aircraft so this airplane can perform in a defense role as distinguished from an aircraft that would have only one mission, that being air superiority. But the Navy cannot afford the luxury of two planes for that purpose.

We got into this problem with the old TFX or the F-111. The F-111 was described as a fighter-bomber. It should never have had the tag "fighter" put on it, because it never was. It is an attack aircraft, it is true. It can go in low, has speed so it can get away; but if we are talking about air superiority, it cannot compete with a lighter aircraft, at altitudes, that weigh much less than the F-111 and is perhaps as fast or nearly equally as fast, because it is not built for that air superiority role. Yet it was described as a fighter-bomber in the sense that it can protect itself, which it can do by either firing at another aircraft or going faster than any other aircraft on the deck, so that the pursuing aircraft would pull its wings off. In that sense it can defend itself, go in low, at great distances, avoid radar surveillance, make an attack, and get back.

Mr. HATFIELD. Mr. President, will the Senator yield for a further question?

Mr. CANNON. I yield.

Mr. HATFIELD. Do I understand that the full Committee on Armed Services changed the conclusion of the ad hoc committee of which the Senator from Nevada was chairman, because in the statement of the Senator from Nevada as the finding of the ad hoc committee—and I quote again—it is stated:

It is the committee's judgment that we now concentrate on the development of the fighter aircraft specially configured and confined to the air superiority role.

If I understand that correctly, the Senator's ad hoc committee said that we should confine ourselves to the air superiority, single mission role for a fighter; whereas, as I understand the statement now made, the Senator wants the dual role for the F-14. Is that a correct understanding?

Mr. CANNON. It is not exactly correct as the Senator places it. We, and the Navy feel, the studies indicate, that the F-14 can perform in an air superiority role as required by the Navy. I have already touched on the penalty spoken of by the committee. That is the reason for the design configuration which permits the whole package of the Phoenix, as I said before, to come right off if it is going to perform in an air superiority role. We end up with an airplane that is only 600 pounds heavier, which is not very much in an airplane of this size and weight, than if the airplane had been designed solely for the air superiority role.

Mr. HARTKE. Mr. President, will the Senator yield?

Mr. CANNON. I do not have the floor.

Mr. STENNIS. Mr. President, I ask unanimous consent that I may yield so the Senator may ask questions. I may say to the Senator that I have only two or three more sentences, and then I will yield the floor.

Mr. HARTKE. I withhold.

Mr. STENNIS. Mr. President, I yield myself such time as I may need.

I recognize, Mr. President, that generally studies have a worthwhile purpose. To oppose a recommendation for a study is almost like being against "motherhood." However, we know from our past experience that Secretary McNamara conducted endless studies.

Many systems were literally studied to death. In other cases, the results were that invaluable time was lost and when finally we decided to buy the weapon system the delay resulted in our paying higher cost.

The Department of the Navy has studied the F-14 in great detail over the past 2 years. In November 1967, the Chief of Naval Operations directed the formation of a Navy fighter study. This group spent 30 man-years studying all areas of technical, tactical, and cost estimates. It concluded that the F-14 was the fighter aircraft that the Navy requires.

Subsequently, the Defense Department of Research and Engineering Office and the Systems Analysis Office of the Secretary of Defense commenced their own studies.

With the submission of five proposals from leading aerospace companies, the Navy spent 80 man-months in an intensive technical evaluation.

In addition, over 15,000 hours of wind tunnel time has been performed proving and refining the F-14 design. Finished engineering drawings are now being completed at the rate of 500 per month.

To eliminate any doubts as to the capability of this aircraft, NASA was requested to make an independent assessment of the performance characteristic of the F-14. The results of their assessment was provided by Dr. Foster on August 7, 1969. NASA conclusions were that the Navy's performance estimates were attainable and the multimission capability of the F-14 could be performed without any significant degradation in the performance of its primary mission; namely, air-to-air combat.

In conclusion, Mr. President, I submit that the Defense Department—including the Navy—and most specifically the Senate Armed Services Committee—including the invaluable contribution made by its Tactical Airpower Subcommittee—has studied this matter thoroughly and in depth. It will do so again next year when the authorization bill is considered. The proposed amendment, therefore, would serve no useful purpose. The Armed Services Committee will discharge its responsibilities to the best of its ability. No legislative mandate is necessary to require us to review the F-14 program and other major weapon systems programs contained in the budget. We do not require the Congress to legislate in order to tell us how to do our job in the detail which this amendment proposes. We recognize our job and our responsibility and intend to face up to them in all respects.

Mr. President, I conclude with the statement that we, of course, will fully look over all the phases, particularly the new phases, of the F-14 before we make any recommendation not only on the F-14 but others, too. We mean that, and we will carry it out. But there have been about enough timetables set around here. The committee has to have some kind of latitude about how to function and when it will report.

I submit this is one of the most thoroughly and carefully considered matters of this kind, and after 15 years of effort to try to get a new and better Navy

plane to meet its role, I believe we had better get going.

Mr. HATFIELD. Mr. President, will the Senator yield for a question?

Mr. STENNIS. Yes, I yield.

Mr. HATFIELD. I believe we have agreed to have a study of this aircraft carrier.

Mr. STENNIS. Yes.

Mr. HATFIELD. And every Senator supported that proposal. Does the Senator not believe it is just as important to have a study not only of the aircraft carrier and its capability, but what we place on the aircraft carrier?

Mr. STENNIS. Oh, yes. They are both important and will be considered together, to a degree. That is correct. That is a good question.

This is a new plane. I have already outlined what we have done. The promises about the aircraft carrier related to the carrier fleet. There are 15 of them, as the Senator knows, in operation. There is a question as to whether some should be taken out, and so forth. We are going to review all parts of it.

Mr. HATFIELD. Will the Senator yield further?

Mr. STENNIS. Yes, I yield.

Mr. HATFIELD. If it is accepted generally, then, that we are going to study the purpose and mission of the aircraft carrier, and that it is logical to study that which we place on the carrier, the amendment offered by my colleague from the State of Indiana and myself—with the proposed change in that amendment—then only, really, would provide emphasis to the group to study not only the carrier but also the kind of plane that is placed on the carrier. That is actually all the amendment now proposes to do.

As I understand, the distinguished chairman of the Committee on Armed Services felt this would not be inconsistent with the study of the carrier; is that correct?

Mr. STENNIS. Well, there is a relationship. The study of the carrier question, I think, is broader and more comprehensive. I wrote the word "comprehensive" into that resolution in its final form the other day, because I wanted to show we were willing to cover it all. But I think this is a single-shot proposition now, related somewhat to the carrier question, but I think it stands on its own feet, frankly.

I believe the Senate is going to give us discretion in passing on these matters.

Mr. President, I yield the floor.

Mr. HATFIELD. Mr. President, I should like to make just one or two further brief comments on this amendment.

I believe it is very clear that the amendment proposes to do exactly that which we have outlined in the colloquy with the distinguished Senator from Mississippi, chairman of the Committee on Armed Services. That is simply to make more pertinent that to which we have already committed ourselves in the study of the aircraft carrier and the fleet generally. This is the purpose of the carrier study; and if you are talking about an aircraft carrier, you have to consider what is placed on it; namely, the airplanes.

I do not think our amendment is incompatible at all with that to which the Senate has already committed itself. I cannot understand how a Senator could vote for the study of an aircraft carrier without being willing to study that which is to be placed on the carrier.

I should like to comment further on this matter of the multipurpose mission versus the single mission. I again refer to that report made by the distinguished Senator from Nevada (Mr. CANNON), and I believe that I can understand the English language, when it says in the report that there is some question—in fact there is very definite question—as to an aircraft that is required to perform a multipurpose mission.

That was pointed out in the report. Second, it was pointed out that the committee's judgment was that they should concentrate on the development of the fighter aircraft specifically configured and—I underline the following words—confined to the air superiority role.

I submit that, in studying the F-14-Phoenix system, this is not a single mission but a multimission aircraft, and that we are compromising on this aircraft. I feel, therefore, that it should be studied further, and I should like to offer one last quotation from a very distinguished man, Gen. G. P. Disoway, formerly head of the U.S. Tactical Air Command. This is not a Senator; this is a general of the Air Force speaking. He said:

If you could build an airplane which would do everything, it would be wonderful. You just cannot do it in this modern day.

I think that the general has really capsuled the whole thought behind this amendment that the Senator from Indiana and I have prepared and referred to this body. I hope that the Senate will consider the fact that this amendment merely asks that we continue the study on this aircraft along with that on the aircraft carrier, and not commit ourselves to the expenditure of billions of dollars with such a questionable aircraft in mind.

Mr. HARTKE. Mr. President, I should like to state, first, that no one questions the diligence, hard work, and devotion of the chairman of the committee and the chairman of the subcommittee. I think it has been remarkable. No one questions that they have been trying to provide the best weapons necessary for our defense.

The fact still remains, however, the experience of the ill-fated experiment with the TFX has put us in a position where we have not had a Navy fighter aircraft in 15 years.

The circumstances which were to blame for that situation should not be used to justify the same errors over again. This is what the Senator from Oregon and I are trying to bring to the attention of the Senate.

There are certain documents which really challenge the basic assumptions which have been made as a result of the hearings, and the lack of any opposition to the presentation made on behalf of the F-14. I should like to point out that it is very easy for us to stand here and say that this multipurpose aircraft can drop

part of its equipment, and therefore lighten its load. But you cannot drop the man out. It is a two-seated operation; you are not going to drop out a man, and you are not going to drop out the avionics equipment which has to go with this multipurpose development.

The Senator from Nevada has admitted on this floor that as far as this plane is concerned, it is not a superior tactical aircraft. Its ability as a dog-fighter have been compromised by its assigned function of fleet defense and consequential requirement of having the Phoenix.

Mr. President, the Phoenix is the very heart of what we are asking to be studied in depth. The Phoenix has not undergone thorough and proper testing. There have been no shots against any supersonic targets, maneuvering targets, or clustered targets. There have been no tests of its performance against electronic countermeasures. Until such tests are complete, we are in the position of going ahead with another airplane, assuming that the Phoenix is going to work, and admitting before we start that we are going to have an airplane which will not be a superior dogfighter.

So I ask the Senator from Nevada, not denying the threat of superiority from the Russians, and agreeing that so far as the F-4 is concerned, it is not modern, and that the Russians have flown 18 prototype models—and we, incidentally, should be flying prototypes ourselves—how is it going to do any damage to agree to an amendment which says we should study the F-14 carefully and go into it thoroughly?

The Senator from Nevada even admits he has not seen the documents and does not know what they contain. I cannot understand why the Senator does not want to look at those documents, and report back to Congress whether they disclose any valid objections.

Mr. CANNON. I would have to ask the Senator a question. Has he seen those documents? I do not know; perhaps they would contain something. Has the Senator from Indiana seen the documents?

Mr. HARTKE. I have outlined them in detail for the Senate. Why cannot the committee ask for them? I have asked for them generally, and have outlined them in detail.

What is there to hide? We learned, during the debate on the ABM, that secrecy about these matters is frequently unjustified, that the secrecy is more dangerous to our national security than revealing the classified material and that secrecy is used to protect questionable decisions and assumptions.

Mr. CANNON. I would simply have to say that I suppose there are a lot of in-house documents over in the Department of Defense that might be interesting if one had time to read them all. I have not seen these documents; I do not know what they say. I do not know what pertinence they might have to this matter. But I have already inserted in the RECORD a list of 48 studies that have been completed on this problem; and furthermore, the National Aeronautics and Space Administration is the organization charged with research and develop-

ment in the field of aviation, independent from military aviation.

Navy performance estimates on the F-14A and the F-14B have recently been established by an independent NASA assessment, made at the request of Dr. John F. Foster, Jr., Director of Defense Research and Engineering. Here they have gone completely away from the military; they go to an independent and say, "Study this. Will it do this and this? Can we do that?"

The answer was favorable. NASA reviewed all the major data, conducted tests on its own, and came back and told Dr. Foster that the multimission performance estimates of the Navy were attainable.

The Senator has already referred to my comments in the report this year. Actually, what I was reading from, or at least what we said, was from our report of the Preparedness Subcommittee last year. We said, "Go ahead and get to it now, and develop an aircraft that can have a single purpose mission."

Now NASA and the Navy have both said that this does not detract from the primary mission of the aircraft, because, as I stated earlier, you end up with only 600 pounds more weight than if the airplane had been designed solely for the air superiority role.

The Senator from Indiana referred to the F-14, and said it will not perform with the F-15.

I ask the Senator, can he figure out some way to transport a 10,000-pound plane on an 8,500-foot runway, so that it can perform with the fleet? If the Senator can, we would be better off to put the F-15 on that runway, and operate it out in the middle of the ocean. Any time an aircraft operates off a carrier, it has to have more thrust than if it operates on the ground. If we go back to the weight-to-thrust ratio, we do have a good aircraft here.

We have an aircraft that has been studied to death. If the Senator is trying to kill the aircraft, he should say so. Let us then give it another study and bury it. If the Senator is opposed to it basically, he should say so. If he is not, let us review it from the studies that have been made.

The Senator said earlier that we did not consider any witnesses who were opposed to the aircraft. Would the Senator give me the name of one or two witnesses who are opposed to it?

Mr. HARTKE. Mr. President, I pointed out that in Coronado, Calif., Navy fighters participated in a symposium of the F-14 and they were extremely critical. They are the ones who would be required to fly the plane. The report of their comments has not been presented. Their lives are on the line. They will operate the planes.

Why is the report of that symposium withheld? A number of witnesses could be provided.

Mr. CANNON. Mr. President, does the Senator have the name of one witness who is opposed to the aircraft? I would be interested in having the name.

Mr. HARTKE. We would be glad to submit that to the Senator.

I am not being critical of the Senator or indulging in frustration over the TFX. I just want a good plane. I am not asking that any money be taken out of the bill. The bill will be passed. There is not any question of that.

However, why should we go ahead and commit ourselves blindly for a number of years on the assumption that we will be successful when we have the history of the ill-fated F-111 project in which there was so much trouble. Everything that was said about that project is basically the same thing that the Senator from Nevada is saying today.

I am sure the Senator from Nevada is acquainted with the F-XX or the UF-XX in the Navy version. The Senator knows this is an alternative. It is cheaper. And it is much more maneuverable. It is considered to be a superior plane; is it not? Is it not true that it is considered to be superior? Is it not an alternative?

Mr. CANNON. It is an alternative. However, it is not a good one. It was considered and rejected for a lot of reasons. Mr. HARTKE. Was it rejected for any reason other than the fact that it is not a multipurpose plane? It is lighter. It is more maneuverable. However, it is a single purpose plane.

Mr. CANNON. I should like to answer that statement. I think it was rejected basically because it would not fly. The people who examined it in detail said that the proposal was not a feasible proposal and that the airplane would not do what the paper study showed that it could do.

Mr. HARTKE. The paper study would be worth as much as it was in the case of the TFX. The paper study in that case showed that plane would also work. However, ultimately, after long-term experiments and anxiety and increased frustration, we find ourselves going now into another paper airplane that will be produced before we have even one prototype. We will spend \$3 billion before we know whether it meets the specifications, let alone know whether it will be a good fighter.

The Russians have done what I have suggested. They have flown prototype planes and found how they performed. Then they have gone on with the production of the plane.

As the Senator states, the F-14 will be designed for 1975 to 1985 and my amendment would attempt to give some guidance for the future. We have a very simple situation. Unless something is hidden beyond the seven documents that have not been presented, I cannot see why the committee itself would not be in agreement that this should be done.

I think it would be a tribute to the committee and to Congress to say for once, "We are going to take this upon ourselves and have a study made before we go ahead with the money in 1970." We would not bother anything in the bill. I cannot see why that cannot be done.

Mr. CANNON. Mr. President, if the Senator from Indiana does not realize that what I have been saying all afternoon is that we have studied the matter, if he does not realize that I have had 48 studies printed in the RECORD today, if he does not realize that the matter has

been studied thoroughly, if he does not realize that I said Dr. Foster requested NASA to make a study and that they did make a study and reported back that it was feasible, and if the Senator does not realize that that constitutes a study, then I am sorry the Senator does not understand me. I think there is no point in going further. I think the Senator has covered it quite thoroughly.

The PRESIDING OFFICER. The time of the Senator has expired. Who yields time?

Mr. CANNON. I yield myself 2 additional minutes.

The PRESIDING OFFICER. The Senator from Nevada is recognized for 2 additional minutes.

Mr. CANNON. Mr. President, if the Senator is opposed to the matter, let him vote against it if he does not prefer that we go ahead and try to have a new, modern fighter that will do the required job within the time frame discussed.

We think the thing is needed. The Preparedness Subcommittee said more than a year ago that it was needed. We held the Navy's feet to the fire and held up the Navy version of the F-111 in the committee and said, "Go ahead and develop an airplane that will do the job."

This is what they had attempted to do. The Senator from Indiana is trying now to refer to another time.

Mr. President, if no other Senator wishes to talk on the matter, I intend to make a motion to table.

The PRESIDING OFFICER. Who yields time?

Mr. STENNIS. Mr. President, other Senators wish to speak.

Mr. DOMINICK. Mr. President, will the Senator yield me 5 minutes.

Mr. STENNIS. Mr. President, we have only 5 minutes remaining. I yield 3 minutes to the Senator from Colorado.

The PRESIDING OFFICER. The Senator from Colorado is recognized for 3 minutes.

Mr. DOMINICK. Mr. President, I have listened to the debate with great interest. I was particularly intrigued with the speech given by the Senator from Nevada (Mr. CANNON), which, I think, outlines very clearly why we need this development work and why we need to move forward now.

Over and over again on the floor of the Senate I have said to the Senator from Indiana and to other Senators that we have spent more time and more money in getting less products in the last 8 years under Secretary McNamara than we ever did before in the history of the country.

People say that we saved a lot of money. It cost us a lot of money and we have nothing to show for it. The cost systems analysis, or whatever the department is called, has stopped us from going forward time and time again.

Unless we move forward now, we will find ourselves in a position of being unprepared in the middle seventies. This is the problem that we must face up to.

Mr. HARTKE. Mr. President, will the Senator yield?

Mr. DOMINICK. I yield.

Mr. HARTKE. Mr. President, I do not want to fight about McNamara. I am not

talking about him. I do not want to stop the bill. I am not talking about that. I do not want to hold up anything. I want Congress to study the matter.

What objection could there be from the Senator to going ahead and checking into some of the matters I discussed on the floor of the Senate? What would be the delay? I am not advocating delay.

Mr. DOMINICK. Mr. President, the Senator from Nevada has already shown the work he has done in the subcommittee. He has shown the studies that have been done by other outside agencies on this particular fighter system. He has shown the problems we face vis-a-vis technical superiority over the Soviet Union. He has shown the problems we will face in the 1970's. We think that the United States will have the best airplane in the world, but we will then realize we are flying a technical airplane designed and built in 1954.

This is why we think we must go ahead with the F-14 now. The F-111B simply was not good enough. The committee found that out and said, "We will not put this into effect. We will get something that will operate and be more effective."

I have here a document from Admiral Moorer, Chief of Naval Operations, dated September 6, 1969, making the following three points:

The present complement of Navy fighters is rapidly becoming obsolete. The F-8 became operational eleven years ago followed two years later by the F-4 (nine years ago). During this same period the Soviets have introduced eight new fighter aircraft.

The Soviet Union currently has four fighter aircraft with performances exceeding those of the F-4 and future improvements must be expected.

The Soviets have developed other weapon systems clearly designed to attack naval forces. Badger and Blinder bombers can launch any of five different guided air-to-surface missiles at ranges up to 150 miles. They have surface-to-surface guided missiles deployed on submarines and ships.

2. The problem is clear and so is the solution. We must have a new fighter superior in air combat to present and postulated Soviet fighters, for close-in visual encounters and for stand-off all-weather conditions. In addition, the new fighter must be able to defeat the enemy air threats to naval forces: bombers and missiles. The threat is serious now. It will become more serious in the future.

3. We are already very late with a new fighter program to counter superior Soviet capabilities. The F-14/PHOENIX system will meet our fighter needs through the 1970's and into the 1980's. Delay in the present funding profile will seriously delay achieving the required high capability as well as raise program costs markedly.

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

Mr. DOMINICK. Mr. President, will the Senator yield me an additional minute?

Mr. STENNIS. Mr. President, the Senator from Washington has been promised 3 minutes. That is all the time I have remaining.

Mr. DOMINICK. Mr. President, will the Senator from Indiana yield me 1 minute?

Mr. HARTKE. I yield 1 minute to the Senator from Colorado.

Mr. DOMINICK. I thank the Senator from Indiana.

Mr. President, it seems to me only commonsense that we continue with this program and that the committee be given continuing surveillance, as it has within its jurisdiction anyway, and that we continue the fine work which has been done by the Senator from Mississippi and the Senator from Nevada.

Mr. GOODELL. Mr. President, the debate on this amendment which would require Congress to complete a comprehensive study of the F-14 has been most useful in contributing to an understanding of the F-14 program.

The Senator from Colorado (Mr. DOMINICK) has referred to summary points on the F-14 made in a September 6 memorandum prepared by the office of the Chief of Naval Operations for the Secretary of the Navy. In connection with this memo, the Department of the Navy has compiled a number of questions and answers relating to the F-14 program.

This document entitled "The F-14 Fighter Program" provides a useful reference, and I ask unanimous consent that it be printed in the RECORD.

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

THE F-14 FIGHTER PROGRAM

(NOTE.—The questions and answers have been prepared to set forth in simple terms facts and rationale relating to the United States Navy F-14 Fighter Program. In their brief form, these answers cannot cover in detail all aspects of the entire program but they do present an unclassified discussion of the principal issues.)

RATIONALE

Q. What is the F-14?

A. The F-14 is a new supersonic carrier-based fighter aircraft. It is the result of a Navy competition among five contractors. From inception, the F-14 was designed as an air superiority fighter around four Sparrow missiles and a 20mm gun. The F-14 is an optimized combination of speed, acceleration, maneuverability and radius of action; it includes a weapons control system with multiple weapon options.

The F-14 will provide air superiority for the fleet and for friendly land forces. Included in the basic design is the capability for fleet air defense carrying 6 Phoenix missiles and for air-to-surface attack carrying conventional ordnance, both without degradation of fighter performance. This is accomplished by palletizing¹ Phoenix and other ordnance equipment which is carried only when desired. The F-14A and F-14B will have an air-to-surface capability with accuracies comparable to the A-7E.

When the F-14 is performing in either the fleet air defense or the air-to-surface attack configuration, it can return to its primary air superiority role immediately upon release of ordnance.

The F-14 will fill the fleet air defense need for which the F-111B was designed. It will replace the F-4 as an air superiority fighter and in escort roles.

A low risk development program was conceived for the F-14 to provide improved air-to-air capabilities in the earliest time frame. Improved versions of the existing Phoenix/AWG-9 missile control system and TF-30-P-412 engines will be installed in the F-14A, to be operational in April 1973. The F-14A will meet the fleet air defense need and provide fighter performance considerably superior to

¹ Armament and peculiar auxiliaries used only during the fleet air defense and air-to-surface missions are installed in low drag, external, flush mounted racks.

the F-4 Phantom. An Advanced Technology Engine under development in a Joint Navy/Air Force program will have 40% more thrust and weigh 25% less than the TP-30-P-412. This advanced engine will be incorporated in the F-14 for operational use in December 1973. Designated F-14B, it will have maneuverability and weapon system performance superior to the threat expected through the 1970s. Not more than 67 F-14A will be produced.

Q. Is the F-14 a "warmed-over" F-111B?

A. The F-14A is not in any sense a "warmed-over" F-111B. It will be a new airplane—smaller, lighter, higher performance and much more effective than the F-111B, and with better fighter-to-fighter performance than the F-4. The F-14A will become operational in early 1973. Because the engines and avionics are already developed we have high confidence in the program.

The second step in the F-14 program will be a "block" improvement, the F-14B. This model will use the same airframe and avionics as the F-14A but will incorporate the "advanced technology" engine funded and under joint development by the Air Force and Navy.

This advanced engine will have a thrust of 28-30,000 pounds and will weigh 800 pounds less than the TF-30. Thrust-to-weight 75% higher than current engines and a 30% improvement in specific fuel consumption due to its advanced design are features of the advanced engine.

The F-14C is the third step in the F-14 fighter program. This model will use the airframe and engines of the F-14B but will incorporate advanced avionics for even better weapons control. The equipment is in development. This avionics suit will use the latest techniques of microminiaturization and solid state electronics. It will be smaller lighter more reliable and more versatile than current equipment, and will extend the F-14s air-to-ground weapon delivery from visual to all-weather. The F-14C will be introduced on an orderly program when the new avionics have been fully developed and tested.

Q. How can the F-14 use the engines and the radar from the F-111B and be any better than the F-111B?

A. The F-14A is better than the F-111B using the same engines and a reconfigured weapons control system because the design for this fighter changed it from an interceptor to an air superiority fighter. As such it will weigh 20,000 pounds less than the F-111B. An engine and a radar set in themselves do not guarantee success or failure in the design of an aircraft. The F-14 is designed as an air superiority fighter around a combat weapons load of four SPARROW air-to-air missiles. To achieve air superiority a fighter should be in balance with respect to thrust, weight, high roll rates, acceleration and proper sizing of fuel required. This balance should be designed into the aerodynamic properties of the aircraft. Engine inlets must match engine characteristics for flow free of turbulence and distortion. The TF-30-P-412 is the most modern engine in the free world to provide thrust required at the right weight in balance with the other F-14A features. Wind tunnel data plus running the TF-30-P-412 in a full-size F-14A inlet confirms the Grumman design.

In addressing Phoenix missile and the AWG-9 weapons control system, the contractor has taken great pains to see that provisions to employ the Phoenix missile will not reduce air superiority performance in close-in combat. The six Phoenix missiles and the external fuel will be carried as an over-load, that is, a reduction in load factor limits (from 6.5g to 6.0g) has been accepted. This design procedure saves weight and cost in the basic aircraft and retains full air superiority performance as a fighter. Said another way, it would be illogical to design the F-14 for "dogfighting" with six Phoenix missiles and extra fuel because this weapon loading

is for another purpose, i.e., to destroy a different enemy threat.

Q. Why do we need an F-14?

A. The basic problem is that our stable of Navy fighters is rapidly becoming obsolete. Development of the F-8 day-fighter was started in 1953—fifteen years ago. It became operational eleven years ago. Our F-4 series is almost as old—it was started in 1954 and became operational in 1961. Both airplanes were superior fighters in their day—but the pace of technology in engine design, avionics and airframe construction is rapidly reducing this superiority.

When the F-4 first came into fleet service it was the world's finest high-performance fighter. Watching the changing and developing aircraft and missile threat and knowing that some day we would have to replace the F-4 as the air superiority fighter and fleet air defense interceptor, the Navy participated in the TFX (F-111) program in the early 1960s. The F-111B developed serious problems in development—primarily stemming from serious weight growth. It became apparent that this airplane would never be the aircraft the Navy needs. When the mounting difficulties became clear, Congress stopped funding the F-111B in FY 1969.

Over the years the threat has risen. The Soviets have been busy developing new and advanced aircraft—particularly fighters and interceptors. They have introduced a new or an improved fighter into their operational inventory at the rate of one per year. In July 1967 the Soviets flew six new fighters plus major "block improvements" of three older ones in an air show. Two of these new fighters, the Foxbat and Flagon A, are estimated to have performance comparable to the F-4 at low and middle altitudes but higher top speeds and higher ceilings.

The Soviets have also shown both ability and intention to create improved weapons and fire control systems. Their latest fighters appear to have all-weather all-aspect long-range air-to-air capabilities. Fiddler, Foxbat and Flagon A have large radomes to house new radar fire control systems.

The F-4 has not been exposed to firstline Soviet aircraft. The MIG-21 (Fishbed), the latest Soviet fighter exported to satellite countries, has demonstrated excellent maneuvering performance over North Vietnam. Superior U.S. pilot skill and weaponry, higher speed at low altitudes and electronic countermeasure equipment are among the reasons our fighters have been able to hold their own with the MIG's over Vietnam. We cannot expect these advantages to prevail against later Soviet aircraft or against Soviet pilots.

New Soviet fighters are not the only problems. The Soviets have developed and built other systems designed to attack surface targets at sea and on land. Badger and Blinder bombers can launch any of five guided air-to-surface missiles at ranges up to 150 miles. Most of these missiles have terminal homing. In addition, advanced surface-to-surface guided missiles have been developed and are in service in Soviet forces. These weapons are accurate and lethal—witness the Israeli Ellat incident—and can be launched from submarines, ships and shore installations. Thus, "the problem" is clear—an early solution is essential.

We must have a new fighter as soon as possible that is superior in air combat to the best Soviet fighters in close-in visual encounters and in stand-off all-weather conditions. This fighter must be able to defeat enemy bombers, air-to-surface missiles and surface-to-surface missiles. This threat is already in being and serious now. It will become more severe as time goes by because Soviet investment in military technology has reached the pay-off stage across the board.

Q. Why not improve the F-4J to make it equal in performance to the F-14A?

A. The F-4 was designed in 1954 and became operational in 1961. Since that date the Soviets have built and flown eight new fight-

ers. The F-4 cannot be improved significantly without major redesign costing many millions of dollars. It still would be inferior to Soviet fighter aircraft. Further, the F-4 was designed as an interceptor and equipped with an avionics/weapons system to destroy high altitude bombers. Although it is now our best and only fighter for air superiority close-in combat it is not as maneuverable as it needs to be and as an air superiority fighter designed from scratch for this role will be.

Q. Can industry build an aircraft to meet the requirements specified for the F-14?

A. The F-14 is the result of a Navy competition among five contractors. The Grumman Aircraft Engineering Corporation won the engineering development contract on the basis of the best overall technical proposal and cost.

The F-14 is a phased development program. The program has been carefully designed to produce the best fighter at an early date.

Experience has shown that the "high risk" and long lead-time items for a new advanced fighter are the engines and the avionics including, of course, the armament systems and ECM equipment. We have the TF-30-P-412 engine already developed. It is our first afterburning turbofan engine with many advanced features: lower fuel consumption and high thrust-to-weight ratio. TF-30 engines are operational in the F-111 and A-7 aircraft. Thus, engine risk with the F-14 is low.

We also developed an advanced missile system for the F-111B. The AWG-9/Phoenix system combines an advanced high power, pulse doppler (lookdown), track-while-scan, multi-shot radar and fire control system with a long-range, mid-course guidance, terminal homing missile. This system is now in the final phase of developmental testing—a program that has been very successful to date.

Performance of the F-14 has been subject to analysis by the Naval Air Systems Command, NASA and DDR&E. All agree that the performance characteristics of the F-14 are attainable.

Q. How many F-14 aircraft is the Navy really talking about? Numbers have been mentioned varying from 463 up to 722.

A. The baseline number of F-14 aircraft on which the contract with Grumman was negotiated is 469. This is composed of 6 R&D aircraft plus 463 production F-14As and F-14Bs. To update the fighter force of the Navy and Marine Corps will require 716 production F-14As and F-14Bs plus 6 R&D aircraft. This number does not provide replacement aircraft to meet attrition losses. However, the F-14 is designed to grow in performance as the situation requires. We expect this growth to keep pace with the Soviet developments through the mid-1980s. Historically our successful fighters have been produced in numbers exceeding 1200. McDonnell Douglas Corporation has produced 3500 F-4s, 1254 of which went to the Navy and Marines. Production of the F-4 continues for the Navy and Marine Corps, the Air Force, and foreign sales at the rate of about 30 per month. The F-8 Crusader buy for the Navy and Marine Corps exceeded 1200. The F-9, F-105, F-86, F-4U, F-6F are similar examples. The Navy expects the F-14 to have a similar history and that at least 1200 aircraft will be produced over the next 10-12 years.

Costs of these aircraft have always gone down with the number of aircraft produced. Using the same pricing methodology the F-14 total unit program costs can be expected to decrease from \$13.6 million per unit for a buy of 469 (6 R&D plus 463) aircraft to \$10.4 million for a buy of 1200 F-14 aircraft. These costs include R&D, aircraft procurement, on site support, contractor engineering services, and investment spares, and are escalated dollars at 4% compounded from FY 70 through FY 80. In constant FY 70 dollars the price would be \$12.4M and \$8.5M.

Over the years, the price of an aircraft has been expressed as the "flyaway" cost. The flyaway cost is the cost of the aircraft as it stands at the head of the runway ready for take-off.

"Flyaway" costs for the F-14 would be:

	[In millions of dollars]			
	Escalated		Constant 1970	
	463 A/C	1,200 A/C	463 A/C	1,200 A/C
Average flyaway cost.....	8.5	7.6	7.5	6.0

Q. What is the estimated empty weight of the F-14A aircraft and how does this compare to the empty weight of the F-111B and the F-4J aircraft?

A. The estimate of the F-14 weight empty is 35,979 pounds. The empty weight of F-111B number 7 was 47,278 pounds. The F-4J weight empty is 30,234 pounds.

Q. What is the difference between the weapons fire control system for the F-111B and the F-14?

A. Considerable increases in capabilities are provided in the F-14A/B.

Incorporation of Sparrow, Sidewinder, and a M-61 gun.

Emphasis on "dogfight" performance but retaining long-range stand-off Phoenix for task force and area defense. Phoenix/AWG-9 is effective against air and surface launched missiles.

Significant lowering of AWG-9 weight, from 2000 to 1360 pounds while adding the aforementioned features.

Significant decrease in AWG-9 "cube", from 46 cubic feet to 30 cubic feet.

Improved packaging and design for increased reliability/maintainability.

Improved air-to-ground capability, comparable to the A-7E.

Q. What is the new Navy fighter aircraft (F-14) requirement in terms of military doctrine, strategy and geography to meet commitments? What commitments would this system fulfill?

A. The current Navy fighter inventory contains the F-8 Crusader and the F-4 Phantom, designs originated more than 15 years ago. If the United States is to remain militarily adequate and to retain an ability to control the use of the seas for moving men and materials for its own needs and those of its allies as well, its deployed task forces must be able to engage a wide range of hostile vehicles. These include high performance fighters, supersonic bombers with stand-off air-to-surface missiles, as well as surface-launched missiles. The F-14 is specifically designed as an air superiority fighter. In a strategic sense the U.S. is an island separated from sources of materials and from its allies by the oceans. It depends on having a sound overseas strategy. A sound overseas strategy requires naval forces capable of implementing that strategy. During the cold war the Soviet challenge to that strategy and the naval power that supports it has increased at an alarming rate. Naval power requires effective air power. A key element of air power is the manned fighter. The F-14 has three prime missions: an air superiority "dogfighter"; task force area defense; and air attack of targets on land and sea.

Sea-based tactical air is an invaluable instrument of U.S. policy. Navy power can be applied at all levels of warfare—from deterrence to nuclear attack. A strong Navy at sea deters a confrontation. Naval forces in strength and quality are essential to underwrite U.S. policy, such as NATO. If elements of naval power such as the F-14 are not made available to provide confidence in meeting the developing Soviet threat, our ability to support U.S. policy and commitments loses credibility.

Q. What is the need for the F-14, in terms

of maintaining modernity in our weapons systems as against gradual obsolescence?

A. The F-14 will replace the F-4 in air superiority and escort tasks in the mid-1970s. The projected threat that will confront the U.S. in the 1970s currently includes four new Soviet fighter aircraft, each with performance greater than that of the F-4J. Delay during the F-111B program has placed the Navy in a late position with respect to acquiring an air superiority fighter replacement. Since August 1967 the F-4 in Southeast Asia has had a 1:1 kill ratio against the older Mig-21. Against late model Mig-21s, or the newer USSR fighters, the F-4J almost certainly will not be adequate.

The F-4, designed in 1954, became operational in 1961. Since 1954 the Soviets have built and flown eight new fighters. The performance of the F-4 cannot be improved without major redesign. This would cost many millions of dollars and take several years. Even then it would be inferior to the new Soviet fighter aircraft. Further, the F-4 was designed as an interceptor and equipped with an avionics/weapons system to destroy high altitude bombers. Although it is now used as an air superiority fighter, it is not sufficiently maneuverable at lower altitudes.

The F-14 has been designed for the Advanced Technology Engine without need to modify the F-14 airframe. By pursuing this development concept higher thrust engines will be operational in the F-14B as soon as they are available without waiting for concurrent development of the airframe and avionics. This will have been accomplished during the F-14A test program.

Threat analysis dictates introducing a better fighter capability at the earliest possible date. The F-14 is scheduled for fleet operations in early 1973 and is substantially better than the F-4. A decision to stop the F-14A and wait for the F-14B would delay the operational introduction of a superior fighter at least two years. Cost would be considerably greater.

Q. Why do we need the F-14A? Why not wait for the F-14B?

A. Analysis of Soviet capabilities in the mid-1970s reveals that today's fighters will not successfully counter the threat. A comparatively low risk development program was initiated to produce at an early time an advanced fighter fully capable of countering the threat. Studies were used to determine the optimum time and cost schedules for this. Stretch-out would increase program costs as well as delay introduction of an advanced fighter.

Proceeding with a Navy fighter development by means of evolution from the F-14A to the F-14B reduces the risk and provides distinct and substantial savings in cost and time. It also provides greater flexibility to meet other military objectives.

Stopping the F-14A program and proceeding only with the F-14B will result in additional program costs of \$340M. These increases do not include TF-30-412 engine termination. They do reflect sustaining manpower over a longer development period, adding flight testing, changing GFE requirements and timing, and adjusting for inflation due to delay.

Q. Isn't the TF-30-P-412 an old engine and therefore a mismatch of old and new technology in the F-14A?

A. The TF-30-P-412 engine to be used in the F-14A is the most advanced engine that could be selected for the F-14A mission with low risk relative to cost, schedule and performance. It represents the latest production model of the TF-30 series which includes the TF-30-P-1, P-3, P-6, P-7, P-8, P-9 and P-12.

Early in calendar 1966 Pratt and Whitney Aircraft and Grumman were requested to cooperate in an accelerated study of the F-111B/TF-30-P-1A aircraft to improve its performance as necessary to meet Navy mission requirements. This study indicated

specific changes in the TF-30 engine designed to provide lower fuel consumption at loiter conditions and significant thrust increases at critical flight conditions, revised installation characteristics to provide improved aircraft performance, and changes to improve its suitability for carrier operation. These changes were made in the TF-30 engine and resulted in the model TF-30-P-12.

In addition to the improvements in design, the TF-30-P-12 engine benefited from all the evolutionary changes introduced into other TF-30 engines to correct problems encountered in flight test and service operation of the A-7 and F-111 aircraft. The TF-30-P-412 engine to be used in the F-14A aircraft is the TF-30-P-12 engine adapted to the F-14. It is equipped with a new Iris type exhaust nozzle which provides improvements in aircraft range varying up to 8 percent over the operating envelope. It also has refinements to reduce fuel consumption at significant mission conditions and smokeless combustors. Its development is based on the latest techniques to ensure compatibility of the engine with the aircraft inlet and the exhaust nozzle. The TF-30-P-412 engine is 57 pounds lighter than the TF-30-P-12 engine. The TF-30-P-412 thrust at sea level is up 1750 pounds over the TF-30-P-1 engine.

Contract negotiations are currently underway with Pratt and Whitney. The first P-412 prototype F-14A flight test engine will be delivered in September 1970; production engine delivery starts in February 1971.

Q. When will the Advanced Technology Engine be ready for the F-14B?

A. The schedule for the Advanced Technology Engine calls for an engine to be installed in one side of number eight F-14A in November 1971. This will allow early verification of engine and airframe compatibility without risk: the F-14 will be able to fly on the one TF-30-P-412 engine in the other nacelle should it be necessary to shut the ATE down. In June 1972 two ATEs will be installed for final flight test and evaluation leading to Fleet Introduction of the F-14B in December 1973. It is expected that 67 F-14As (or fewer) will be produced.

Q. Why a multi-purpose F-14 instead of a single purpose (Dogfight) fighter?

A. Navy aircraft are designed to meet one primary task best. But the fighters are used for fleet defense and for air-to-surface attack as additional tasks. Long experience has shown this plan to be sound, effective and efficient. It provides the tactical commander greater choice and flexibility. As a battle or conflict progresses needs constantly change; initially the requirement may be for large numbers of fighters, to later for larger numbers of attackers. Once air superiority is attained only a portion of the fighters are required for air defense. Fighters with an air-to-ground feature are effectively used in the destruction of many targets and thus assist greatly in achieving success.

The F-14, designed primarily as an air superiority fighter, is a weapon system that can shoot down long-range multi-raid aircraft and missiles as well as engage enemy fighters in close-in combat. Weight reducing microminiaturization of avionics, balanced with airframe and engine design, has eliminated performance penalties formerly associated with multi-mission fighters. In the F-14 one percent of the aircraft weight makes it possible to use Phoenix, Sparrow, Sidewinder, Agile, a gun and air-to-surface weapons. A large part of that weight is in removable pallets not used for the "dogfight" configuration.

Navy performance estimates of the F-14A and F-14B have recently been substantiated by an independent National Aeronautics and Space Agency assessment made at the request of Dr. John S. Foster, Jr., Director of Defense Research and Engineering. It was further concluded the multi-mission performance estimates were attainable without degrading the pure fighter capability.

Q. The F-14 proposal would combine the Navy requirement for a fleet air defense aircraft carrying the PHOENIX missile system with an air superiority dogfighter aircraft carrying the SPARROW missile system. Has anything been lost in each of these missions through the design of a multi-purpose aircraft?

A. The Navy F-14 is designed for air superiority. There has been no compromise in air superiority performance because of the fleet air defense capability of this aircraft. The air superiority mission requires dogfighter performance superior to the threat at distances compatible with the Navy attack aircraft to be escorted.

The fall-out capability resulting from this air superiority mission emphasis with "proper" sizing also enables the fleet air defense mission to be accomplished. This is achieved by external fuel tanks and adding the PHOENIX missiles to the fighter fuselage, with readily removable adapters or pallets. Thus, both Navy mission requirements are met without adversely affecting the design for the primary air superiority mission and with no resulting conflict in design emphasis and overall mission priorities.

Q. What would be the impact of a one or two year delay in the F-14 program on our readiness posture? In other words, what will be the capability of our forces to confront the enemy with weapons current today against those an enemy is likely to have?

A. The projected threat that will confront the U.S. in the 1970-80's currently includes four new Soviet fighter aircraft each with performance estimated to be greater than that of the F-4J, including superior maneuverability. A new U.S. fighter to meet this treat is already very late.

The F-14 is designed and will have growth potential to provide adequate carrier fighter capability through the 1970-80 time period. The F-14/Phoenix system in addition to its fighter capabilities, will have a significant capability to destroy Soviet missiles.

The F-4, designed in 1954, became operational in 1961. Since that date, the Soviets have built and flown eight new fighters. As they have done in the past, we must expect them to select the best for large-scale production. The F-4 cannot be improved significantly without major redesign amounting to a new airplane and costing many millions of dollars. It still would be inferior to operational Soviet fighter aircraft.

The F-4 is our best U.S. fighter employed in Southeast Asia. Its performance in aerial combat became marginal with respect to the MIG-21 just before the bombing pause. Designed originally as a high altitude interceptor, and equipped with a weapons system to destroy high altitude bombers, the F-4 has for some time been used as an air superiority dogfighter at low altitude where it has not been at its best.

The ratio of MIG-21s downed by F-4s to F-4s down by MIG-21s diminished from April 1966 to August 1967. Since August 1967 the F-4 has a 1:1 kill ratio against the older MIG-21s. In a confrontation with late model MIG-21s, and particularly with the newer USSR fighters the F-4J would be inadequate. While this occurred in the enemy's GCI environment we have classically carried the fight to the enemy and can expect to fight in more advanced GCI environments in the future.

The results of an attack on a carrier task force are primarily functions of the combat capabilities of the task force. The greater the capabilities the less the damage. The long-range, multi-shot F-14/Phoenix system make it completely superior to the F-4J/Sparrow system against any attack on a carrier. The F-14/Phoenix system augmented by the surface-to-air missile systems will blunt any Soviet attack.

Soviet surface-to-surface and air-to-surface missile threats already exist. They will certainly become more advanced. Advanced

Soviet fighters are expected to be equipped with missiles of range greater than U.S. missiles except Phoenix. We must be able to counter the full present and the future threat, not the past.

From time to time, missile carrying Soviet bombers fly over or near units of the U.S. fleet. Although detected early and intercepted, these overflights make clear what the situation is. New Foxbat, Fiddler and Flagon fighters have long-range escort capabilities with advanced avionics and missiles, adding to the threat. New missiles are the weapons of concern; they must be countered.

The F-14, designed for air superiority, is the weapon system that can destroy long-range multiple raid targets, aircraft and missiles. It can destroy enemy escort fighters in close-in combat. Computer technology and weight reducing microminiaturization of avionics, properly balanced with airframe and engine design, have removed performance degradation that formerly resulted from multi-mission fighter designs. In the F-14, adding one percent of the aircraft's combat weight has made it possible to use the complete combination of Phoenix, Sparrow, Sidewinder, Agile, a gun and air-to-surface weapons. A significant amount of this weight is in removable pallets not carried in the "dogfight" configuration.

A stretch-out in the F-14 program would increase the overall program costs: delays; price rises; contract renegotiation; additional flight tests; and purchase of F-4s to maintain force levels. It is estimated that stopping the F-14A program and proceeding with the F-14B would result in additional program costs of \$340M. Delaying the F-14A for one year is estimated to result in additional program costs of \$100M.

Should Phoenix be cancelled, the long-range intercept capability required to counter multiple target raids against surface forces, U.S. forward objective areas and continental U.S. will be delayed until a replacement system can be designed and developed. In addition, the capability to counter advanced Soviet fighters equipped with long-range missiles will be degraded. Over 91% of the development funds for the AWG-9/Phoenix missile system have been spent.

Q. Pilots who have flown in combat in Southeast Asia have stated that the U.S. needed a light, uncomplicated, highly maneuverable fighter aircraft. Is the F-14 this kind of aircraft?

A. The F-14 is that kind of aircraft to the extent that it will be highly maneuverable and, while it will have a sophisticated weapons control system, it will also have a higher degree of reliability, maneuverability and weapons versatility than we have ever achieved. The key to a good fighter is to have a balanced, well-proportioned aircraft with a good thrust-to-weight ratio to provide high speed, good range, outstanding acceleration, and the aerodynamic characteristics to ensure the best possible maneuverability. These attributes are essential to beat the enemy. Regardless of the weight of the aircraft, if it is not in balance it will never be a great fighter. Therefore, the "lightweight is better than the heavyweight" fighter is irrelevant, and largely untrue. When the F-4U, Corsair was developed, there was no decision to build a heavier fighter. Rather, an aircraft was designed to meet the needs of a possible war in the Pacific, that is, an aircraft with range and high performance. The result was a fighter heavier than had ever been seen before—anywhere. It had a longer service life than any other fighter. The F-8F, on the other hand, was developed to out-duel the Japanese Zero. Even though it was a "pilot's dream", it had little potential and a short service life. The F-14 is designed to meet the threat . . . to the best degree possible. Aircraft size in itself does not determine performance.

Q. Wouldn't the Navy be better off with a smaller, lighter, and cheaper fighter than the F-14?

A. Analyses of a smaller less costly fighter showed that to achieve desired performance either the thrust required would be beyond the level attainable or the gross weight of the aircraft would far exceed that of the F-14A. The light weight fighter would excel in air combat maneuvering only. It would not have adequate range to escort attack aircraft to their full mission range, or provide good fleet air defense in all-weather conditions or to deliver air-to-surface ordnance.

Surface-to-surface and air-to-surface missile threats already exist. They will certainly become more advanced. Advanced Soviet fighters will be equipped with missiles capable of ranges greater than U.S. missiles with the exception of Phoenix. We must be able to counter the full present and future threat, not the past. Over the past few years, Soviet weapons progress has been startling. There is no reason to believe that this progress will not continue.

Q. The bomber threat against the fleet has been predicted by Navy officials for some time. It has not developed to date.

A. From time to time, missile carrying Soviet bombers fly over or near units of the U.S. fleet. Although detected early and intercepted, these overflights make clear this threat does exist. New Foxbat, Fiddler, and Flagon fighters have long-range escort capabilities with advanced avionics and missiles, adding to the threat.

Surface-to-surface, as well as air-to-surface missile threats also exist. They will certainly become more advanced. The F-14/Phoenix system in addition to its fighter capabilities, will provide a significant capability to counter the Soviet submarine-launched cruise missile threat. A look-down shoot-down capability against small multiple targets has been successfully demonstrated during development, and clearly indicates a capability against such attack.

Q. What is the history of the F-14 program in terms of when and how the requirement developed, and what delays have already occurred in the program as a result of the Vietnam War and other factors?

A. The F-14 is the result of a Navy competition among five contractors for a development program to provide improved air superiority capability in the shortest reasonable time. In addition to air superiority, the F-14 will provide better fleet and area defense than would have been provided by the F-111B. The F-14 will also replace the F-4 as an air superiority fighter and in escort roles. The delay incurred through the F-111B program has placed the Navy in a deficit position. We need the F-14 in the budget now because the actual threat and need for the capabilities of the F-14 exist today. In FY 1969 the Congress canceled further funding of the F-111B and authorized development of a new Navy fighter (the F-14). Concurrently the Congress approved \$130 million in R&D funds for contract definition, engineering development, and incremental funding for three R&D F-14 aircraft. There have been no delays in the program since its inception. The F-14 design and construction are well along. First flight is scheduled in January 1971.

Q. If the Advanced Technology engine fails or slips significantly, what will be the effect on the F-14 program?

A. In the event unforeseen technical problems are encountered and cause a slip in the Advanced Technology Engine the F-14A production can continue until the Advanced Engine becomes available. The F-14 design provides for retrofit of the Advanced Engine in the F-14A as a relatively simple matter. The F-14A performance meets the threat. Without the Advanced Technology Engine there is no F-14B or F-15.

Q. On which carriers do you plan to use

the F-14? Can it be used aboard the Midway class?

A. Initially the F-14 will replace F-4 aircraft on the Forrestal class and subsequent carriers. The F-14 series will eventually replace all of the F-4 and F-8 aircraft in our active inventory. It will have a full operational capability aboard all Midway class carriers.

Q. Why is the F-14 a two place airplane in lieu of single place?

A. In 1954 the Navy reached a tentative conclusion that a two-man crew was required to accomplish the all-weather fighter mission when it established the requirements for the XF4H-1, now known as the F-4. In 1955, a competitive situation was developed by initiating the single place, Sparrow equipped, F-8U-3 project. A choice between these two highly successful airplane developments was forced on the Navy in 1958. With the choice of the two seat F-4, the era of Navy single seat fighter development ended.

Then, as now, a weight and cost penalty was associated with the requirement for two men. These disadvantages were more than offset by the much greater capability of the two-man airplane, particularly under adverse conditions. Today, electronic warfare developments have made the tactical environment much more demanding re-emphasizing the necessity for a two-man crew. F-4 and A-6 experience in Southeast Asia has confirmed that the help provided by the second man with his additional sensors is invaluable.

EFFECTIVENESS

Q. Why develop a new fighter aircraft with a ceiling which does not exceed that of existing Soviet fighter aircraft?

A. It is, of course, impossible to design any one fighter which excels in each of its characteristics over all other fighters. The U-2 was a prime example of designing a special purpose aircraft. Its ceiling far in excess of any other aircraft at the time it was put into service, allowed it to survive until a counter weapon was developed by the Soviets.

In a similar manner, the F-14 will use its Phoenix and Sparrow missiles to handle those threats which, by virtue of specialized design, may be able to fly beyond its own envelope. Higher ceilings are therefore not militarily required, and could be achieved only at the expense of other more necessary features. The F-14 now represents an optimum balance between thrust, weight, agility and range.

Q. Is the F-14 the best performing air superiority fighter aircraft that the state-of-the-art will permit the development of at this time?

A. The achievement of long-term air superiority requires the proper combination of system performance in order to provide tactical options to meet the changing environment. The balance achieved in the F-14 between performance, system integration, and a two-man crew provides superior performance plus long range, stand-off missile capability. A two-man crew provides tactical flexibility in a variable ECM environment. The F-14A utilizes the TF-30-P-412 engine, the most advanced engine that has been developed to date. The AWG-9 is the most advanced and versatile fire control system being developed in the free world, and to our knowledge in the Communist world as well. Minimum weight is achieved due to the structural arrangement and the use of newest state-of-the-art materials. The F-14B and F-14C will maintain long term air superiority capability through easily achievable evolutionary changes. While pure airplane performance might be increased by sacrificing carrier suitability, strength or other features, the F-14 is the best performing air superiority fighter that can be developed at this time to meet overall Navy requirements.

Q. How can air superiority be achieved unless we design aircraft which not only exceed

the performance characteristics of presently known Soviet aircraft, but also new aircraft which the Soviets will probably develop in the next five years?

A. Experience, backed up by many studies and analyses, shows that the effectiveness of an air superiority fighter is determined by vehicle performance parameters (energy for maneuverability (P_n), wing loading, visibility, roll rate, radius, combat ceiling, time to accelerate, etc.) and by the effectiveness of the air-to-air weapons carried. The F-14A represents the optimum balance between vehicle performance, weapons, and many other parameters (such as vulnerability, flexibility of weapon mix, interaction with combat support environment, etc.) that determine the overall effectiveness of a fighter within the weighted value of various mission profiles. The F-14B and F-14C will have a combat thrust to weight ratio greater than 1.16 which will give these airplanes much higher air-to-air combat performance than any present or projected Soviet fighters. It is planned to introduce the F-14B at about aircraft number 68 or earlier.

An air superiority fighter aircraft cannot be simply described or compared on the basis of any single performance parameter. A high performance fighter should be judged as a "balanced" weapon system and the overemphasis of any single parameter can lead to many erroneous conclusions of relative merit. For example, maximizing thrust to weight leads to a rocket like solution; maximizing low wing-loading leads to a glider; maximizing visibility leads to a slow observation platform; and maximizing speed and altitude leads to interceptor like performance. A comparison and evaluation of tactical fighter capability is at best extremely complex and requires insight and experience in the balancing of total weapon system parameters. This "balancing" has been done in a thorough manner in terms of realistic technological forecasts for engines, avionics, aerodynamic design, materials, and structures. Of particular importance, in the design philosophy of the F-14, has been the emphasis on systematic growth in performance of an evolutionary family of aircraft to meet the estimated changes in the threat through the early 1980's.

Q. The acceleration of the F-14A when it finally becomes operational in 1973 will be less than the best Soviet fighter in production today, 1969.

A. The F-14A at combat weight (gun and four Sparrows) will have a thrust-to-weight ratio of .84. Acceleration characteristics will be greater than the best Soviet fighter in production today. Furthermore, the F-14 with the Advanced Technology Engines will have a thrust-to-weight ratio of 1.16. Acceleration from .8M to 1.8M will take only 1.27 minutes; a 40% improvement over the best Soviet fighter today. All F-14As will be retrofitted with the Advanced Technology Engine as soon as it becomes available. Retrofit costs are minimal—approximately \$6,000 per aircraft.

Q. Why is the F-14 required to have such long range escort radius on internal fuel?

A. The Foxbat and Flagon have demonstrated extended radius of action and improved avionic and missile capabilities. Tactical commanders must anticipate possible combat with enemy fighters long before the strike group enters the peripheral defensive posture of the enemy.

The F-14 with a long range escort radius of action on internal fuel is compatible with the radius of the Navy's attack aircraft. It also provides additional combat fuel at closer ranges and increases the tactical flexibility.

It is possible to build a fighter with less internal fuel range and accomplish the remainder with external tanks. If, however, the strike group is engaged prior to those tanks being empty, they will have to be dropped to permit maximum performance. This would

make it impossible for the fighter escort to continue and would abort the entire mission. Additionally, the increased turn around time, maintenance and logistics dictate the internal fuel requirement.

Assuming a limited war (U.S. and USSR not in direct conflict), 85% of the remaining land area of the world and 95% of its population are within 600 miles of sea-based tactical air. This 85% portion contains 56.5 million square miles. A single carrier task force could respond to a contingency in any one of the 56.5 million square miles.

Q. Is the F-14/Phoenix the best performing fleet air defense weapons system that the state-of-the-art will permit the development of at this time?

A. The F-14 does represent the best performing fleet air defense aircraft that can be designed to operate in the carrier environment using today's state-of-the-art. The carrier environment includes not only its flying and deck handling qualities but its utility in the over-all defensive/offensive picture. Although the fleet air defense configuration of six Phoenix missiles is technically defined as an "overload" condition, what this really means is the "g" capability of the aircraft at combat gross weight is reduced only 0.5 "g". This reduction is insignificant, particularly as operational tactics with a six Phoenix load do not call for high "g" maneuvers. The design philosophy of the F-14 family of aircraft provides for evolutionary growth for both the air superiority mission and the fleet air defense mission. The F-14B and F-14C will incorporate technological advances in engines, maneuvering performance and more capable micro-miniaturized avionics.

Q. To what extent did the use of the AWG-9/Phoenix missile system dictate the design and cost of the F-14?

A. The AWG-9 missile control system is an integral part of the F-14 design and has obviously influenced the size, weight and cost of the design. However, by careful design tailoring, the gross weight increase has been held to about 1% and the cost increase to about 10% over an airplane incorporating a digital version of the AWG-10 (F-4J) fire control system. Vast improvement in capability of the AWG/Phoenix overshadows such differences.

Q. Why do we need the AWG-9/Phoenix missile system?

A. The multi-shot AWG-9/Phoenix missile system is essential for shooting down or diverting missile carrying aircraft before they reach missile launch range. Of equal importance is its capability to destroy air and surface launched cruise missiles after they have been launched.

The results of an attack on a carrier task force are primarily functions of the combat capabilities of the task force. The greater the capabilities the less the damage. The long-range, multi-shot F-14/Phoenix system make it completely superior to the F-4J/Sparrow system against any attack on a carrier. The F-14/Phoenix system augmented by the surface-to-air missile systems will blunt any Soviet attack.

Q. Why has the AWG-9/Phoenix missile system taken so long to develop? How much slippage; Why?

A. The AWG-9/Phoenix missile system development program began with a letter contract to the Hughes Aircraft Company in December 1962. The proposed program was keyed to the first F-111B fleet squadron delivery in February 1969. In the spring of 1964 the Navy learned of technical difficulties being encountered by two major subcontractors: Litton (computer, controls and displays) and Rocketdyne (missile rocket motor). These technical problems together with the attendant cost increases resulted in a corrective plan which essentially would have slipped the Phoenix development by one year.

Subsequent to these events further F-111B funds were denied by Congress in FY 1969 and the Phoenix development was re-oriented to the F-14A requirements and schedule which then deferred fleet introduction to April 1973, an approximate two year deferral.

With respect to the F-14A program the AWG-9/Phoenix reconfiguration is on schedule.

Q. Will Phoenix be capable of coping with the various missile threats?

A. The Phoenix is a long-range air-to-air missile designed to engage threat aircraft and various modes of missile attacks. Although Phoenix has not yet been used operationally, 21 of 26 planned R&D missiles have been fired with unprecedented success. These include hits by one missile fired at a range of 78 miles, two missiles fired simultaneously at two targets with 10 miles separation, one missile fired in the active mode for the close-in situation and a look-down missile at a low flying unaugmented drone. The Phoenix missile to date has demonstrated every design performance requirement.

Q. Won't the Phoenix be jammable and, therefore, ineffective?

A. The Phoenix missile is designed to operate in an electronic countermeasure (ECM) environment. Its multiple guidance phases and multiple control frequencies make it effective against all predicted ECM techniques.

Q. What is the weight penalty for carrying the Phoenix missile?

A. About 600 lbs. of aircraft weight, a significant amount of which is in removable pallets not carried in the "dogfight" configuration.

Q. Can unexpended missiles be brought back aboard after a mission?

A. Yes. Design specification requires that any combination of fuel and unexpended ordnance up to a total of 10,000 lbs. can be brought back aboard the carrier.

Q. It has been said that the AWG-9/Phoenix missile system, with its multi-track capability, involves too great a workload for the pilot and requires a missile control officer. Would the second man be required if the Phoenix system is not used?

A. In 1954 the Navy reached a tentative conclusion that a two-man crew was required to accomplish the all-weather fighter mission when it established the requirements for the XF4H-1, now known as the F-4. In 1955, a competitive situation was developed by initiating the single place, Sparrow equipped, F-3U-3 project. A choice between these two highly successful airplane developments was forced on the Navy in 1958. With the choice of the two seat F-4, the era of Navy single seat fighter development ended.

Then, as now, a weight and cost penalty was associated with the requirement for two men. These disadvantages were more than offset by the much greater capability of the two-man airplane, particularly under adverse conditions. Today, electronic warfare developments have made the tactical environment much more demanding reemphasizing the necessity for a two-man crew. Experience in Southeast Asia has confirmed that the help provided by the second man with his additional sensors is invaluable.

COSTS

Q. What are the total R&D costs of the F-14A and F-14B?

A. The F-14A R&D costs are \$731M in escalated dollars. The F-14B Advanced Technology Engine R&D costs are \$243M in escalated dollars.

Q. What is the F-14 total program and total cost?

A. The baseline for negotiating the contract with Grumman was on 469 aircraft (6 R&D and 463 production aircraft). The total program unit cost including R&D (F-14A and F-14B), procurement, support, training and investment spares is 13.6M. The Navy's

desired program to replace the Navy and Marine F-4s is 722 aircraft (6 R&D and 716 production). The total program unit cost is 12.0M. The foregoing are escalated dollars. In constant calendar year 1970 dollars the total program unit costs are 12.4M and 10.4M respectively.

Q. What is the cost difference between the F-14 and F-15 airplane?

A. There is a great deal of confusion within the Press and Congress with regard to the program costs of the F-14 and F-15 aircraft programs. The large variation is due to the difference in service missions, differences in the environment in which the missions are performed and to the degree and magnitude of combat support afforded to the two aircraft in a typical tactical air combat environment.

A true measure of cost comparison is to recognize that the two airplanes are in the same class with regard to sophistication, i.e. they are both air superiority fighters as their primary mission. In this category a rule of thumb with regard to cost that is derived and supported by the aerospace industry is that airplanes of this level of complexity and performance cost approximately \$100 per pound. The difference in weight between the F-14 and F-15 is expected to be approximately 10,000 to 13,000 pounds. On this basis the cost differential of the two airplanes on a flyaway basis will fall between \$1.0 million and \$1.3 million. Either airplane taken into the Air Force or the Navy inventory under given production rates and support conditions will not deviate significantly from this simple costing rule-of-thumb. Confusion has come in assigning and assessing different rules for program costing.

Q. What are the terms of the contract with Grumman?

A. The F-14A engineering development (R&D) contract with Grumman Aircraft Engineering Corporation includes six R&D aircraft. This contract was let as a result of competition between five firms; Grumman, McDonnell Douglas, Ling Temco Vought, General Dynamics, and North American Rockwell.

The R&D contract is on a Fixed Price Incentive (FPI) basis. It has a target price of \$388M consisting of a target cost of \$352.8M and target profit of \$35.3M and a ceiling price of \$440.9M (25% of target cost). It contains ceiling price options of seven additional production lots.

Lot I, 6 aircraft (first flight; January 1971). Total flight test and demonstration program. Data for: aircraft, trainers, support and management.

Lot II, 6 aircraft.

Lot III, 30 aircraft.

Lot IV, 96 aircraft.

Lot V, 96 aircraft.

Lot VI, 96 aircraft.

Lot VII, 96 aircraft.

Lot VIII, 43 aircraft.

In addition, options have been granted, subject to restrictions on the rate of production acceleration or deceleration, for quantities not less than half nor greater than one and one half of those shown. (For example, Lot V minimum quantity is 48 aircraft and the maximum quantity is 144 aircraft.) The present ceiling price is the maximum amount the Government will pay for the contract scope of work. Costs incurred beyond the ceiling price are borne solely by the contractor.

The R&D contract penalties and awards are based on performance by the contractor. The following items have contract guarantees:

Weight empty.

Minimum approach speed.

Acceleration time at altitude.

Specific Range.

Maintainability.

Cost.

The incentive arrangement allows the contractor to maximize his profits by producing an aircraft which exceeds performance

requirements (on the above items) while being produced at lowest actual cost. As the performance is degraded, or as actual costs increase, the contractors' profits are less.

The Government has no obligation to accept the aircraft if any of the minimum performance levels are not achieved. At this point the Government can either require the contractor to correct the aircraft to meet the minimum requirement or agree to an equitable reduction in contract price.

The R&D contract also contains a predetermined price decrease for slippage in delivery of the five (5) aircraft to the Board of Inspection and Survey Trials. This decrease

will be at a rate of \$5,000 per aircraft per day, not to exceed the sum of \$600,000 per aircraft or \$3,000,000 total.

The contract requires the contractor to maintain a management and reporting system which meets the stringent criteria of Department of Defense Instructions. In addition, the reports are stipulated as a substantive product of the contract and the Government Contracting Officer can reduce or suspend Progress Payments under the contract if the contractor fails to submit the reports on time.

Q. What is the breakdown of F-14 costs?

A. "F-14A/B PAMN/R&D unit costs."

Number of A/C	Escalated dollars in millions			Calendar year 1970		
	463	716	1,200	463	716	1,200
Flyaway.....	\$8.5	\$8.1	\$7.6	\$7.5	\$6.8	\$6.0
Support.....	1.1	.9	.6	.9	.8	.5
Inventory spares.....	2.0	1.7	1.4	1.9	1.5	1.2
Total production.....	11.6	10.7	9.6	10.4	9.1	7.7
Unit costs:						
R. & D.:						
F-14A ^a			731			705
F-14B ^b			243			228
Total unit prog. Cost (PAMN/R. & D.).....	13.6	12.0	10.4	12.4	10.4	8.5

^a 1,200 buy—Extension of 716 schedule. (a) Maximum rate 12 per month. (b) 10-year program—Fiscal year 1970 through fiscal year 1980.

^b Includes 6 R. & D. A/C.

It should be mentioned, however, that the Navy has reviewed its operational flying requirements and the impact on spares, train-

ing and support reduces the total program cost of 722 aircraft by about \$600M and is reflected by the following breakdown.

Number of A/C	Escalated dollars in millions			Calendar year 1970		
	463	716	1,200	463	716	1,200
Flyaway.....	\$8.3	\$7.7	\$7.3	\$7.3	\$6.5	\$5.8
Support.....	1.0	.8	.6	.9	.7	.5
Inventory spares.....	1.6	1.3	1.2	1.5	1.1	1.0
Total production.....	10.9	9.8	9.1	9.7	8.3	7.3
Unit cost:						
R. & D.:						
F-14A ^a			731			705
F-14B ^b			243			228
Total unit program.....	12.9	11.1	9.9	11.7	9.6	8.1

^a Includes 6 R. & D. A/C.

Q. How much confidence do we have in F-14 cost estimates?

A. The Navy has a high degree of confidence in their cost estimates based on past history comparing estimates to actual costs. The Navy conducted a detailed, involved Concept Formulation and Contract Definition effort for the F-14 utilizing the Navy Fighter Study, the CNO staff, and Naval Air Systems Command personnel. Detailed costing was done by these groups supplemented by various independent consultants. Events to date have not shown any reason to alter these cost estimates.

Q. How can you be sure that the costs of the F-14 will not escalate in the same way the F-111, C-5A, Cheyenne, etc. programs have?

A. Navy conducted detailed Concept Formulation/Contract Definition phases.

Detailed costing by Navy Fighter Study, Naval Air System Command, Resources Management Corporation, and consultants.

F-14 R&D contract is firm FPI with firm specifications. Option for production quantities includes $\pm 50\%$ in production lot buys by FY with pre-negotiated ceiling prices negotiable downward only. The contract is different from both the F-111 and C-5. (The F-111 contract was FPI for R&D—poor specs—no production commitment and letter contract initiated program. C-5A repricing formula is different from F-14A.)

Low risk program.

Q. Wouldn't it be less expensive to not build the F-14A and wait for the F-14B?

A. Threat analysis dictates introducing a better fighter capability at the earliest possible date. The F-14 is scheduled for operations in early 1973 and is substantially better than the F-4. A decision to stop the F-14A and wait for the F-14B would delay the operational introduction of a superior fighter at least two years.

Proceeding with a Navy fighter development by means of evolution from the F-14A to the F-14B reduces risk and provides distinct and substantial savings in cost and time. It also provides increased flexibility to satisfy other military objectives.

Stopping the F-14A program and proceeding only with the F-14B will result in additional program costs of \$340M. These cost increases do not include TF-30-P-412 engine termination. They do reflect sustaining adequate manpower over a longer development period, adding flight testing, changing GFE requirements and timing, and adjusting for inflation due to time lag.

The development process must be slowed when the number of major items to be developed is increased. In this case at least two years are lost at a time when greater fighter capability is urgently needed.

Analysis of the threat in the mid-1970s reveals that present fighters cannot successfully counter the threat. A low risk orderly development program was initiated to introduce in the earliest time frame an advanced fighter capable of countering the threat. Studies determined the optimum time and cost schedules for this program. Any stretch-

out will increase total program costs and delay introduction of an advanced fighter.

Costs associated with a decision to proceed directly to an F-14B are as follows:

"Decision" costs total \$340M, which break down as follows:

A. A reduced but fixed personnel payroll is required to retain a cadre of project personnel during stretch-out. Payroll cost is estimated at \$34M.

B. The stretch-out moves many costs to later years where inflationary effects increase costs. In particular, prime contractor labor and material inflation costs are expected to be \$100M, support equipment inflation costs \$10M, and GFE inflation costs \$30M; for a total of \$140M.

C. Additional flight testing time is required to proceed directly to the F-14B. This increased time is attributed to: First, fewer flight hours per flight test period, because new engines are restricted in running hours and therefore require more frequent engine change; second, more test hours are lost due to engine problems than would be encountered with proven TF-30-P-412 engines and third, a greater amount of engine-airframe testing must precede other aircraft testing sequentially, such as flight performance, flying qualities, etc. There are ground tests which also cannot be paralleled. Increased test time costs are estimated at \$24M.

D. A relevant decision cost, but not a program cost, is the cost of procuring 24 additional F-4 aircraft to sustain the fleet fighter aircraft inventory during the stretch-out period. This cost is estimated at \$86M.

E. Stretch-out costs other than inflationary effects will increase cost of major GFE components such as the AWG-9 fire control system. The effect of the twenty-three month stretch-out on the AWG-9 development is \$56M. This cost is associated with continued efforts on a minimum sustaining level basis in the development program, such as roofhouse work, avionics integration effort and software exercises.

F. Numerous relevant decision costs cannot be easily quantified. These include the expected cost increase involved in negotiating a new prime F-14 contract with Grumman, without the benefits of a competitive environment. New incentives must be negotiated which will alter the fee-cost-performance relationships. Learning curve economics achieved by repetitive efforts, however infrequent, are lost. "Gold-Plating" effects will occur where existing designs become overperfected by conscientious engineers. There is a deleterious effect upon the morale of all associated program personnel, both Government and private industry which tends to allow schedule slippage, since milestone slippage becomes easier once a stretch-out is allowed. These miscellaneous costs are conservatively estimated to total \$20M.

G. The non-recurring costs of converting the F-14A to the F-14B by installation of the ATE is estimated at \$20M. It is a combination of tests and design costs and is considered included in the costs otherwise discussed. This is a fixed cost for the program and is subtracted from costs previously discussed to arrive at the decision cost for the alternatives posed.

There are sunk costs associated with the F-14A/TF-30-P-412 engine program which are not considered relevant decision costs, yet these costs remain accountable as program costs. These costs are, \$5M testing, \$12.3M P-412 nozzle development, \$6.4M P-412 engine procurement and \$8.0M prime contractor design work. The total sunk costs for current F-14A work is estimated at \$31.7M.

Q. What is the additional cost to modify the AWG-9 for the F-14?

A. The additional cost to modify the AWG-9 missile control system is \$129.0M. This includes reconfiguring from a side-by-side to a tandem seating arrangement and

incorporating the capability to fire Phoenix, Sparrow, Sidewinder, Agile and 20mm gun. Additionally, the AWG-9 will display firing envelopes for all weapons under maneuvering environments to the pilots heads-up display. These costs are included in the F-14A R. & D. costs (\$731M).

Q. What is the total R. & D. cost for the AWG-9/Phoenix missile system?

A. Since the beginning of the program in FY-63, the total R. & D. cost for the missile and the AWG-9 is \$414M, of which 91% has already been expended.

ARMAMENT

Q. Why does the F-14 need an air-to-ground capability? How does it penalize the F-14 performance to have this capability?

A. Navy aircraft are designed to meet one primary task best. But the fighters are used for fleet defense and for air-to-surface attack as additional tasks. Long experience has shown this plan to be sound, effective and efficient. It provides the tactical commander greater choice and flexibility. As a battle or conflict progresses, needs constantly change: initially the requirement may be for large numbers of fighters, to later for larger numbers of attackers. Once air superiority is attained only a portion of the fighters are required for air defense. Fighters with an air-to-ground feature are effectively used in the destruction of many targets and thus assist greatly in achieving success.

The unique design of the F-14 permits the incorporation of a significant air-to-ground capability without penalizing its air superiority mission.

Weight and performance penalties are avoided by palletizing equipment for fleet air defense and air-to-surface missions. The added weight is carried only on these missions. PHOENIX and air-to-surface ordnance are carried as overload. The F-14 is designed as a 53,000 pound four SPARROW air superiority fighter. An insignificant penalty in maneuvering performance (0.5g) is accepted while the ordnance is aboard the aircraft. However, the full F-14 maneuvering performance returns when the missiles or ordnance are fired.

Q. What armament is the F-14 capable of carrying?

A. As an air superiority fighter, the versatile F-14/AWG-9 system will control Phoenix, Sparrow, Sidewinder, and AGILE air-to-air missiles and generate sighting data for the 20mm cannon. It also provides for visual delivery for all conventional bombs and rockets with accuracies comparable to the A-7E (approximately 10 mils).

Q. What is the pallet concept of the F-14?

A. In order to avoid carrying unnecessary weight during the air superiority mission, the pallet concept was developed. Armament and peculiar auxiliaries used only during the fleet air defense and air-to-surface missions are installed in low drag, external, flush mounted racks (palletized) and Phoenix, bombs and rockets are carried as an overload. An insignificant penalty in maneuvering performance (0.5g) is accepted while this ordnance is aboard the aircraft. However, the full F-14 maneuvering performance returns when the missiles or ordnance are fired. This design approach enables an F-14 loaded with six Phoenix to remain on combat air patrol longer than the F-111B, yet it does not carry the airframe weight penalty that was in the F-111B design.

Q. Does the F-14 have the capability to launch air-to-surface guided weapons?

A. These capabilities were not designed into the aircraft because of the additional weight resulting from associated black box and cockpit avionics requirements. This is in keeping with the original concept that air superiority fighter considerations were paramount and would not be compromised. The Sparrow has a proven capability against small ships and boats, although it wasn't designed originally for the air-to-surface role.

PROGRAM STATUS

Q. What is the F-14 program status today?

A. In FY-69 the Congress approved the expenditure of \$130M in R&D funds for contract definition, engineering development and incremental funding for three R&D F-14 aircraft. The FY-70 F-14 budget request is \$175M for R&D including three additional test aircraft. Also included in the FY-70 budget request is \$275 PAMN for procurement of six aircraft, advance procurement of support, training and investment spares.

The Navy has recently completed a new F-14 price-out based on a program designed to fulfill anticipated Navy and Marine Corps needs. Both the R&D and Production funding requirements were again investigated in detail and have verified original Navy estimates of the F-14 program costs. Since the last review in January of this year there has been a slight increase in the estimate of engine costs partially due to the overall reduced volume caused by cutbacks in the Air Force F-111 program and the adjusting estimates for incorporating the Advanced Technology Engine in aircraft number 68.

The "flyaway" cost of the airplane, defined as the airplane sitting on the runway complete in all respects ready to take off (does not include ground support equipment, trainers and spares), is composed of three major cost elements—the airframe, the engine, and avionics. Of the total flyaway cost the airframe constitutes about 46%, the engine 23%, and the avionics 27% with the remaining 4% being miscellaneous items. In the case of the F-14 the airframe will be procured under a multi-year contract with firm ceiling prices already established through FY-76. These ceiling prices constitute the maximum amount that the Government is obligated to pay. If the cost of the airframe exceeds this amount the contractor must bear the burden. These "not to exceed" firm ceiling prices were used by the Navy in pricing the F-14 program.

The other two major money items, the avionics and the engines, do not have signed contracts as yet but the cost projections are based on experience gathered through the actual production and delivery of 15 sets of the AWG-9 Missile Control System and the actual production costs of the Pratt & Whitney TF30 engines. Since both the avionics and engines for the F-14A are modifications of existing hardware, many of the cost unknowns are eliminated. The Advanced Technology Engine (ATE) to be used in the F-14B (and F-15) will have contractual prices presented to the Services in September as a milestone in the competitive effort between General Electric and Pratt & Whitney. The current estimate for the advanced engine is based on a costing formula developed by the Navy and should more than adequately cover the cost of the new engine. The Navy is attempting to negotiate similar multi-year contracts with the avionics and engine contractors to contain firm ceiling prices already established through FY 1976 paralleling the airframe contract. Furthermore, the Navy has escalated all estimates by 4% per year to account for inflationary trends. This amount was based on an average of 5% per year for labor increases and 3% per year for material increases.

In order to arrive at total investment unit cost, support (ground equipment, trainers, publications, etc.) and spares must be added to the "flyaway" cost. Of the total investment unit cost, "flyaway" constitutes about 73%, support about 8%, and spares 19%. The amount of ground equipment, trainers and other such equipment that is required is dependent upon the number of squadrons, ships and land-based sites that are to be supported. The planned number of sites is known; hence, the amount of equipment necessary is established. The cost of this equipment can be, and has been, established on past experience, particularly the F-4

Phantom, as well as sound budgetary estimates. In the unlikely event that there were substantial errors in determining support requirements or costs, the impact on the overall program would be minimal since only 8% of the total program is accounted for in support. The cost of spares is for the most part dictated by the cost of the two major money items: engines and avionic equipments. Therefore, the cost of spares is directly related to the accuracy of pricing these same items for the "flyaway" cost.

Experience gained to date on both the AWG-9/Phoenix fire control system and the TF30 series engines, as well as the conservative approach to the new advanced engine prices for the F-14B, give an excellent baseline for determining total F-14 program costs and for achieving the desired milestones.

The **PRESIDING OFFICER**. Who yields time? Time is running. Is the debate concluded?

Mr. **HARTKE**. Mr. President, unless the Senator from Mississippi wants additional time, I am prepared to yield back the remainder of my time.

Mr. **STENNIS**. I had promised the Senator from Washington that I would save him 3 minutes. I yield myself another half minute to say this: The committee will do no less about this matter whether the amendment is agreed to or not. It is our obligation to keep up with these matters the very best we can. If this amendment is agreed to or is not, so far as our plans are concerned, we go right on.

I hope it will not start putting us in a straitjacket on everything that comes along because they heard somebody down the street or somebody in California say there might be some question about a plane. That is about what it has come to.

I yield the remainder of my time to the Senator from Washington.

Mr. **JACKSON**. Mr. President, I wish to speak in support of the recommendation of our Armed Services Committee to authorize funds for production of the new Navy fighter aircraft—the F-14.

My support for the committee's recommendation stems from three principal factors:

First. The F-14 program strikes me as an eminently sensible one. I have given it careful study and audit as a member of the Armed Services Committee.

This airplane is designed and will have potential for growth to give adequate carrier fighting capability through the 1973-80 time period. It is being developed in an evolutionary way, building on the fire control system and engine developed for the F-111.

The F-14 is to replace the Navy's F-4 Phantom as a general air superiority fighter-escort. Carrying the Phoenix missile, it is to perform the fleet air defense mission of the discarded F-111B against Soviet bombers and cruise missiles. It will also have an air-to-ground attack capability.

The concept of the F-14 includes designing the aircraft to accept a more advanced technology engine—higher thrust and lower weight—without changing the basic F-14 airframe. The long-range, multishot F-14 Phoenix system makes it far superior to the F-4J/Sparrow system.

Second. We are already very late in getting a follow-on fighter to the F-4 Phantom. It is undisputed that there has been too much delay in the devel-

opment of a plane to provide improved air superior capability, as a result of the experience with the F-111B.

The F-4—designed 15 years ago—in 1954—became operational in 1961. Since that date the Soviets have developed and flown eight new fighters. It is generally accepted that the F-4 cannot be further improved without substantial redesign constituting a virtually new plane and requiring many millions of dollars. Even then, it would be inferior to existing Soviet fighter aircraft. Further, although used as an air superiority fighter, the F-4 was not specifically designed for that role.

Third. Last year, on the advice of the Senate Armed Services Committee, the Congress authorized and appropriated funds for a new Navy fighter, with the understanding that its development was to proceed as quickly as possible, in view of the time already lost.

The F-14 contract was awarded after an intense Navy competition among five contractors for a program to provide improved air superiority capability in the briefest reasonable time.

The Department of Defense and the Navy are well satisfied with the progress of the F-14. The Armed Services Committee has looked into the program this year and recommends that we go ahead with it. I see no reason whatsoever to slow down or otherwise hold up a sound program that is urgently needed and that is progressing well.

Mr. **STENNIS**. Does the Senator from Indiana yield back the remainder of his time?

The **PRESIDING OFFICER**. The Senator from Indiana has agreed to yield back the remainder of his time.

Mr. **HARTKE**. I am prepared to yield back the remainder of my time.

The **PRESIDING OFFICER**. All time on the amendment has been yielded back or has expired.

Mr. **STENNIS**. Mr. President, a parliamentary inquiry.

The **PRESIDING OFFICER**. The Senator will state it.

Mr. **STENNIS**. All the time on the amendment has been yielded back, and there is a new parliamentary situation.

Mr. **CANNON** addressed the Chair.

The **PRESIDING OFFICER**. The Senator would have to ask unanimous consent for additional time.

Mr. **MANSFIELD**. Not to move to table. The **PRESIDING OFFICER**. A motion to table would be in order; yes.

Mr. **CANNON**. Mr. President, I move to table the amendment of the Senator from Indiana.

The **PRESIDING OFFICER**. The question is on agreeing to the motion to table.

Mr. **HARTKE**. Mr. President, I ask for the yeas and nays.

The yeas and nays were ordered.

The **PRESIDING OFFICER**. The clerk will call the roll.

The bill clerk proceeded to call the roll.

Mr. **MANSFIELD**. On this vote, I have a pair with the Senator from Wyoming (Mr. **HANSEN**). If he were present and voting, he would vote "yea"; if I were at liberty to vote, I would vote "nay." Therefore, I withhold my vote.

Mr. **JAVITS** (after having voted in the negative). On this vote, I have a live pair with the Senator from North Dakota (Mr. **YOUNG**). If present and voting, he would vote "yea"; if I were permitted to vote, I would vote "nay." I withdraw my vote.

Mr. **SAXBE** (after having voted in the negative). On this vote, I have a live pair with the Senator from Nebraska (Mr. **HRUSKA**). If he were present and voting, he would vote "yea"; if I were at liberty to vote, I would vote "nay." I therefore withdraw my vote.

The rollcall was concluded.

Mr. **BYRD** of West Virginia. I announce that the Senator from Washington (Mr. **MAGNUSON**) is absent on official business.

I also announce that the Senator from Indiana (Mr. **BAYH**), the Senator from Wyoming (Mr. **McGEE**), the Senator from Arkansas (Mr. **FULBRIGHT**), the Senator from Massachusetts (Mr. **KENNEDY**), and the Senator from Oklahoma (Mr. **HARRIS**) are necessarily absent.

I further announce that, if present and voting, the Senator from Wyoming (Mr. **McGEE**), would vote "yea."

On this vote, the Senator from Washington (Mr. **MAGNUSON**) is paired with the Senator from Arkansas (Mr. **FULBRIGHT**). If present and voting, the Senator from Washington would vote "yea" and the Senator from Arkansas would vote "nay."

Mr. **SCOTT**. I announce that the Senator from Arizona (Mr. **GOLDWATER**), the Senator from Wyoming (Mr. **HANSEN**), the Senator from Nebraska (Mr. **HRUSKA**) and the Senator from California (Mr. **MURPHY**) are necessarily absent.

The Senator from North Dakota (Mr. **YOUNG**) is absent on official business.

If present and voting, the Senator from Arizona (Mr. **GOLDWATER**), and the Senator from California (Mr. **MURPHY**) would each vote "yea."

The pair of the Senator from Wyoming (Mr. **HANSEN**) has been previously announced.

The pair of the Senator from Nebraska (Mr. **HRUSKA**) has been previously announced.

The pair of the Senator from North Dakota (Mr. **YOUNG**) has been previously announced.

The result was announced—yeas 63, nays 23, as follows:

[No. 93 Leg.]

YEAS—63

Alken	Ervin	Pearson
Allen	Fannin	Pell
Allott	Fong	Percy
Anderson	Goodell	Prouty
Baker	Griffin	Randolph
Bellmon	Gurney	Ribicoff
Bennett	Holland	Russell
Bible	Hollings	Schweiker
Boggs	Inouye	Scott
Brooke	Jackson	Smith, Maine
Byrd, Va.	Jordan, N.C.	Smith, Ill.
Byrd, W. Va.	Jordan, Idaho	Sparkman
Cannon	Long	Spong
Cook	Mathias	Stennis
Cotton	McClellan	Stevens
Curtis	McIntyre	Symington
Dodd	Metcalf	Talmadge
Dole	Miller	Thurmond
Dominick	Montoya	Tower
Eastland	Mundt	Tydings
Ellender	Pastore	Williams, Del.

NAYS—23

Burdick	Hart	Muskie
Case	Hartke	Nelson
Church	Hatfield	Packwood
Cooper	Hughes	Proxmire
Cranston	McCarthy	Williams, N.J.
Eagleton	McGovern	Yarborough
Gore	Mondale	Young, Ohio
Gravel	Moss	

PRESENT AND GIVING A LIVE PAIR, AS PREVIOUSLY RECORDED—3

Javits, against.
Mansfield, against.
Saxbe, against.

NOT VOTING—11

Bayh	Harris	McGee
Fulbright	Hruska	Murphy
Goldwater	Kennedy	Young, N. Dak.
Hansen	Magnuson	

So Mr. CANNON's motion to lay on the table Mr. HARTKE's amendment was agreed to.

Mr. STENNIS. Mr. President, I move that the vote by which the motion to table was agreed to be reconsidered.

Mr. JACKSON and Mr. COOK moved to lay the motion on the table.

The motion to lay on the table was agreed to.

MESSAGE FROM THE HOUSE—
ENROLLED BILL SIGNED

A message from the House of Representatives by Mr. Bartlett, one of its reading clerks, announced that the Speaker had affixed his signature to the enrolled bill (S. 728) for the relief of Capt. Richard L. Schumaker, U.S. Army, and it was signed by the Acting President pro tempore.

A CLEAR PERSPECTIVE ON THE
PROBLEM OF SOLID WASTE

Mr. COOPER. Mr. President, the Committee on Public Works has scheduled hearings on the bill, S. 2005, the Resource Recovery Act of 1969 for the 30th of September and the 1st, 2d and 3d of October. The subject of this bill, the problem of solid wastes is one that Senator Boggs, in an address to the National Symposium of State and Interstate Solid Waste Planning Agencies, called "a problem that affects every American as few other problems affect him."

He went on to describe the magnitude of the problem with some dramatic data. He said:

Our nation annually produces 13 tons of wastes of one sort or another for each of our citizens. Put another way, we as a society annually discard as unusable approximately 170 times our body weight in used soft-drink bottles, tailings from mining operations, junk cars, and old newspapers.

I think that Senator Boggs presents a clear perspective on the problem of solid waste and I ask unanimous consent that the full text of his address be printed in the RECORD.

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

AMERICA'S BIGGEST INDUSTRY: THE
PRODUCTION OF WASTE

(By Senator J. CALEB BOGGS)

Thank you, Mr. Vaughn. Good morning gentlemen. I am extremely honored to join you today to participate in this important session to discuss a problem that affects every American as few other problems affect

him, our national trash pile. The problem of our solid wastes is as crucial as any this nation faces in the latter third of the 20th century. You are the men and women who will create and perfect the systems to free humanity from the burden of his discards. I see no more socially beneficial job than protecting and enhancing our environment—the job you are doing.

To do some preparation on the plane west last night, I was looking at the annual report on Public Works put out by a county government in my home state of Delaware. The report was discussing the trash collection problem. It came to the conclusion that the mounting piles of rubbish in our nation will require that "more and more money and brains will have to be thrown in trash." I'll have to protest part of that jocular observation. We've got lots of brains in the trash—you gentlemen are good evidence of that. Now all we need is the money.

I applaud the Bureau of Solid Waste Management for convening this National Symposium of State and Interstate Solid Waste Planning Agencies. And I must add that I am doubly delighted to know that my state of Delaware is so ably represented by Frederick Stiepler, of the State Board of Health.

When Mr. Hickman graciously invited me to join you today, he mentioned some of the topics you intended to discuss. He thought it would be helpful if I would tell you a bit about how the Congress looks at our environment, and what kind of legislation we are discussing in an effort to enhance it through such programs as solid waste management.

I know you are familiar with the statistics on our national trash pile, but I believe they need to be reiterated regularly to make us constantly aware of the magnitude of the problem. The President's Science Advisory Committee found not long ago that "each year we must dispose of 48 billion cans, 26 billion bottles and jars, 65 billion metal and plastic caps and crowns, plus more than half a billion dollars worth of miscellaneous packaging material."

The problem, as you know, isn't just items like these that fit into the garbage can. Waste is America's number one industry in terms of tonnage, for we produce far more waste than we produce steel or cars or any other product.

Our nation annually produces 13 tons of wastes of one sort or another for each of our citizens. Put another way, we as a society annually discard as unusable approximately 170 times our body weight in used soft-drink bottles, tailings from mining operations, junk cars, and old newspapers. As we grow more affluent, this tonnage mounts.

We buy our soft drinks in disposable bottles and clothe our infants with throw-away diapers, adding new burdens to the nation's disposal problem. We have become a society of discards. Technology taps lower grade ores, which creates more waste for each ton of useful material. This expands our waste productions by an almost geometric rate. And these discards pollute the environment as surely as DDT or auto exhaust.

It has been just a few weeks since the great evening when man entered for the first time an entirely new celestial environment, the moon.

Not long ago, the humorist, Art Buchwald, recalled that glorious day when a spaceship from Venus landed in a desolate area identified on the Venusian space charts as "Manhattan." As the travelers from Venus examined the landscape, a professor radioed the news to Venus: "We have come to the conclusion that there is no life on Earth," the professor related. "For one thing, the Earth's surface in the area of Manhattan is composed of solid concrete and nothing can grow there. For another, the atmosphere is filled with carbon monoxide and other deadly

gases, and nobody could possibly breathe this air and survive." His point was obvious.

Norman Cousins, the knowledgeable editor of the Saturday Review, recently sought to define the major problems confronting mankind. He cited peace as one. He mentioned the need for all peoples to get along together, a complement to peace between nations.

Then he talked of the need for man to control his environment, to preserve his landscape, his air, and his water, so that man could both live and enjoy living. Mr. Cousins then made what I consider his major point—a most hopeful point. Each of these problems of the future is man-made, so each must be within the realm of man's ability to solve.

President Nixon has shown his commitment to the eradication of environmental pollution through his creation recently of the cabinet-level Environmental Quality Council. That commitment to enhance our environment permeates the White House. The President's Science Advisor, Dr. Lee A. Du Bridge, recently spoke of the need for the council to find ways to improve cooperation between the Federal, state, and local governments for the best method of disposal of solid waste.

Still, the enormity of this problem remains great. The Congress, I believe, sees a need for action. That is why we in the Public Works Committee are pressing forward on S. 2005, the proposed Resource Recovery Act, which is designed to improve and expand the 1965 Solid Waste Disposal Act. Similar legislation, H.R. 10916, has been introduced in the House by Congressman Robert Tiernan of Rhode Island.

That 1965 solid waste legislation authorized a research and development program with respect to solid waste disposal, aimed at providing new technology for collection and disposal of solid wastes. Some very good research has been done, much of it from your agencies. Grants have been made available for state and interstate planning, interstate cooperation, research, demonstration, training, and other programs. But, under the 1965 Act, no grants have been available for construction of facilities for disposal, unlike the national effort to combat water pollution which for several years has provided construction grants to the states.

The major thrust of the first solid waste legislation was designed to provide the base for correcting the deficiencies in existing systems and to develop new methods and techniques for collection and disposal of wastes. With the growing awareness of the extent of the problem, many of us have come to realize that simply extending and strengthening current systems will probably not provide the answer.

One important aspect of this legislation to amend the Solid Waste Disposal Act would be to provide financial assistance for the construction of solid waste disposal facilities. It would provide grants for construction up to 25 per cent for individual cities, or 50 per cent for a regional facility. In addition, it would allow the Secretary of Health, Education, and Welfare to increase the grant by half again as much—to 37½ per cent for individual communities and 75 per cent for regional facilities—where projects used new or improved technology.

Also significant, is the bill's price tag—about \$800,000,000 over five years. I consider that a sign that the Congress intends to take a major step toward ridding this nation of clutter.

Should this legislation pass, it of course remains uncertain how it would be affected by President Nixon's announcement last week on reducing construction projects. Yet I feel confident that the Nixon Administration is committed to environmental programs, since the President exempted from the cutback projects of "the highest social priority." I can think of no greater social priority than those projects designed to protect the environment in which we live.

The new legislation provides the opportunity for cities or states or regional units to initiate, explore, and test new collection and disposal techniques, with heavy Federal support. It places a strong emphasis, as it should, on Federal-state-local partnership to protect and enhance the quality of the environment.

On top of this new construction support, S. 2005 would augment the Federal share of planning in the field of solid wastes. The existing act provides up to 50 per cent of the costs of surveys of solid waste disposal practices. The proposed law raises the participation to two-thirds of the cost for individual municipalities and 75 per cent for regional planning.

We have four days of hearings scheduled on S. 2005 at the end of this month, with more hearings in the field planned for later in the fall. Many of you, I hope, will be able to attend to give us the benefit of your invaluable guidance and knowledge.

Senator Muskie of Maine, when S. 2005 was introduced last April, made an important observation on the Senate floor. He said: "I do not believe that America can continue indefinitely to burn, bury, or throw away the solid wastes generated by its people. There simply are not enough resources, enough land area, or enough clear air and clear water to permit the mere refinement of existing approaches to solid waste management."

Too little thought, I believe, has centered on just such environmental issues to which he alludes—the finite supply of materials available in our Earth. The world supply of nickel, I understand, will be depleted before the end of this century, at current usage rates. Obviously, the supply and demand relationship, plus new discoveries, is unlikely to bring that development. More and more nickel users will have to turn to alternative metals, to the point that our five-cent coin might be known someday as a "steel." My point, however, is this: Who is considering what effect a loss of nickel would mean?

I am convinced a role exists for Federal Government in establishing a coordinated materials policy. This is not a role of dictating usage of materials; we aren't going to tell anyone when they can use a material and when they can't. Rather, the Government can prove helpful, I believe, by providing inventories of world supplies of materials, assistance to the research into alternatives to materials that are in short supply or prove particularly damaging to the environment, and promotion of economic methods for re-cycling discarded products back into our economy.

We may achieve answers by creating bottles that dissolve when broken or cans that degrade, sharply curtailing the growth of our national garbage heap. We may be able to build cars for quick and profitable disposal, instead of tossing them onto a vacant lot to rust away.

The discovery of more efficient ways to produce materials that do not persist in the environment following use, might go far toward reducing the \$3.4 billion we as a nation spend yearly for garbage in our urban areas.

In addition, we must begin to look at the trash heaps of our nation as mines that are as potentially as valuable as the Comstock Lode. As just one example, a typical ton of municipal waste contains a third of the heat potential of a ton of coal, a fact that could prove very useful when we create high-temperature incinerators.

The materials problem must be faced from two ends: before the material leaves the ground and after it has completed its useful life.

This week, or early next week—following the period of mourning over the loss of Senator Dirksen, I hope to introduce an amendment to S. 2005, an amendment to

create a Presidential Commission on Materials Policy. The two-year Commission would have broad authority to pursue these questions of how to coordinate materials policy toward a goal of environmental enhancement, and then report to the Congress with suggestions for action.

This amendment is the outgrowth of two very knowledgeable reports on materials policy I have had the good fortune to receive in the past couple of years. The first was a survey published by the Committee on Public Works in January, 1968. The second, which was far more detailed, was just recently published by the committee. It is entitled, *Toward A National Materials Policy*, and was prepared by a group of some of the nation's most prominent experts in the materials field. The report digs deeply into the subject, and comes to these conclusions: "We should insure an adequate supply of all types of materials needed in appropriate balance for our production requirements, both in peace and during national emergencies; we should husband our resources by efficient processing techniques and by the use of commonly available materials as alternates for materials that may become short in supply.

Future concerns will involve the ability of the materials and energy resource base to support national and world aspirations for economic growth, and the implications for the economy of periodic changes in the relative prices of various materials.

We need to develop new materials with novel properties to satisfy the more stringent demands of advanced technologies.

Finally, it is of the utmost importance that, from the initial stages of production of materials through their ultimate use and disposal, we conduct our operations and activities in such a way as to minimize pollution of air and water and to avoid despoliation of the environment, both physical and biological. By the way, I have brought a couple dozen copies of the report with me, and I would be delighted to share them with any of you, and I solicit any thoughts and observations you might have after you read the report.

Solid wastes have been a public problem long before the advent of our industrialized society. Near the coast of Maine, there is a huge pile of clam shells left beside the Damariscotta river by some long-ago tribe of Indians. These Indians, no better than we, had no place to dispose of their used shells, so they threw them onto a giant heap, that today has become a tourist attraction.

Today's wastes are not so picturesque. But they still can be the source of some humor, as that report I mentioned at the start of my talk indicates.

It was prepared by George Dutcher, director of the Public Works Department of New Castle County in Delaware, and it contains a page of cartoons. One carries this headline: "Collecting refuse will one day carry great prestige and affluence." The drawing shows a dejected son telling his father that he just flunked the Department of Sanitation test. "You know what that means, son," the Father reprimands the youngster. "Medical School."

The fact is that both are dealing with man's health and his survival as a civilized being. Man surrounded by piles of garbage is little better than man surrounded by an epidemic of plague. We defeated plague. I feel confident we can master our solid waste problems as well.

Thank you.

COMBAT INVOLVEMENT OF U.S. TROOPS IN LAOS AND THAILAND

Mr. JAVITS. Mr. President, I was not able to be present on the floor when my

colleague, Senator COOPER, made his statement concerning the report of the combat involvement of U.S. forces in Laos, which was carried on the front page of the New York Times. I wish to make it unmistakably clear that I share the deep concern expressed by Senator COOPER. I wish to support with all the force at my command his call for a full explanation and investigation of the events behind this gravely portentous report.

As a cosponsor of the Cooper amendment—which seeks specifically to forbid this type of combat involvement of U.S. troops in Laos and Thailand—and as one Senator who has repeatedly voiced his concern over the danger of U.S. involvement in Vietnam-type wars in Laos and Thailand, I believe this matter requires the closest scrutiny of the Senate.

U.S. CIVIL RIGHTS COMMISSION STATEMENT ON PUBLIC SCHOOL DESEGREGATION

Mr. JAVITS. Mr. President, last Friday, in a timely and eloquent statement, the members of the U.S. Commission on Civil Rights urged a more active commitment to the goal of public school desegregation. Pointing out that the Commission had not commented on the revised guidelines announced on July 3, the members now characterize that change in policy as "a major retreat in the struggle to achieve meaningful school desegregation." Their conclusion is based on a thorough and well-documented study of the status of school desegregation programs which was also released with the statement. The study shows a dismal picture of delay with permanent harm done to the thousands of children involved.

The statement also calls for Senate rejection of the Whitten amendments, designed to reinstate freedom of choice plans and thereby to impede meaningful desegregation. I agree with the Commission's position, and urge the support of my colleagues on the Appropriations Committee for striking the Whitten amendments.

I ask unanimous consent that the statement by the Civil Rights Commission, together with the additional statement of Vice-Chairman-designate Horn be printed at this point in the RECORD.

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

STATEMENT OF THE COMMISSIONERS ON FEDERAL ENFORCEMENT OF SCHOOL DESEGREGATION, U.S. COMMISSION ON CIVIL RIGHTS, SEPTEMBER 11, 1969

Two months ago, the Attorney General and the Secretary of Health, Education, and Welfare announced a number of changes in the manner in which their Departments would in the future enforce the laws requiring desegregation of elementary and secondary schools. The statement of the Attorney General and the Secretary of HEW affirmed a commitment "to the goal of finally ending racial discrimination in schools, steadily and speedily. . . ." Prior to this announcement, the Commission, in telegrams to the President, the Attorney General and the Secretary of Health, Education, and Welfare had urged that no action be taken to slow the pace of school desegregation.

The Commission withheld any public com-

ment on the July 3 announcement until the staff of the Commission had had a chance to complete a thorough analysis and until the Department of Justice and the Department of Health, Education, and Welfare had had an opportunity to take action consistent with their statement.

Since July 3, the House of Representatives has passed the Whitten Amendment, a measure that would restrict the Department of Health, Education, and Welfare's ability to enforce Title VI of the Civil Rights Act of 1964 by requiring it to accept freedom-of-choice plans for school desegregation and may well affect the acceptability of freedom-of-choice plans in the courts as well. The amendment was not opposed by the Administration in the House.

Also since that time, court orders have been entered and desegregation plans accepted which in our opinion postpone meaningful desegregation from 1969 to 1970, and the Secretary of HEW and the Department of Justice have taken the unprecedented step of requesting the courts to postpone effective school desegregation in Mississippi from this school year to 1970 and have also accepted delays in South Carolina and Alabama. To be sure, administrative actions were taken by HEW during the past several years and again this year to postpone school desegregation in various districts. These were made under the standards of the Guidelines and only under most exceptional circumstances. But it should be emphasized that what we are concerned with here is the Government's going into court at its own initiative and asking affirmatively for a postponement.

At the time the procedures were announced, the Attorney General is reported to have said that he preferred that the Nation watch what he *did* rather than focus on what he *said*. It is with this in mind that we find ourselves especially disheartened by the recent actions of HEW and of the Department of Justice in the cases in Mississippi, South Carolina, and Alabama. For the first time since the Supreme Court ordered schools desegregated, the Federal Government has requested in court a slow-down in the pace of desegregation. This request is particularly difficult to understand since as recently as July 3 the Secretary of HEW and the Attorney General announced that delays in desegregation beyond September 1969 would be granted only where a school district sustained "the heavy factual burden of proving that compliance with the 1969-70 time schedule cannot be achieved. . . ." In Mississippi, however, the Secretary of HEW and the Attorney General urged delay on their own initiative. In South Carolina and in Alabama, the Government took other action to delay desegregation. Certainly those who have placed their faith in the processes of law cannot be encouraged.

We acknowledge that the Department of Justice, in some areas, has sought court orders compelling desegregation this Fall. Eight such suits have been filed in Georgia. But each of these suits was necessitated when the school district reneged on a promise already made to HEW. One can only speculate on whether the July 3 statement and the Government's action in Mississippi encouraged this reneging.

But the problems caused by these new procedures and recent actions, however, are likely to be dwarfed by the probable effects of the Whitten Amendment, if passed by the Senate and approved by the President.

Our analysis of the new procedures and recent actions has now been completed, and a copy is attached to this Statement. Based upon it, we make the following findings:

1. The new procedures and recent actions involving Federal efforts to bring about school desegregation appear to be a major retreat in the struggle to achieve meaningful school desegregation. See pp. 31 to 56 of the Report.

2. The statistics purporting to show the present extent of school desegregation which were contained in the July 3 joint statement of the Attorney General and of the Secretary of the Department of Health, Education, and Welfare give an overly optimistic, misleading and inaccurate picture of the scope of desegregation actually achieved. In fact, in a number of Southern States, relatively little desegregation of elementary and secondary schools has been accomplished in the last 15 years. See pp. 8 to 12, 35 and 36 of the Report.

3. One of the major fallacies in the claim of substantial desegregation is that many districts have violated the terms of the assurances they have signed, or of the court orders that have been entered against them. Adequate personnel is necessary to police compliance. Congress has ordered HEW to treat the North and the South equally in its enforcement efforts. As a result of this Congressional directive, the Department of Health, Education, and Welfare has recently reduced the number of its personnel working for desegregation of elementary and secondary schools in the Southern and Border States, and has increased the number of its personnel working on such problems in the North and West. In the past, we have found that its staff was inadequate to police the compliance of school districts in the South, and the reduction in personnel can be expected to further restrict its compliance efforts in that region. Although HEW has requested 75 additional employees from Congress, it is unlikely that these additional personnel will be sufficient to remedy this problem. See pp. 9 to 13, 30, and 47 to 51 of the Report.

4. Court orders to desegregate have not generally been as effective a means of desegregating elementary and secondary schools as administrative proceedings backed by the threat of a fund cutoff. One reason is that a number of Federal judges in the South have been unsympathetic to the necessity of eliminating racial segregation in elementary and secondary schools. As a result, they have been insensitive to the requirements of the appellate courts which Congress has set over them, and have by their direct actions and tolerance of the actions of others significantly retarded the pace of school desegregation in the cases before their courts. In addition, it is more difficult, under current law, to enforce a school board's compliance with a court order than it is to enforce, by the threat of withholding Federal funds, a school board's compliance with an HEW-approved voluntary plan. See pp. 31 to 46 of the Report.

Accordingly, emphasis upon court orders rather than administrative proceedings as the vehicle of Federal efforts to desegregate schools can be expected to slow the pace of school desegregation. The situation is further aggravated by the limited Department of Justice personnel available to bring lawsuits as well as the laudable newly announced policy of extending desegregation efforts from the South into the North and West. See pp. 47 to 51 of the Report.

5. Although use of the threat of withholding Federal funds has proved to be the most effective means of enforcing school desegregation, the actual termination of funds, when not followed by Department of Justice litigation to enforce immediate desegregation, reportedly results in disproportionate harm to black students and their teachers. We recommend that the Department of Justice promptly bring lawsuits to require immediate desegregation as soon as a district's Federal funds have been finally terminated. We also recommend that Title IV of the Civil Rights Act of 1964 be amended to permit the Department of Justice to initiate school desegregation suits without the necessity of receiving a specific complaint—as is now the requirement. See pp. 31 to 33 of the Report.

6. Since passage of the Civil Rights Act of

1964, Congress has given inadequate support to HEW's attempts to enforce school desegregation—appropriations have been limited and some unnecessary restrictions placed on HEW's operating procedures. In part, the inadequacy of HEW's enforcement efforts in the past five years stems from the inadequacy of this support. HEW's request for additional personnel is now pending before the Senate and we urge its approval.

7. Passage of the Whitten Amendment, which would require the acceptance of freedom-of-choice plans, would slow or halt the progress of school desegregation. We believe that there is a serious chance that its passage would reverse some of the limited gains already made. See pp. 25 and 26 of the Report.

8. As we had previously found in our 1967 report, *Southern School Desegregation: 1966-67*, freedom-of-choice, since it places the full burden of desegregation upon the shoulders of black parents and their children—those who are politically, economically, and socially least able to bear it—is not an effective means of desegregating elementary schools in the Southern and Border States. See pp. 14 to 26 of the Report.

Because freedom-of-choice requires affirmative action by black parents before their children can attend an integrated school, its use, as a practical matter, has encouraged local white citizens to engage in campaigns of intimidation and economic retaliation against black parents willing to take such action. Similarly, white students and teachers frequently harass and punish the black children whose parents have chosen to send them to the formerly white-attended school. Consequently, many black parents are literally afraid to send their children to formerly white-attended schools; as to them, the "freedom" to choose the school their children will attend is illusory. See pp. 20 to 23 of the Report.

Fifteen years have passed since the Supreme Court decided that the right of black children to attend the same schools attended by other children was guaranteed by the Constitution. Five years have passed since Congress, in the Civil Rights Act of 1964, also declared that segregation violated the law of the land. But segregation is more than just simply a violation of the law. In 1967, we issued a Report, *Racial Isolation in the Public Schools*, which concluded that racial isolation, whether caused by *de jure* segregation, discriminatory housing patterns, or other factors, resulted in serious educational harm to the children of minority groups. Conversely, integration significantly boosted the educational achievement of these children. If this Nation truly respected the rule of law, if it truly cherished each of its children, the last vestiges of segregated education would have disappeared years ago. Instead, segregation continues as the pattern, and not the exception, of education in many States.

At this point, we can do no more than echo the words written recently by Justice Black: ". . . [T]here are many places still in this country where the schools are either 'white' or 'Negro' and not just schools for all children as the Constitution requires. In my opinion there is no reason why such a wholesale deprivation of constitutional rights should be tolerated another minute."

Similarly, we agree with Federal Judge Hoffman that: "For an American who is devoted to his country and wants to believe in the intelligence and good-will of its citizens it is very painful to contemplate and difficult to understand continued resistance to school desegregation."

While progress has been slow, the motion has been forward and this is certainly no time to create the impression that we are turning back but a time for pressing forward with vigor. This is certainly no time for giving aid and comfort, even unintentionally, to the laggards while penalizing those who

have made commendable efforts to follow the law, even while disagreeing with it. If anything, this is the time to say that time is running out on us as a Nation. In a word, what we need most at this juncture of our history is a great positive statement regarding this central and crucial national problem where once and for all our actions clearly would match the promises of our Constitution and Bill of Rights.

Thus, we are deeply concerned over the directions recently being taken in Federal efforts to desegregate elementary and secondary schools. We are committed to the purpose for which this Commission was created: to act as an objective, bipartisan factfinding agency and to continually apprise the President and the Congress of the facts as we see them. We speak out now since we believe our Government must follow the moral and legal principles and promises on which our Constitution and laws are based and meet the high expectations to which the people of this country have addressed themselves.

Rev. THEODORE M. HESBURGH, C.S.C.,
Chairman.

STEPHEN HORN,
Vice-Chairman-designate.

FRANKIE M. FREEMAN,
HECTOR P. GARCIA, M.D.,
MAURICE B. MITCHELL,
ROBERT S. RANKIN,
HOWARD A. GLICKSTEIN,

Staff Director-designate.

**ADDITIONAL STATEMENT BY VICE-CHAIRMAN-
DESIGNATE HORN**

Civil rights is a national problem. Progress and blame can be shared by those in all three branches of our Government under several administrations and by people in all parts of our country.

Under the previous administration, the Department of Health, Education, and Welfare permitted 67 school desegregation plans submitted by districts in Southern States to be delayed for final implementation until September, 1970. Under the current administration, 51 school desegregation plans have been delayed for final implementation until September, 1970.

The easier tasks have been done. The most difficult problems still remain. All who serve in each of the three branches of our Federal Government and, indeed, all Americans should face up to them.

**PUBLIC HEARINGS ON TAX REFORM
ACT OF 1969—SUMMARY OF
TESTIMONY**

Mr. LONG. Mr. President, today the Senate Finance Committee continued hearing witnesses present testimony with respect to the charitable contribution provisions of the House-passed tax reform bill. Additionally, the committee received testimony relating to the tax treatment of stock dividends and moving expenses.

So that Senators might follow the progress of these tax reform hearings, I ask unanimous consent that the attached summary of the testimony be inserted in the RECORD.

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

CHARITABLE CONTRIBUTIONS—WITNESSES

LOGAN WILSON, PRESIDENT, AMERICAN
COUNCIL ON EDUCATION:

General

Believes that Federal tax policy should continue to provide an incentive for giving to higher education. However, objects to any result which would leave any donor with an overall profit.

Indicates that a Council study of 1962-63 giving to higher education disclosed that less than 1 percent of all donor transactions accounted for about 75 percent of all support, and that 17.7 percent of the giving was in securities, 5.6 percent in property, and 76.7 percent in cash. Notes that the average size of gifts is significantly greater in gifts of securities or property than cash.

Limitation on tax preferences and allocation of deductions

Contends that the most damaging provisions of House bill for charitable contributions are those requiring inclusion of unrealized property appreciation gifts as a "tax preference" and in the allocation of deductions.

Contends that these limitations could severely reduce the substantial gifts of major donors, and that the complicated computations required would affect a taxpayer's income not only in the year of gift but later and would make the planning of such gifts difficult, if not impossible.

Maintains that unrealized appreciation on gifts of property are not like other items of "tax preferences," which represent income that actually escapes taxation or an unrealistic deduction.

Opposes inclusion of charitable contributions in allocation of deductions proposal.

Gifts of appreciated property

Endorses provision that continues to permit gifts of appreciated long-term real and intangible property to be deducted in full without including unrealized appreciation in income. Sees no reason, however, why this incentive should not be extended to gifts of tangible personal property and future interests. Maintains that abuses with respect to gifts of tangible personal property have been largely eliminated by other provisions of bill or by the Internal Revenue Service.

Limitations on gifts by individuals

Supports the increase in the limitation on gifts from 30 to 50 percent. Feels, however, that this will be of limited influence in encouraging gifts.

Contends that there is little reason for the 30-percent limitation on gifts of appreciated property. Suggests that if this limitation is not eliminated, then the limitation should be related to the unrealized appreciation which escapes taxation rather than in terms of the total value of the property.

Charitable remainder trust

Doubts whether the alleged abuses in gifts of remainder interests warrant the requirement of either a "charitable remainder annuity trust" or "charitable remainder unitrust." Contends that there is no reason for denial of a deduction for a traditional legal life estate.

Proposes that if the "charitable remainder trust" concept is accepted, no change should affect the income, estate, and gift tax consequences of irrevocable transfers made prior to 1970.

Charitable deduction for right to use property

Endorse the denial of a charitable deduction for gifts of the use of property, but contends that the language goes too far by denying gifts of partial interests other than through a charitable remainder trust.

Charitable contributions of estates or trusts

Suggests that if the present unlimited deduction for contributions of estates or trusts is altered, it should not be applicable to irrevocable life income and annuity gifts created prior to enactment of the bill.

Foundations

Believes that any tax on private foundations will actually be a burden on beneficiaries of grants. Proposes, instead, that a "supervisory fee" be imposed to cover costs of audit and supervision.

Feels that entities associated with higher

education should be excluded from the definition of and not be made subject to provisions governing private foundations. States that the restrictions on legislative activities of foundations will seriously endanger making of grants to educational institutions.

Unrelated business—Clay Brown

Endorses extending the Clay Brown provision to churches and other tax-exempt organizations. Proposes that a promise to pay an annuity not be considered a debt subjecting the institution to the unrelated business tax.

Unrelated business—taxation of advertising revenue

States that the phrase "any activity which is carried on for the production of income from the sale of goods or performance of services" is so vague as to permit application of the unrelated income tax to integral parts of a single activity solely on the basis of return of income and without application of concepts of an unrelated trade or business. Suggests that the provision should be narrowly confined to the provisions of the regulations.

Income tax returns

Opposes making the increased reporting requirements for private foundations also applicable to colleges and universities. Contends that the publication of such data as the names of substantial contributors and compensation of trustees and highly compensated employees could seriously effect fund raising activities without any real benefit to the public.

Tax-exempt municipal bonds

Indicates that colleges and universities have been dependent on tax-exempt bonds. Feels that no change should be made that will inhibit the ability of educational institutions to raise funds at low interest costs.

HERMAN L. TRAUTMAN, PROFESSOR OF LAW,
VANDERBILT UNIVERSITY

Treatment of charitable remainder trusts

Criticizes the effective date provided in the House bill with respect to remainder trusts, and states that many irrevocable gifts to colleges and universities were completed between the effective date and the introduction of the bill.

States charitable remainder gifts should not be limited to those in the form of a dollar annuity or a unitrust—suggesting there is scant evidence of abuse in this area. Contends present law can be adequately improved by expressly disallowing a deduction for contingent remainder gifts to charity, and also disallowing a charitable remainder trust which is subject to any power to invade the corpus of the trust for any purpose.

Does not believe the fixed dollar annuity trust or the unitrust necessarily has any relation to the value of the benefit which the charity receives—explaining that both forms assume a rate of discount for determining the value of the charitable remainder gift which is arbitrarily selected, and not likely to be consistent with economic reality.

Suggests it might be desirable to tighten up present rules to deny a charitable deduction for contingent interests, and trusts subject to invasion of any kind—suggesting further, the possibility of penalties against both the donor and the charity for condoning a breach of trust. However, argues that it does not follow that the deduction for all charitable remainder trusts should be denied except when in the form of a dollar annuity or the unitrust.

DR. T. W. VAN ARSDALE, JR., PRESIDENT, FEDERATION OF INDEPENDENT COLLEGES & UNIVERSITIES OF ILLINOIS:

Charitable contributions

States that annual support from gifts to colleges and universities in the State of Illinois ranges from 5 to 20 percent of annual operating budgets. Contends that gifts to

colleges and universities should be excluded from "tax preference" and "allocation for deductions."

Foundations

Endorses the objective of the House bill to eliminate "tax loopholes" of certain foundations. Points out there are abuses exercised by certain foundations, but these are few in number and should be eliminated because they are inherently conceived as "tax dodges." Maintains, however, that the provisions in the House bill correcting or eliminating such "loopholes" are realistically unenforceable and will involve remarkably increased bureaucratic investigative expenditures. Contends that the restrictions which the House bill proposes to impose on foundations will inevitably result in curtailment of research, innovating programs and major capital gifts for facilities which are desperately needed by colleges and universities.

DR. CLARENCE SCHEPS, EXECUTIVE VICE PRESIDENT, TULANE UNIVERSITY

Charitable contributions and tax on investment income

Indicates concern with the inclusion of the appreciated value of real property and securities contributed to charity within the definition of tax preferences, and the inclusion of the appreciated value of property contributed to charity in the itemized deductions to be allocated between taxable and nontaxable income.

States these provisions would result in serious detriment to its giving program because donors would lose a large part of their incentive for making gifts. Contends that under the bill, the more tax preferences a donor has, the more costly his gift would be. Adds that these provisions would lend uncertainty to the donor's tax picture and run contrary to the desired principles of tax reform—simplification and clarification.

Does not approve of the elimination of a charitable deduction for the type of charitable remainder trust currently in use, or of the deduction for the gift of an income interest.

Opposes the 7½ percent tax on foundation investment income, and states it will reduce the moneys available for its activities.

DR. C. THOMAS SPITZ, JR., GENERAL SECRETARY, LUTHERAN COUNCIL IN THE U.S.A.

Voluntary associations in a democracy

Contends that the concept of tax exemption for contributions to charitable, educational, and religious organizations underlies the basic principles of our Government and society. Maintains that democracy is dependent upon free associations and pluralism, i.e., a wide diversity of groups and organizations. States that where all such organizations are paid for by the State and are under control of the State, it is easy for the State to control every aspect of life.

Private initiative and tax policy

Believes that private initiative should be encouraged by tax policy, so that the Government will not be required to support private associations. Emphasizes that the question is not one of dollars but the structure of our society and government.

Maintains that religious institutions provide a moral basis for society, and that Government must not interfere with freedom of such institutions by direct support of it.

Argues that tax relief for private donations is not a subsidy of those organizations, but a subsidy to help guarantee a democratic society.

Technical consideration of bill

Agrees with statements of the Committee on Gift Annuities and the Lutheran Educational Conference of North America with regard to specifics in bill on charitable contributions.

Life-income giving

Points out that annuity and life-income contracts have been used for a half century

by churches and institutions. Considers these to be proper methods of securing gifts. Emphasizes that tax implications of these arrangements should be simple to understand, as the donors are apt to be advanced in years and unsophisticated in financial matters.

ROBERT E. R. HUNTLEY, PRESIDENT, WASHINGTON AND LEE UNIVERSITY, ON BEHALF OF THE ASSOCIATION OF INDEPENDENT COLLEGES IN VIRGINIA

Treatment of charitable organizations under House bill

States that the reform bill is the first significant step backward with respect to the provisions for charitable contributions during the past 56 years of income tax history.

Contends the bill dilutes the strength of the private sector of our national life and of State and local governments through provisions that discourage charitable gifts of appreciated property, jeopardize time-honored methods of charitable giving (e.g., charitable remainder trusts, life income agreements, and gift annuity agreements), drastically alter the tax treatment of State and local bonds, and place a tax of 7½ percent on the investment income of private foundations.

States that the allocation of deductions requirement would be a major factor in diminishing voluntary support for education.

States that a source of grave concern to all educational institutions and publicly supported charities is the possible public impact of retroactive features of the bill—particularly those provisions which would alter the tax treatment of already existing trusts and gift agreements.

LOUIS J. FOX, PRESIDENT, COUNCIL OF JEWISH FEDERATIONS AND WELFARE FUNDS

General

Feels that gifts for welfare, health, and educational services provided by private philanthropy can be seriously harmed by effects of proposed tax changes. Indicates that if gifts are discouraged through reducing tax incentives, result would be pressures to shift financing from voluntary sector of the Government. States that charities support tax equity so that no one can escape taxes altogether and the removal of low-income persons from taxation, but that tax equity can be attained without harm to charities.

Donations of appreciated property

Recommends that appreciated property be deleted from list of "tax preferences" and that all charitable contributions, including appreciated property, be removed from the allocations of deductions proposal.

Maintains that charities have nothing in common with other tax preferences" listed in bill or with other deductions, as charitable contributions benefit charity, and not the individual contributor, as do the other preferences and deductions. Moreover, indicates that contributions are voluntary and discretionary expenditures. Argues that the full ceiling of 50 percent be allowed gifts of appreciated property.

Bargain sales to charity

Contends that the bill will virtually bar "bargain sales" of stocks to charity.

Effective dates

Argues that the series of past effective dates proposed for some of the charitable contribution changes are jeopardizing many gifts because of uncertainty for contributors. Proposes that dates be made prospective.

Standard deduction

Contends that the increase in standard deduction will affect charities, since those in the \$10,000 to \$15,000 bracket who will benefit from standard deduction contribute almost one-fourth of charitable contributions. Suggests that whatever is done with the standard deduction, Congress should permit charitable deductions outside of the standard deduction to encourage gifts.

Tax on foundations

Argues that proposed 7½-percent tax on foundations will hurt beneficiaries of foundation grants.

Review of charitable contributions

Maintains that charity is not a "loophole," as it supports voluntary programs which the Government would otherwise have to support. Recommends an overall review of charitable area to insure no harm to beneficiaries of charity.

GEORGE H. HEYMAN, JR., PRESIDENT, FEDERATION OF JEWISH PHILANTHROPIES OF NEW YORK

Charitable contributions

Opposes certain proposals contained in the House bill, especially legislation which suggests that contributions made by large donors to private philanthropy constitutes a form of tax evasion.

Gifts of appreciated property

Maintains that the inclusion of gifts of appreciated property in tax preferences, and all charitable contributions in allocation of deductions is without merit or logic. States that the implicit equation of gifts of appreciated property with other so-called tax saving devices in the group of tax preference items raises questions on the role of private philanthropy in the scale of national and social values. Argues that the continued limitation of 30 percent of gifts of appreciated property while the limit on other forms of charitable contributions is raised to 50 percent would seem to indicate a consistent desire to discourage or eliminate gifts of appreciated property.

Allocation of deductions

Asserts that the twin disincentives of tax preferences and allocation of deductions will seriously curtail the number and volume of gifts by large donors with the result that private charity may find its ability to function seriously impaired.

Bargain sales

States that retroactive dates for changes relating to bargain sales and other forms of charitable giving are inequitable and damaging in their effect.

Standard deduction

Favors an increase in the standard deduction in order to help the lower and middle income taxpayers but observes that such an increase may actually constitute a disincentive to giving by this group since it will provide them with the tax benefits without a concomitant financial obligation to giving.

Definition of disqualified persons

States that the phrase "disqualified persons" should be more clearly defined in accordance with its apparent intent to reduce self-dealing between individuals and private foundations. Argues that gifts for capital purposes made to organizations normally considered to be publicly supported should be excluded in determining the proportion of support obtained from so-called disqualified persons.

Foundations

Asserts that the 7½ percent tax on investment income of private foundations will further reduce contributions to philanthropic organizations.

Unlimited charitable deduction

States that the present formula should be replaced by a rule permitting every person one opportunity during his lifetime to make and obtain a deduction for an unlimited charitable contribution for capital purposes only.

C. STANLEY LOWELL, ASSOCIATE DIRECTOR, AMERICANS UNITED FOR SEPARATION OF CHURCH AND STATE

Unrelated business income

States that the acquisition of commercial businesses by churches is further encouraged by the section 6033(a)(1) exemption from

filing returns for religious organizations. Claims that some operate in complete secrecy, not even reporting to members. Considers that the religious exemption is an invitation to take over more businesses.

Urges that the House bill provision to remove section 511 of the code be enacted. However, questions the wisdom of section 121 (c) (16) of the bill to allow unrelated businesses of churches continuance of exemption for 5 years, as this maintains unfair competition.

Recommends further reform to draw a clear distinction between related and unrelated businesses of churches.

Sacerdotal test

Maintains that the so-called sacerdotal test has been inadequate in preventing avoidance of tax on unrelated business of religious bodies. Asserts that the Government continues to show deference to religious groups in enforcing the tax on groups which have, in fact, been held to be taxable.

Suggests that a proper definition of a church be made, since a State exemption for churches requires a definition. Indicates that the definition should deal with actual functions, not merely with clergy ordination.

Other religious immunities

Recommends that section 107 of the code concerning the exclusions covered under the "rental value" of parsonages be removed, and also the section 119 exemption for meals or lodging furnished by the employer.

Proposes that the exemption from withholding requirement for those vowing poverty be withdrawn.

Limitations on political activity

Asserts that the code limitations imposed on exempt groups are so comprehensive as virtually to destroy basic civil liberties, and that the strictures are so vague and sweeping as to lead to discriminatory actions by the Service. Argues that the term "substantial" is uncertain in that a large organization could engage in considerable activity of this kind with impunity, whereas a small organization could engage in none at all. States that if these prohibitions are to remain in the regulations, they should at least be applied impartially to all exempt organizations.

Disclosure requirements

Recommends that a substantial change be made in section 6033(a)(1) of the code which would remove church immunity from disclosure. Urges requirement of full disclosure of church income and assets on same basis as section 501(c)(4) organizations. Considers the House bill requirements to be inadequate.

Notes that the House bill continues preferential treatment of churches; that is, they are given 15 years exemption on the debt-financed property designated for related use, whereas other nonprofit organizations are given only 10 years, and that churches are not subject to the "neighborhood test" as are other groups. Feels that all should be treated alike.

STOCK DIVIDENDS

GLEN M'DANIEL, CHAIRMAN OF THE EXECUTIVE COMMITTEE, LITTON INDUSTRIES, INC.

Stock dividends

Opposes taxing common stockholders who receive common stock dividends where the corporation has outstanding convertible preferred stock or convertible indebtedness. Argues that the premise of the bill, that a holder of convertible stock or indebtedness is essentially a common shareholder, is invalid. Considers that the proportional interest of the common shareholder does not change by reason of a change in the conversion ratio of the preferred security, and that the result of the change, a diminution in the degree of potential dilution of the common shareholder-

ers' proportionate interest, is an inadequate basis for levying a tax.

Considers there is no substance to the argument that a large revenue loss could result if the amendments are not made, and that there is no need to reintroduce all of the complications of the pre-1954 law, and even additional complications.

States that the bill would unwisely interfere with normal corporate financing by needlessly "locking in" the parties to a full anti-dilution provision, a fixed conversion price or conversion rate, etc.

Considers that the bill raises serious constitutional questions in taxing a distribution of common stock on common stock where there is no other security outstanding except convertible preferred stock or convertible indebtedness.

Suggests that a test might be added to distinguish bona fide preferred stock from common stock disguised as preferred stock.

MOVING EXPENSES

HOWARD M. LEE, PRESIDENT, EMPLOYEE RELOCATION REAL ESTATE ADVISORY COUNCIL:

Moving expenses

Supports the enactment of the House bill to keep the U.S. Government from imposing a tax hardship each year on an estimated half million employment related moves (including military, civil servant, and private business).

Comments

Maintains that the 20-mile test of existing law should be retained and that the substitution of a 50-mile test as proposed in the House bill assumes an unreasonably long commuting pattern for employees whose principal place of work is changed.

Considers that the new moving expense rules should apply beginning with calendar year 1969 rather than with 1970 as proposed in the House bill.

Recommendations

States that the overall dollar limitation of \$2,500 on the three new categories of deductible moving expenses is grossly inadequate in many cases to cover reasonable expenses. Proposes for reasonable expenses incident to the sale or exchange of the employee's former residence that the limitation would be the smaller of 10 percent of the actual sales price of the residence or \$5,000 (indicates that this limitation is the same as provided for by the Bureau of the Budget, Circular No. A56, for reimbursement of Federal civilian employees moving at the request of the Government). Suggests for reasonable expenses incident to the purchase of a new residence at the new principal place of work that the limitation would be the smaller of 5 percent of the purchase price or \$2,500. Maintains that a reasonable limitation in the case of a resident's lease would be \$1,500 for settlement of an unexpired lease and \$750 for the acquisition of a lease on a new residence.

Maintains that the Finance Committee report should include a reference concerning section 3401(a)(15) expressly excluding from withholding amounts reimbursed to employees which are deductible by the employees under the moving expense deduction.

GENERAL

HON. WILBUR J. COHEN, DEAN, SCHOOL OF EDUCATION, UNIVERSITY OF MICHIGAN AND FORMER SECRETARY, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

General

Believes that in deciding on content of tax bill, consideration should also be given to its relationships to Government expenditures, inflation, employment, and other public social policies. States that House bill is good but should be improved.

Tax yield

Urges tax yield of House bill be increased rather than reduced to provide additional funds for priority expenditures for human welfare, especially education.

To increase tax yield, recommends elimination of accelerated depreciation for high income and luxury housing, tightening of deductions for farm losses, raising tax on capital gains, withholding on dividends and interest, and decreasing depletion allowances (oil and gas to 15 percent). Suggests that part of the tax rate reductions be spread out over 1970, 1971, and 1972.

Personal exemption for dependents

Maintains that system of an equal amount for each dependent is neither based on facts nor is it intelligent social policy to give financial incentive for more children. Favors decreasing exemption: \$700 for first child, \$600 for second, etc., until only \$100 for seventh child.

Withholding of dividends and interest

Asserts that if withholding is proper for salaries, it also is proper for dividends and interest.

Health insurance premiums

Recommends that, as a condition for employers obtaining tax deduction for contributions to pension, profit-sharing, or stock option plans, all employees be covered under a medical policy at least as broad in coverage as medicare, and that employer pay at least one-half of premium.

Tax treatment of elderly

Considers part of tax return applying to elderly to be most complex, and urges simplification. Suggests revision so that high-income taxpayers will not benefit from provisions designed to assist low-income elderly.

Social security taxes and low-income allowance

Endorses low-income allowance provision. Proposes consideration be given to a refund of one-half of social security tax, if income is below nontaxable level, and that one-half of social security benefits be taxed above a minimum, e.g., \$125 a month.

Foundations and charitable contributions

Urges that any provisions in this area be effective for only 2 years at which time they should be subject to independent review.

States that if the 7½-percent tax on foundations is to be a minimum tax, this principle should apply equally to all other charitable and business enterprises. Recommends a filing fee in place of special tax on foundations.

Considers sanctions for violation of foundation provisions to be punitive. Suggests a 50-percent penalty as a maximum.

Presidential Committee on Tax Policy

Proposes a Presidential Commission to review tax law and suggest changes as well as requirement that Treasury issue a report within 2 years after enactment of reform bill.

Revenue sharing

Opposes shared-revenue proposal as long as—

- (1) All States do not have an income tax;
- (2) Proposal does not assure reduction in reliance on property taxes to finance education;
- (3) A substantial portion is not guaranteed for education; and
- (4) Congress has not appropriated full amounts authorized under existing education legislation. Suggests that House Committee on Ways and Means, Senate Committee on Finance, and Joint Committee on Internal Revenue Taxation consider shared-revenue proposal together with overhaul of welfare system, tax system, and social security, medicare and Medicaid programs.

Education tax credit

Objects to proposal to allow tax credit for tuition for higher education. Contends that this would be a subsidy to higher income persons who already can afford to send children to college and not help those who cannot afford it.

AUTHORIZATION OF APPROPRIATIONS FOR FISCAL YEAR 1970 FOR MILITARY PROCUREMENT, RESEARCH AND DEVELOPMENT, AND FOR THE CONSTRUCTION OF MISSILE TEST FACILITIES AT KWAJALEIN MISSILE RANGE, AND RESERVE COMPONENT STRENGTH

The Senate resumed the consideration of 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.

AMENDMENT NO. 167

Mr. BROOKE. Mr. President, I call up my amendment No. 167 and ask that reading of the amendment be dispensed with.

The PRESIDING OFFICER. Without objection, it is so ordered; and the amendment will be printed in the RECORD at this point.

The amendment offered by Mr. BROOKE is as follows:

At the end of the bill add a new title as follows:

"TITLE VI—COMMISSION ON NATIONAL SECURITY POLICY

"ESTABLISHMENT OF COMMISSION

"Sec. 601. (a) There is hereby established a commission to be known as the Commission on National Security Policy (hereinafter referred to as the 'Commission') which shall be composed of fifteen members as follows:

"(1) five appointed by the President of the Senate from among persons recommended by the Majority Leader of the Senate with the concurrence of the Minority Leader of the Senate, the chairman of the Committee on Armed Services and the chairman of the Committee on Foreign Relations of the Senate;

"(2) five appointed by the Speaker of the House of Representatives from among persons recommended by the Majority Leader of the House of Representatives with the concurrence of the Minority Leader of the House of Representatives, the chairman of the Committee on Armed Services and the chairman of the Committee on Foreign Affairs of the House of Representatives; and

"(3) five appointed by the President of the United States.

"(b) Of each class of members not more than three members appointed under subsection (a) (1), (a) (2), or (a) (3), of this section shall be from the same political party. Members shall be appointed from private life from among persons who are specially qualified by virtue of experience or training to serve on the Commission.

"(c) Any vacancy in the Commission shall not affect its powers, but shall be filled in the same manner as the original appointment.

"(d) The Commission shall elect a chairman and Vice Chairman from among its members.

"(e) Eight members of the Commission shall constitute a quorum.

"DUTIES OF THE COMMISSION

"Sec. 602. (a) The Commission shall make a full and complete study and investigation of national security policy and programs for the purpose of making recommendations with respect to—

"(1) the Nation's international commitments and responsibilities;

"(2) the strategic policy options available and related manpower and equipment requirements needed to carry out such commitments and responsibilities;

"(3) the costs, capabilities, preferred types, and numbers of military systems for offensive and defensive purposes, specifically including but not limited to missiles, aircraft, aircraft carriers, missile launching and attack submarines, and other major systems;

"(4) the organization, management, procurement practices, and other administrative arrangements of the Department of Defense and other agencies responsible for the support, formulation, and implementation of national security policies and programs;

"(5) the development and implementation of programs permitting economies and the identification of programs demanding priority expenditures; and

"(6) such other matters as the Commission deems appropriate to a realistic and strengthened national security.

"(b) The Commission shall submit to the President and to the Congress an interim report with respect to its study and investigation not later than March 15, 1970, and a final report, not later than December 31, 1970, containing its findings and recommendations.

"POWERS AND ADMINISTRATIVE PROVISIONS

"Sec. 603. (a) The Commission or, on the authorization of the Commission, any subcommittee or member thereof, may, for the purpose of carrying out the provisions of this title, hold such hearings, take such testimony, and sit and act at such times and places as the Commission, subcommittee, or member deems advisable. Any member authorized by the Commission may administer oaths or affirmations to witnesses appearing before the Commission, or any subcommittee or member thereof.

"(b) Each department, agency, and instrumentality of the executive branch of the Government, including independent agencies, is authorized and directed to furnish to the Commission, upon request made by the Chairman or Vice Chairman, such information, including classified data, as the Commission deems necessary to carry out its functions under this title.

"(c) All members and employees of the Commission having access to classified information shall be subject to established security requirements.

"(d) Subject to such rules and regulations as may be adopted by the Commission, the Chairman, without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and without regard to the provisions of chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates, shall have the power—

"(1) to appoint and fix the compensation of such staff personnel as he deems necessary, including an executive director who may be compensated at a rate not in excess of that provided for level IV of the Executive Schedule in title 5, United States Code, and

"(2) to procure temporary and intermittent services to the same extent as is authorized by section 3109 of title 5, United States Code.

"COMPENSATION OF MEMBERS

"Sec. 604. Members of the Commission shall receive compensation at the rate of \$125 per day for each day they are engaged in the

performance of their duties as members of the Commission and shall be entitled to reimbursement for travel, subsistence, and other necessary expenses incurred by them in the performance of their duties as members of the Commission.

"EXPENSES OF THE COMMISSION

"Sec. 605. There are authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, such sums, not to exceed \$5,000,000, as may be necessary to carry out the purpose of this title.

"EXPIRATION OF THE COMMISSION

"Sec. 606. The Commission shall cease to exist ninety days after the submission of its report."

UNANIMOUS-CONSENT AGREEMENT

Mr. STENNIS. Mr. President, will the Senator from Massachusetts yield so that I may make a unanimous-consent request?

Mr. BROOKE. I yield.

Mr. STENNIS. Mr. President, before I ask for the unanimous-consent request, it appears to me that if we get the unanimous-consent request agreed to, we should be able to finish this bill today.

There will be some colloquy as to a few points some Senators wish to ask about.

I have a few brief remarks I want to make, and one short and noncontroversial amendment to offer, after the Brooke amendment has been considered.

The Senator from Utah tells me that he will not offer the amendment he had submitted. Thus, I believe there is a good prospect that we can finish this bill today. There will have to be a rollcall vote on final passage of a vote of this magnitude.

I have conferred with the Senator from Massachusetts with reference to the pending amendment, which concerns the Commission. He joins me in this unanimous-consent request: that time on the amendment be limited to 1 hour, with an equal division of time. He will have control of the time for the proponents, and, as chairman of the committee, I will have control of the time for the opponents. It is expected that probably all of that time will be taken.

Mr. JAVITS. Mr. President, reserving the right to object—and I shall not object, because I am sure what I have in mind will be looked at—we ran into a jam here about amendments to the amendment. So I hope the Senators who are asking unanimous consent will now make provision that if there are amendments to the amendment—which should be germane, and I agree to that—there will be time to debate them and vote on them, and not by anyone's favor.

Mr. STENNIS. Mr. President, for my part, I am glad to add that if there should be amendments to the amendment, debate thereon will be limited to 20 minutes, 10 minutes to a side, to be divided equally.

The PRESIDING OFFICER. Is there objection to the unanimous-consent request? The Chair hears none, and the unanimous-consent request is agreed to.

A COMMISSION ON NATIONAL SECURITY POLICIES AND PROGRAMS

Mr. BROOKE. Mr. President, for over 2 months this Senate has been engaged in one of the most fruitful and informed debates in our Nation's history. The most serious questions of national strategy

and purpose have been posed and deliberated at length. Our foreign commitments have been examined in detail, and particular attention has been paid to the multitude of weapons and supporting materiel required to maintain those commitments at a credible and effective level.

From this debate there have emerged two fundamental facts: First, a defense system which for years has operated without sufficient public and private checks has now been exposed to the sunlight which the distinguished Senator from Wisconsin has termed "a great disinfectant." Whatever the outcome of the specific proposals, the process itself has been healthy for all concerned. Facts were brought forth, assumptions were challenged, and in the course of rigorous debate participants and spectators alike were forced to apply the most stringent standards of logic and persuasion.

A good foundation has been laid for future inquiry. But in the course of this debate we have also run head on into a second fundamental fact which cannot be ignored. In all too many instances, no matter how well prepared the case for or against a given weapons system or strategic concept, the definitive judgment, the expert assessment which would have been conclusive simply was not available. This is not intended as a reflection on any of those who have worked long and hard to prove their case in court. Rather, it is a summation of a truth which we all acknowledge in our private moments: few of us have the technical competence and the strategic background to judge, in the final analysis, whether most of these weapons or weapons systems are truly necessary to our national defense.

This is obvious from the way many of the proposed amendments have been phrased. In the course of this debate the amendments regarding specific weapons systems have not sought to strike the systems themselves from our inventory. Rather, they have consistently called for a delay or a reduction in funding until an in-depth study could be carried out. What has been said here, Mr. President, is that available evidence raises questions about the need for a variety of military hardware, but on the basis of this evidence we ourselves are not now prepared to make a final determination.

The question which I pose to the Senate today is:

How can we improve our capacity to make these difficult technical and strategic judgments? We have already made it quite clear that we do not intend to accept without question the judgments of the executive branch on these matters; this is right and consistent with our role as a separate branch of government. At the same time, however, the sole agent on which we can rely, outside of our own committee structure, is the General Accounting Office which has judged itself unprepared and unable to deal with more than a few of the questions posed in this debate.

It is with these limitations and considerations in mind that I rise today to propose a method of improving our capacity to deal with these great issues in the future.

What we have seen, in the country and in the Senate during recent months, is a

growing doubt about the soundness of recommendations on national security policy, and even more about the process by which these recommendations are made. There is a profound apprehension in the land that decisions in this realm, so often closed to full public scrutiny because of the classification and complexity of relevant information, are not always as balanced and judicious as they should be. Some of the new criticism of defense policies and programs may well be emotional and ill considered, but much of it represents a thoughtful and concerned effort to refine some of the most vital actions taken by our Government.

In my work as a junior member of the Armed Services Committee, I have come to appreciate both the immense labor my colleagues are devoting to these issues and the overwhelming difficulty of the task. I have acquired a great regard for the work of many conscientious Senators who are primarily occupied with these questions. I have also come to the conviction, which I believe is shared by many members of the Armed Services Committee and of the Senate at large, that we must seek ways to improve congressional oversight of these vast and complicated programs.

If we can devise effective means of coupling the dedication of the responsible Senate committees with better information and dependable advice, I have every confidence that the national security process can be substantially improved.

As we have begun to grope for ways to do a better job in these areas, a number of constructive measures have been taken. The chairman of the Armed Services Committee has designated a number of subcommittees to focus on various elements of the DOD procurement bill; I think this innovation proved extremely useful to the committee and the Senate. The chairman also established procedures for monitoring more closely a number of major weapons contracts, procedures which have been reinforced by Senator SCHWEIKER's amendment to the bill. These efforts are most worthwhile. The Senate should acknowledge with appreciation the commendable beginning Chairman STENNIS has made in his early months as head of this important committee.

I believe, however, as do many Senators, that additional steps are still desirable to strengthen the ability of the committee, the Congress, and the Nation to oversee our defense programs. Much of the difficulty we now face lies not with the Congress itself, but with a general loss of confidence in executive recommendations on proposed weapons procurement and other aspects of our national security needs. If we are to deal effectively with this problem, which I believe lies at the heart of the present controversies over the defense budget, we must reestablish the credibility of the larger structure of national security policymaking.

This goal would be served, I submit, by seeking an independent and demonstrably objective review of these issues. That is the objective of the proposal I make here today.

The amendment I am offering with my distinguished cosponsors would provide for the creation of a high-level Commission on National Security Policies and Programs, primarily chosen by and responsible to the Congress. It would be charged with the responsibility of conducting a thorough and comprehensive investigation of the broad range of national security issues and of submitting reports and recommendations to the Congress as a basis for future deliberations.

At several points in this debate we have found ourselves face to face with the fact that national security is a large and interrelated category of problems which is divided among several committees of the Congress. For example, I think Chairman STENNIS and the rest of us serving on Armed Services are increasingly aware that the Nation's international commitments, which fall primarily within the jurisdiction of the Foreign Relations Committee, are the controlling factor in many of the strategic policies and weapon decisions which come before our body. Thus there obviously exists a need for an integrated responsibility for the overall cluster of issues involved in national security policy.

The proposed Commission would have such an integrated mandate. It would consider and offer recommendations regarding:

First, the Nation's international commitments and responsibilities;

Second, the strategic policy options available and related manpower and equipment requirements needed to carry out such commitments and responsibilities;

Third, the costs, capabilities, preferred types and numbers of military systems for offensive and defensive purposes, specifically including but not limited to missiles, aircraft, aircraft carriers, missile-launching and attack submarines, and other major systems;

Fourth, the organization, management, procurement practices and other administrative arrangements of the Department of Defense and other agencies responsible for the support, formulation, and implementation of national security policies and programs;

Fifth, the development and implementation of programs permitting economies and the identification of programs demanding priority expenditures; and

Sixth, such other matters as the Commission deems appropriate to a realistic and strengthened national security.

Such studies and recommendations as it submits would be referred back to the appropriate committees of the Congress for further review and any action they deemed appropriate. Thus the Commission mechanism would be designed to facilitate and improve the work of the responsible committees of this body and the other.

Furthermore, a special appointing procedure has been conceived, a procedure which I believe will both assure the appointment of distinguished members to this Commission and stamp the Commission with an indelible mark of primary responsibility to the Congress. All members would be drawn from private life. Five of the 15 members would

be appointed by the President, as in the case of the notable Hoover Commission; this degree of Executive participation should encourage the desired cooperation between the branches of Government concerned with these matters.

Two-thirds of the membership, however, would be appointed by the Congress. Five members would be designated by the President of the Senate on the recommendation of the majority leader and with the concurrence of the minority leader, the chairman of the Armed Services Committee, and the chairman of the Foreign Relations Committee. Five others would be appointed by a similar method in the House of Representatives.

The appointing role of the several respected members I have named gives high confidence, I believe, that the Commission would have a most capable membership. Together with the ample authority to assemble a senior and superior staff, such a membership could undertake a concentrated and independent evaluation, with full access to the necessary information, of the whole range of national security issues. The unique congressional appointment process also should assure that the analyses and recommendations of the Commission receive serious consideration when they are eventually filed. It makes it clear from the very beginning that the responsible committees are principal agents for creating the Commission and for making use of its product.

Each of us can think of the kind of men who could make major contributions to such an historic Commission. As I have considered this matter over recent months, many eminent and qualified candidates have come to mind: such able former defense executives as Thomas Gates and Cyrus Vance; such knowledgeable scientist administrators as James Killian and Harold Brown; prominent technical and strategic analysts like Thomas Schelling and Gordon MacDonald; and numerous other distinguished individuals whose competence and balanced judgment would be recognized by the Congress and the Nation. An eminent group of this character and with this mission could prove invaluable in this period of grave challenge to the national security policy process.

The proposed Commission might well confirm the good sense of many of the current policies and proposals being advanced by the Executive; others it might subject to serious challenge. The fundamental point is that this wholly independent body of respected citizens would be able to function without the specific obligations and vested interests which affect the nature of Executive recommendations in this field. It would be in a position to submit the most objective assessment of our national security options, requirements, and priorities.

There can be no question that we need such a clearly objective evaluation if we are to restore public and congressional confidence in the national security process. This observation is no affront to the able and hard-working men who apply themselves so diligently in the Department of Defense and elsewhere. Indeed it could serve to relieve them of the often

unwarranted suspicions which have come to handicap them in their service to their country.

Those of us who have been most critical of recent governmental policies in foreign policy and defense matters are obliged to realize the significant truth contained in the old maxim that "politics stops at the water's edge." The truth of that ancient insight lies not in any suggestion that critical discussion of the Nation's international problems is taboo. Rather it consists of the understanding that a democratic government cannot operate effectively in an often hostile international environment if there is serious division on the homefront regarding the wisdom and justice of the Nation's foreign policies.

That is especially the case in matters of national security. To act effectively on these matters, our form of government dictates that we find a wide area of domestic consensus. It is evident that the consensus on our postwar national security policies has been eroding for some time, and the long-term interests of our Nation require that we find the basis for a new one.

In my opinion the suggested Commission could contribute much to that quest. By performing its task efficiently, objectively, and with a full understanding of its long-range significance, such a commission could help reestablish national confidence in the process by which the country governs its international activities, strategic policies, and military expenditures. That is an essential goal, and I commend the proposal to the Senate as worthy of prompt approval.

Mr. PASTORE. Mr. President, will the Senator yield me 2 minutes?

Mr. BROOKE. I am happy to yield to the Senator from Rhode Island.

Mr. PASTORE. Mr. President, the Senator from Massachusetts was gracious and kind enough to discuss this amendment with me several days ago, and I at this time commend him for the note of apprehension that he has expressed with reference to our foreign commitments, and also as to our global military stance.

I rise so that I may be recorded in favor of a study to be made, so that we may relate our foreign policy to our defense posture and our defense posture to our foreign policy. I think that the time has arrived when we should conduct a very comprehensive and exhaustive examination of what our foreign policy is today, and what our defense commitments have to be in order to sustain our foreign policy.

I believe that fundamentally that has been the trouble, and fundamentally that has accounted for much of the debate that has transpired on the floor of the Senate for the past several weeks.

I think that sometimes we are a little too critical of the Defense Department and its requests without considering the fact that the Defense Department has to follow the commitments made by the State Department. If the State Department is going to commit us all over the world and is going to involve us in treaties of every kind and character and place these commitments on the desks of the Joint Chiefs of Staff, they

have to begin to calculate what our military posture should be.

Sometimes it gets out of hand. I must say in full honesty, as I indicated to the Senator from Massachusetts, I was not fully satisfied with the makeup of his Commission. I explained to him that I was rather doubtful of the chances of the amendment being agreed to.

I do not think five members of the Commission should be appointed by the President of the United States—not so much because I am opposed to the President's making an appointment of five of the members, but the fact is that we are going outside of Congress and it is the responsibility of Congress exclusively.

I think there ought to be better liaison and understanding among the various committees of the Senate. I think there ought to be better liaison between the Foreign Relations Committee, the Armed Services Committee, and the Appropriations Committee.

I have noticed the votes in the Senate on this bill. The members of the Committee on Foreign Relations seem to go one way on all of these very serious questions. The members of the Committee on Armed Services all seem to go the other way. The question that arises in my mind is that sometimes the left hand does not know what the right hand is doing. And that is not good for the country. Perhaps somehow or other we ought to create this network and call upon outstanding experts and have sufficient staff to make sure that when they come to testify from the State Department or from the Defense Department we have some way of scrutinizing the facts. That has been the great hiatus. I regret it very much.

I repeat that I would have been satisfied if the request were confined solely and strictly to the membership of the Senate. I think it would have been more effective. I think there would have been a better chance of passage. I doubt very much in the form in which the amendment is now that it will have a chance to survive the vote.

Mr. President, in order that I may be recorded, because I have said this today here and I have said it all over the country, what we need today is a breath of fresh air not only as to foreign policy but also as to the military global strategy. The time has come to look into the matter fully. We are not equipped to do it here.

I think we need the assistance of experts who have all kinds of clearance so that we could talk to them confidentially. However, I would not want to see a new National Security Council created over an existing one. I am afraid that that is what we would be doing under the pending amendment.

I shall support it. However, I do so with my tongue in cheek because of the proposed composition of the Commission.

Mr. BROOKE. Mr. President, I thank the distinguished Senator from Rhode Island. I think he has made a rich contribution to the discussion.

I assure the Senator that I understand his point about the Executive appointing the five members of the Commission. The only purpose for its being written in

this manner was to get Executive cooperation. Some thought the Executive should appoint the 15 members of the Commission. This is negotiable.

As I explained to the distinguished Senator from Rhode Island, I feel that the committee ought to get the expertise it does not now have. I am glad the distinguished Senator agrees with that statement.

I have noticed that with respect to almost every amendment—with the exception of a few—that has been debated on the floor during the long debate had on the pending matter, it has always been said, "We want to delay it. We want to stop funding. We want to have a study."

They always refer to the GAO. The Senator knows and we all know that the GAO is not really equipped to give us the expertise that Congress needs.

The executive branch does have the expertise available to them. However, Congress does not. I thank the Senator for his contribution and support.

Mr. JAVITS. Mr. President, will the Senator yield?

Mr. BROOKE. I yield.

Mr. JAVITS. Mr. President, I believe that the debate on the pending matter started on a very high level with the ABM debate, which was historic. It is ending on a very high level with what I consider to be an outstanding amendment offered by the distinguished Senator from Massachusetts.

It does, as the Senator from Rhode Island has said so astutely, seek to ease the problems that have arisen from the blending of foreign policy and military policy. The Senate, the Nation, is not yet fully equipped to handle all of these matters on the high level of wisdom and judgment they deserve. We may be some day. Perhaps joint hearings of the Committees on Armed Services and Foreign Relations are necessary. Perhaps we are too inflexible about joint action by committees. We have not articulated that concept sufficiently.

The pending amendment is a very sound amendment. I believe the Senator is correct in seeking to introduce the executive department into the selection of the members of the Commission. We learned from the debate on the amendment offered by the Senator from Kentucky (Mr. COOPER) that that is where we have the big dissension.

We are concerned because the executive branch is making our decisions for us, and it does involve the influence of the Executive.

There is concern on that score. As the Senator from Rhode Island has said, I will support the amendment because this potential problem can be worked out in conference.

I have a technical point I should like to call to the attention of the Senator. The Senator proposes that five members be appointed by the Senate upon the recommendation of the majority leader with the concurrence of the minority leader and the chairmen of the Committees on Armed Services and Foreign Relations.

That is boiler plate. The majority and minority leaders would make the recommendations. There would be three mem-

bers from the majority and two from the minority.

I am afraid, however, that the Senator is inhibiting the chairmen of the Committees on Armed Services and Foreign Relations from serving on such a commission.

Mr. BROOKE. Mr. President, will the Senator yield?

Mr. JAVITS. I yield.

Mr. BROOKE. Mr. President, the Senator will find that I restricted the membership of the Commission to private citizens and not to Members of the Senate.

Mr. JAVITS. Mr. President, I am not so sure that the Senator is correct in doing that. That is exactly my point. I am not so sure that the members ought to be exclusively from private life. That kind of plan has not worked out too well in the past.

I should like the Senator to consider a mixed Commission. The Senator does not have to modify his amendment. It could be worked out in conference.

I am laying the idea on the table so that we can think about the matter some more. If a change is required, the Senator can have great influence on what is done.

I think a mixed Commission of Congressmen and private experts, like the Hoover Commission, with provision for some appointments by the President, from private life and to some extent possibly even from the executive departments, is a matter that we ought to think about seriously.

The idea is sound. The duties are sound. The blend of the Commission does require more consideration in my judgment. I am sure that the Senator would be very open minded as to how this is carried out.

Mr. BROOKE. Mr. President, I thank the Senator from New York for his contribution. I had in mind something similar to the Hoover Commission in drafting the measure.

I feel it can be worked out in conference. I might favor the appointment of less than five from the executive department, as suggested by the Senator from Rhode Island. However, certainly it may be that we could have Members of the Senate or the House serve on the Commission and that it would be better than restricting it to private citizens.

I was thinking of men who are great scientists and who could give us the expertise needed and make recommendations to our committees which we could use.

The Commission would give us an interim report and a final report so that we would be better equipped to work on the authorization bill we have pending.

Mr. JAVITS. Mr. President, no committee need fear that its prerogatives are being seized upon and its legislative authority removed. The Foreign Relations Committee can consider the report and reject it or accept it. The same is true with respect to the Committee on Armed Services and with respect to the House committees.

Mr. BROOKE. Just creating a commission to make available to us ex-

pertise, continuous study of expertise, bringing in foreign policy and weapons systems together. I think this would be a great aid to the standing committees, the Committee on Armed Services, and the Committee on Foreign Relations.

Mr. JAVITS. I think it is a fine amendment, and I shall support it.

Mr. BROOKE. I thank the distinguished Senator from New York.

The PRESIDING OFFICER (Mr. MONDALE in the chair). The Senator's 30 minutes have expired.

Mr. STENNIS. Mr. President, I yield the Senator from Massachusetts 5 minutes. He and I talked about this beforehand.

Mr. BROOKE. I yield back the time. I will need it subsequently, if I may have it.

Mr. STENNIS. All right.

Mr. McINTYRE. Mr. President, will the Senator from Mississippi yield me 4 minutes?

Mr. STENNIS. Mr. President, I yield 4 minutes to the Senator from New Hampshire.

Mr. McINTYRE. I thank the Senator from Mississippi for yielding to me.

Mr. BROOKE. Mr. President, will the Senator yield for a moment?

Mr. McINTYRE. I yield.

Mr. BROOKE. Mr. President, I ask for the yeas and nays on this amendment.

The yeas and nays were ordered.

Mr. McINTYRE. Mr. President, I commend my colleague, the distinguished Senator from Massachusetts, for the amendment he has brought before the Senate.

His proposal is clear indication of the fact that he has, as usual, thought meaningfully about some of the needs that many of us feel.

The Senator from Massachusetts (Mr. BROOKE) served with great diligence on the Subcommittee on Research and Development, of which I have the honor to be chairman. On the subcommittee he had questions of how we relate defense research needs and accomplishments to the broader needs of our society. He often felt, as many of us did, that there were gaps in our understanding to which we did not have the answers.

However, I do not feel capable at this point to make a fully determined decision on the broad proposal made by my friend from Massachusetts. I am not sure that he may not be proposing the setting up of a further structure when the problem is not the need of a new structure but the better construction of the existing building in which we work.

I found often that we were short-handed for subcommittee staff assistance. Those who were available did yeoman and extremely competent work. I congratulate them for the help they gave us. But, there are not enough of them. I think we need more, and I further believe that we need them as part of the Senate structure and not some new outside group.

Furthermore, I want to be sure that the Senator's amendment does not take from the responsibility and authority that we as Members of the Senate share and the responsibility and authority which the chairmen of our committees have.

The Senator from Massachusetts proposes the establishment of a commission on national security policies and programs. I wonder however if we do not have this in the form of the distinguished chairmen of our Armed Services, Appropriations, and Foreign Relations Committees. Are not these in reality the Commission which the Senator proposes?

May I say again, Mr. President, that the distinguished Senator from Massachusetts has, as always been provocative and on target. I just do not believe we have the time here today to make the kind of judgment on his amendment which it merits.

I would urge upon my friend from Massachusetts that he present this amendment to the Senate in the form of a bill which can go to the proper committees and be well studied and strengthened where necessary and expanded where needed. This I think would make a real contribution to a stronger future in this vital area of our national security policy.

Mr. STENNIS. Mr. President, I yield 5 minutes to the Senator from Vermont.

Mr. AIKEN. Mr. President, with due respect to my neighbors from Massachusetts and New York, I have to disagree with this amendment.

I have been on enough Commissions of this sort to know that they do not work. The first one was the Hoover Commission, in 1947 to 1948. The purpose of that Commission was to install economy and efficiency in Government. But I take no credit for the wonderful economy and efficiency which have prevailed in Government ever since we made our report. In other words, it did not work out too well.

In the early sixties I was on a Commission of this type on the status of women. We made some good jobs for a lot of people, and made our report. Have you noticed how much better women are treated since we made our report than they were before? [Laughter.] Maybe that Commission worked. To me, yes, many of the women do look better than they looked then. But, as a Commission, with due respect to my colleagues, I will say that it did not affect the status of women very much at all.

I have been on other commissions. When a chief executive of a State or a nation appoints a study commission, it frequently means one of two things: Either he does not know what the subject is all about, or he does not want to face up to the problem at hand.

I think if we adopt this amendment it means we do not have much confidence in our Foreign Relations Committee, our Armed Services Committee, our Appropriations Committee, or the State Department, or the Defense Department. I think the solution is to make these committees and other official organizations work. We have not been making them work the way they ought to. The State Department years ago was declared a 4-F and until recently at least has been pretty much 4-F. But we should make these institutions work, instead of trying to change things over. It is our responsibility to do so and we have full authority to do so.

As to compensation—I think I may be looking at the wrong amendment—it provides \$125 a day. Certainly, that should not apply to Members of Congress who are on the Commission.

As I have said, from experience, I know these commissions provide a lot of good jobs. I do not think I made any votes at home by serving on them. Politically, I do not think they did me much good.

So let us make our committees function properly. Let us make our departments of the executive branch function as they are intended to function. We have the authority to do it, and we should insist upon it.

I have a high regard for the sponsors and those who support this proposed amendment—but I submit that it is the duty of this Congress to make our committees and institutions work better, not to expect others to do this work for us.

Mr. TOWER. Mr. President, will the Senator yield?

Mr. STENNIS. Mr. President, I yield 2 minutes to the Senator from Texas.

Mr. TOWER. Mr. President, I concur with the remarks made by the distinguished Senator from Vermont. It would occur to me that this Commission would be a redundancy, would be performing, in essence, the same functions currently performed by the Defense Department, the State Department, the National Security Council, and other executive instrumentalities, in addition to the appropriate committees of the two Houses of Congress.

I think that about all the Commission could do would be to raise added confusion. Actually, it would not have the power to implement any of its recommendations. These recommendations would have to go to the Armed Services and Foreign Relations Committees of the two Houses for legislative implementation. They would then have their own investigation into the recommendations made by the Commission.

So I see no point in establishing an instrumentality that I think would be redundant the day it was organized.

Mr. STENNIS. I thank the Senator.

I yield 2 minutes to the Senator from Maryland.

Mr. TYDINGS. Mr. President, I think the objective of the Senator from Massachusetts is highly commendable. I think the introduction of the amendment in the debate on the floor of the Senate, particularly the participation of the Senator from Vermont (Mr. AIKEN) and the Senator from Rhode Island (Mr. PASTORE), are highly beneficial, at least to the Senator from Maryland.

I intend, however, to vote against the amendment because, despite the worthiness of the objective, I think that perhaps the responsibility for its achievement lies, as the two distinguished Senators I mentioned have said, with the Senate itself and with the members of the Foreign Relations Committee, the Armed Services Committee, and the Appropriations Committee.

I would hope that this proposal, the debate on it, and the vote would perhaps stir up a little close cooperation among the three distinguished chairmen of those committees and the membership

thereon; because I cannot help but agree with the Senator from Rhode Island (Mr. PASTORE) that there has been little evidence of any cooperation or any joint efforts, at least to my eyes, in this general area, since I have been listening to the debate during the last 2 months and, indeed, during my service in the Senate.

Mr. STENNIS. Mr. President, I yield 2 minutes to the Senator from Oregon, who is going to speak in favor of the amendment. But I yield him 2 minutes, nevertheless.

Mr. HATFIELD. I thank the Senator from Mississippi for yielding 2 minutes.

Mr. President, I have heard today the comments about the amendment offered by the distinguished Senator from Massachusetts—that it was redundant or that perhaps it was not in keeping with the general legislative process and the program in which we are involved.

I would like to point out that one of the most distinguished men who ever sat in the Senate, and so declared by his colleagues on a vote, and his portrait is in our reception room, the late Senator Robert Taft of Ohio, said this in 1950:

I do not know how long this program is going to continue. My impression is that we shall have new weapons and new kinds of airplanes, and that we are embarked on expenditures of this kind for ten, fifteen, or twenty years, as one of the generals stated; and if that is so, I think it means an end of progress and the end of the freedom of the people of the United States. . . . We simply cannot keep the country in readiness to fight an all-out war unless we are willing to turn our country into a garrison state and abandon all the ideals of freedom upon which this nation has been erected. It is impossible to have such a thing in this world as absolute security. I think we should appoint a commission to survey military policy of the United States, to sit down with the military authorities and find out what we are trying to do and to determine what is the proper scope of military activity in the United States.

I think that is a very eloquent statement of the kind of thinking Mr. Taft had relating to the problem in 1950 and it is even more pertinent to the problem we have today.

Mr. STENNIS. Mr. President, I yield myself 3 minutes.

The PRESIDING OFFICER. The Senator from Mississippi is recognized.

Mr. STENNIS. Mr. President, I wish to point out that at the end of over 2 months of elapsed time since the debate started and 8 months after hearings on the bill started there is printed for the first time—even though the Senator gave me a copy of his proposal 2 days ago—for the information of the membership this very far-reaching proposal.

Even though it is presented in good faith it cuts across many of the constitutional principles, as I understand them, and it really abrogates and suspends the work of these committees, the Committee on Foreign Relations, the Committee on Armed Services, and the Committee on Appropriations, to a degree.

I have said many times I think our foreign policy should be reviewed and particularly the Senate's constitutional duty in that field. But if the Senate is going to do that, who should do it? The

Committee on Foreign Relations should do it. That is exactly where this problem lies and that is where the review should start; and that is where policy, as they may see fit to change it, should be brought out and debated.

As I said the other day, the President has a responsibility in that field, too.

If this matter were to be delegated for the time being at least to a commission to work out something along this line, the results are just not going to come about.

I submit if the Senate should want to make an examination along that line, it should come only after the most careful analysis and development of the facts, and any recommendations by those people in the form of a report. There is nothing here. We are launching into a field at the last minute because we have a problem. I think we should buckle down and try to solve that problem ourselves. This is where the Constitution places the responsibility.

I know of no disagreement, enmity, or crossfire between these two committees that have been mentioned. There is none in my mind; there never has been; and I do not think there is any in the minds of others.

We are all unhappy about some things that have happened in other affairs and national affairs but we cannot solve those problems by putting them off on a commission. I would be very much concerned if the Senate, in a thoughtless moment, should seriously consider embarking on this matter in connection with this important bill.

I point out with emphasis the remarks made here by the distinguished Senator from Vermont who is one of the most experienced men in this Chamber.

Mr. President, how much time do I have remaining?

The PRESIDING OFFICER. The Senator from Mississippi has 15 minutes remaining.

Mr. STENNIS. Mr. President, in keeping with the understanding the Senator from Massachusetts and I had, that I would yield him 10 minutes if he desired and he would agree that I have 10 additional minutes to our hour, I ask unanimous consent that the debate be permitted to continue for 10 additional minutes and that it be given to the chairman of the Committee on Armed Services.

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

Mr. STENNIS. Mr. President, I yield to the Senator from Massachusetts. I have already yielded to him for 3 minutes. I yield to the Senator for 7 minutes.

The PRESIDING OFFICER. The Senator from Massachusetts is recognized.

Mr. BROOKE. Mr. President, I wish to point out that the distinguished chairman has said that this is the responsibility of the Committee on Armed Services, the Committee on Foreign Relations, and the Committee on Appropriations. It is also the responsibility of the Executive, as the chairman will point out. But the Executive has not denied itself the availability or benefit of the expertise from various agencies, boards, and commissions which it establishes on its own to supply it with expertise in making recommendations to the Congress.

I am only suggesting what can be done by the Executive can be done by Congress. This Commission would report to the Congress, only giving recommendations to the Congress, which Congress must consider and vote upon. They have no authority other than to make these recommendations. I think Congress needs it.

I think if anything has been brought out by the long debate on this bill it has been that there is a need for expertise and I am very hopeful that the Senate will understand that this is the purpose for which the amendment is intended.

The reason for delay in the filing of the amendment and the printing of the amendment was that this debate was going on. Many Senators have been given the opportunity to discuss it and the form the Commission would take because we are groping for an answer. No one has denied there is a great need for this expertise in order for us to conscientiously and effectively work with this huge authorization budget that we have before us at this time and which we will continually have before the Senate.

Mr. President, I yield 3 minutes to the Senator from Missouri.

Mr. EAGLETON. I thank the Senator from Massachusetts.

I am pleased to be one of the three cosponsors of the amendment, along with the Senator from Massachusetts. We are all products of our own environment and orientation. Although I am new to the Senate, my previous experience was on the State level, 4 years as Attorney General of the State of Missouri and later 4 years as Lieutenant Governor of the State.

As attorney general, which is the chief law-enforcement official of that State, I found that all wisdom, knowledge, and expertise was neither reposed in my head nor readily available to me as one individual public office holder. I urged that the Governor of the State appoint and select a Governor's Commission on Crime and Delinquency, which he did and his Commission on Crime and Delinquency was of inestimable value to our State so far as it brought within the confines of that commission all potential expertise in the field.

Later as Lieutenant Governor of the State of Missouri I was delegated by the Governor with jurisdiction over the Department of Corrections and Parole, and Primary and Secondary Education. Once again I found, much to the sadness of my ego, that I alone did not have the knowledge at my beck and call that was necessary to make proper decisions in those particular governmental areas.

Once again I asked the Governor to appoint a Governor's citizens committee or commission on public education—which he did. Once again it brought great benefit to our State insofar as focusing attention and bringing knowledge of the problems of education in that State are concerned.

Borrowing from that experience, admittedly on a State and not a national basis, it became apparent to me that the same benefits we had derived in the areas previously mentioned could likewise be derived on a national level by creation

of a Commission on National Security as proposed in Amendment No. 167.

This commission would not transgress the official duties and functions of any committee of Congress. It cannot do that.

The ultimate decision must be made initially, of course, by the committees in question and then, even more ultimately, by Congress as a whole.

No one can subtract from that prerogative. No one can subtract nor should they attempt to subtract from that constitutional authority. But, I think that Congress would be remiss in its quest for truth, for facts, and for information, if it did not make available to it all of the potential, intellectual, and professional resources that are within the country, and perhaps in foreign lands, to bring those over under one umbrella, as proposed in amendment No. 167, would perform and serve an eminently wholesome purpose.

Therefore, I am pleased to be a cosponsor of the amendment and hope that it will prevail.

Mr. STENNIS. Mr. President, I yield 3 minutes to the Senator from Florida.

The PRESIDING OFFICER. The Senator from Florida is recognized for 3 minutes.

Mr. HOLLAND. Mr. President, I have full recognition of the high motives which prompted the Senators who offered this amendment and those who support it.

At the same time, I strongly resist their arguments. I call attention to the fact that while the Hoover commission has been mentioned in the speech of the able Senator from Massachusetts, it had nothing to do with anything except the reorganization of the Federal Government—nothing more.

This proposed commission would be given power literally to examine the whole state of the Nation's business in connection with foreign affairs and State affairs, as well as military affairs, and its recommendations even as against the recommendations of the President in his message on the state of the Union.

I call attention to the fact that the first of the fields committed to this commission, and I read it, is this:

The Nation's international commitments and responsibilities.

This runs through the whole field of foreign relations.

The second is—

The strategic policy options available and related manpower and equipment requirements needed to carry out such commitments and responsibilities.

The others are far reaching, and ending with No. 6, as follows:

Such other matters as the commission deems appropriate to a realistic and strengthened national security.

Mr. President, I think that adoption of this amendment and the creation of such a commission would not only be showing disrespect to the Committee on Foreign Relations and the Committee on Armed Services, but would also be an indication that we have little confidence in the form of government under which we exist under the Constitution.

The President is expected to make—and he does make—recommendations on

the state of the Nation in connection with its foreign relations and as to what we should do, he has great power as construed by the Supreme Court in that field.

To set up a commission of this kind would be almost an admission of futility, the futility of our type of government to deal with the problems which confront us.

I am not about to vote for an amendment which I think is a confession of national futility.

It seems to me that this well-motivated amendment proposes just such a confession.

Mr. President, I hope that the amendment will be rejected.

Mr. STENNIS. Mr. President, I yield 5 minutes to the distinguished Senator from Maine.

The PRESIDING OFFICER. The Senator from Maine is recognized for 5 minutes.

Mrs. SMITH of Maine. Mr. President; the proposal of the distinguished Senator from Massachusetts to establish a commission on National Security Policy grows out of his legitimate concern over the adequacy of the available congressional machinery for evaluating the judgment of the executive branch. The complexity of the defense programs have taken considerable time and some are not yet fully understood.

We are all searching for a better understanding of these programs and we desire dependable and wise counsel on defense problems.

But what concerns me, Mr. President, in the proposal of the Senator from Massachusetts is that the Commission which would be created by his amendment would be given more credibility than is warranted. The Senator implies in his remarks that the Commission would provide definitive judgment and expert assessment which could be conclusive in the case of any given weapon system.

I cannot imagine an ad hoc commission that could be appointed, organized, staffed, and thereafter conduct studies on the broad and complex scope envisioned in the amendment and then report to the Congress in 1 year.

I fear that such a commission would not be effective and might well prove dangerous.

One deficiency in our own committee system is that within the time allotted it is not possible to probe each weapon system in depth. But ours is an internal problem which would not be solved by superimposing an external commission to scrutinize our work.

I fear that such a commission would undermine the congressional responsibility.

Whatever internal problems exist must be solved internally. If we need independent expertise then we should proceed to obtain it by recruiting consultants. If we need more in-house capability in the Congress and in our committees, let us expand the staffs.

I am not willing to abdicate the congressional responsibility in the important field of national security to a panel of wise men with no authority and no re-

sponsibility. Such a panel would be of questionable value.

The proposal requires a far more comprehensive examination than we can accomplish here. Extensive hearings would be required and if it has merit it can stand on its own and under specific legislation drafted for very specific purposes.

For these reasons, Mr. President, I cannot support the amendment.

Mr. STENNIS. I thank the Senator from Maine for her timely remarks.

Mr. President, a parliamentary inquiry.

The PRESIDING OFFICER. The Senator from Mississippi will state it.

Mr. STENNIS. What time do I have remaining?

The PRESIDING OFFICER. Eleven minutes remain to the Senator from Mississippi.

Mr. BROOKE. Mr. President, how much time do I have remaining?

The PRESIDING OFFICER. No time remains to the Senator from Massachusetts.

Mr. STENNIS. Mr. President, I yield 3 minutes to the Senator from Colorado.

The PRESIDING OFFICER. The Senator from Colorado is recognized for 3 minutes.

Mr. DOMINICK. Mr. President, I thank the distinguished chairman of the committee.

Mr. President, along with other Members, I have reviewed this proposal, amendment No. 167, by the distinguished Senator from Massachusetts, and have looked at it with some care.

From time to time, there has been great exasperation by most of us to some of the foreign policy pronouncements out of the State Department and at some of the problems we have had with weapons systems, and some of the problems that people have brought up, by saying that we are spending too much on the military without coordinating with the national commitments which have been approved by other branches of the Government.

The interrelationship of this is not, in many cases, clear; but I must say that here we are saying that, since we have been unable to satisfy ourselves on all attitudes of this problem, we are going to appoint 15 persons out of private lives to tell us what to do. We have some 18 members on the Armed Services Committee, some 15 members on the Foreign Relations Committee, and some 24 members on the Appropriations Committee, some of whom are pretty well acquainted with the problems facing them in their field.

It would seem to me that, far better than establishing the whole new commission, which would be studying very confidential, secret, and otherwise classified material in many cases, and then having those members submit their recommendations on the ground that the answer is a definitive one, it might be of far better use to get a closer coordination among the three committees of the Congress, first, because none of them are stupid; second, because they come from all over the country, with different expertise and from different fields; and, third, because they might have had pol-

icy experience in that field. While the members of the commission might have had experience, they might not have had experience with policy decisions.

It seems to me the commissioner would take over the role of the National Security Council. I have grave doubts as to whether that would be very advisable or fruitful, because the National Security Council itself must operate on a day-to-day basis and must determine what it is going to do as part of a general policy, but faced with different circumstances, as time goes by.

For those reasons, though I sympathize with the need for further coordination of information, I really do not think this approach would be fruitful in arriving at that goal. For that reason I must join with the distinguished chairman of the committee and the distinguished Senator from Maine in opposing the amendment. I think there are other approaches. I think perhaps we can explore them as time goes on, and perhaps get more coordination and more joint meetings on these problems, and be able to satisfy ourselves to a greater extent in that way. So, reluctantly, I shall vote against it.

Mr. TOWER. Mr. President, will the Senator from Mississippi yield me 2 minutes?

Mr. STENNIS. I yield 2 minutes to the Senator from Texas.

Mr. TOWER. Mr. President, in setting forth the duties which the Commission would have, the amendment provides that—

The commission shall make a full and complete study and investigation of national security policy and programs for the purpose of making recommendations with respect to—

(1) the Nation's international commitments and responsibilities.

Mr. President, the Nation's international commitments and responsibilities are determined as a result of what is in the national interest. This conclusion is arrived at after many years of experience and as a result of the input of intelligence in the matter of international politics, through the State Department, military intelligence, and so forth. So I do not think a part-time Commission is going to be able to do a better job than the existing agencies in arriving at what our policy should be.

As far as the other recommendations are concerned, they should be determined by people with great expertise and experience in those fields, such as the National Security Council, the Defense Department, and the appropriate committees of the House and Senate of the United States.

Mr. STENNIS. Mr. President, I yield myself 3 minutes or such time as I may use.

Mr. President, I do not condemn this effort, but one of the most significant things about it is that it undertakes to deal with a problem that is a legislative problem. We not only delegate that authority, or undertake to transfer it to someone else to wrestle with—we have a suspension, a hiatus, more or less, during that period—but we reach out into the executive branch of the Government and put five appointees of the President

on the Commission. Whom would they be representing? We would have a mixture there.

The President has to announce some points about foreign policy. He has to, and he should. During the period when he announces a foreign policy point or a foreign policy change, if those five men do not agree with him, or someone thinks he is in error, where is he going to be? Where are they going to be? It just illustrates that the solution of that problem is not through this proposed course.

Someone mentioned something about the staffs of the committees. More and more work piles on these committees, and still there are only 100 Members in this body. I know it does not require numbers in staff as much as it does quality. We have an excellent staff in the Armed Services Committee, small in number, but of the highest quality. I must confess, however, that I do foresee the need for some increase in number. Rome was not built in a day.

Let us not just say we will do something on this problem because we do not have enough staff, or the staff cannot cover it in time. I wish the Senator from Montana were present. I have noticed during the debate criticism of what is in the bill and criticism of the foreign policy of this Nation; and I have some criticism of it, myself. But I have noticed that not much has been said on the constructive side, as I see it, about getting in there and wrestling with our foreign policy, and our commitments, re-examining them and coming out with something constructive. I believe that is one of the major policy questions before our Nation, as well as a fine examination of the military program, present and future.

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

Mr. STENNIS. I yield myself 2 additional minutes.

I do not believe we will begin to solve the problem with the adoption of this amendment. I have said that if it is going to be done, it will have to be worked out in hearings of the most minute kind, with competent people testifying. Someone said, "Well, what committee would you go to with a problem like that?" It seems to me that itself answers the question. If we cannot solve it on the floor, we certainly cannot solve it with an amendment that came in 2 months after the debate began, which was not even printed until last night and was not available to the membership until this morning.

I think it is well for us to look at our problems, but we should look before we leap, and not leap into a matter that, on second thought, would be not only a desertion of our duties and responsibilities but a failure to exercise one of the primary responsibilities, which is to look for a legislative answer.

Mr. BROOKE. The distinguished chairman has stated that this is an abdication of our responsibility.

Mr. President, I cannot concede that the established of a Commission to make recommendations to the Congress of the United States is an abdication of the congressional responsibility.

The PRESIDING OFFICER. All time on the amendment has expired.

Mr. STENNIS. Mr. President, do I have more time?

The PRESIDING OFFICER. There is no time remaining on the amendment.

Mr. STENNIS. Mr. President, I ask unanimous consent that the Senator from Massachusetts may have 5 additional minutes.

The PRESIDING OFFICER. Is there objection? The Chair hears none, and it is so ordered.

Mr. BROOKE. Any more than the appointment of commissions by the executive branch of the Government is an abdication of the executive responsibility.

The National Security Council has been mentioned, and that this might be in conflict with the National Security Council.

What is the purpose of the National Security Council? The National Security Council advises the executive branch of the Government. I am suggesting by this amendment that we have a Commission that would advise the legislative branch of the Government.

No one has denied that we need such expertise. Practically every amendment that has been before the Senate on this authorization bill has called for a study by GAO. Obviously the Senate feels, or many Senators feel, that we do not have the necessary expertise available to the Senate for making these decisions.

This is no indictment of the present committee system. I have great respect for the committee system, and great respect for the members of the Committee on Foreign Relations, and certainly of the Armed Services and Appropriations Committees.

But we are dealing with a \$77 billion budget, involving vast and complex weapons systems, tied into foreign policy matters and treaties that have been made by the executive branch of the Government, with our confirmation.

It seems to me that as we continue down this road, there will be more and more need for coordinating foreign policy and the activities of the armed services. I submit, Mr. President, that there is now no such agency, including the GAO, which itself has declared that it is not prepared to make recommendations, nor does it have the required expertise in certain of these matters.

I also have great respect for the staffs of the various committees. But we know that we are understaffed. We have even had to go to the executive branch to obtain staff members for the Committee on Armed Services, to work with us on armed services matters.

I am saying, Mr. President, that we ought to give thoughtful consideration to where we are going to be in 1970 and 1971, unless we begin to move in this direction.

I have said that much of this is negotiable. It is flexible. Some may not agree that we need 15 members on the commission, or that we need have some appointed by the President. This was raised by the distinguished Senator from Rhode Island (Mr. PASTORE)—who supports the amendment—that we have a

problem in having the executive appoint five of the members.

That was done only to get executive cooperation. The control of this commission would still be in Congress.

I have great confidence that any commission that is appointed by the President of the Senate and the Speaker of the House of Representatives, with the confirmation of the majority and minority leaders and the chairmen of the Armed Services and Foreign Relations Committees, will be a high level, top quality, expert commission that can give us useful recommendations.

Where is the abdication? We still have the responsibility. The ultimate decisions will still have to be made by the Senate and the House of Representatives. So I think the argument of abdication is rather specious. There is no abdication. There was no intent to suggest abdication. There is no abdication of responsibility.

In fact, I believe that such a commission would help us immeasurably to live up to the responsibility that we have in connection with such a bill as this, which has been before us, now, for more than 2 months.

Any delay, as I have stated, in the presentation of this amendment, was because of the fact that there have been so many amendments. I think the debate has been very healthy. I think it is good for the country. But I think that obviously these institutions have been working—

Mr. THURMOND. Mr. President, in my view, the amendment proposed by my distinguished colleague from Massachusetts Senator BROOKE, is not necessary. This amendment proposes to establish a commission to make a full and complete study and investigation of national security policy and programs.

Mr. President, it is my opinion, after reviewing this proposal, that it is a challenge to our committee system in Congress. It is a challenge to the President's responsibilities and competence and a challenge to the administration's resources available to President Nixon for this purpose. A law is not required, if the President believes he needs an independent group to make this study for him and the Congress.

I can appreciate the concern of my distinguished colleagues; however, it would have been much more logical and realistic, if he had made his proposal earlier for consideration by the Armed Services Committee, the Congress and the administration. In my view, our national security policies and programs have had extensive review by the Congress and the administration the past few months. These studies and reviews will continue in accordance with the responsibilities of all concerned.

Mr. President, this amendment is not appropriate or applicable to tag onto the defense procurement bill. I recommend the distinguished Senator from Massachusetts withdraw his amendment. I plan to oppose it.

Mr. BROOKE. I urge the adoption of the amendment.

The PRESIDING OFFICER. All time having expired, the question is on agree-

ing to the amendment of the Senator from Massachusetts. On this question, the yeas and nays have been ordered, and the clerk will call the roll.

The assistant legislative clerk called the roll.

Mr. BYRD of West Virginia. I announce that the Senator from Washington (Mr. MAGNUSON), and the Senator from Tennessee (Mr. GORE), are absent on official business.

I also announce that the Senator from Arkansas (Mr. FULBRIGHT), the Senator from Wyoming (Mr. MCGEE), the Senator from Indiana (Mr. BAYE), the Senator from Indiana (Mr. HARTKE), the Senator from North Dakota (Mr. BURDICK), the Senator from South Dakota (Mr. MCGOVERN), the Senator from Massachusetts (Mr. KENNEDY), and the Senator from Oklahoma (Mr. HARRIS), are necessarily absent.

I further announce that, if present and voting, the Senator from North Dakota (Mr. BURDICK), the Senator from Washington (Mr. MAGNUSON), and the Senator from Wyoming (Mr. MCGEE), would each vote "nay."

Mr. SCOTT. I announce that the Senator from Arizona (Mr. GOLDWATER), the Senator from Wyoming (Mr. HANSEN), the Senator from Nebraska (Mr. HRUSKA) and the Senator from California (Mr. MURPHY) are necessarily absent.

The Senator from North Dakota (Mr. YOUNG) is absent on official business.

If present and voting, the Senator from Arizona (Mr. GOLDWATER), the Senator from Wyoming (Mr. HANSEN), the Senator from Nebraska (Mr. HRUSKA), and the Senator from California (Mr. MURPHY) would each vote "nay."

The result was announced—yeas 22, nays 63, as follows:

[No. 94 Leg.]
YEAS—22

Anderson	Hart	Pastore
Brooke	Hatfield	Pearson
Case	Hughes	Percy
Church	Javits	Proxmire
Eagleton	Mathias	Saxbe
Goodell	Mondale	Schweiker
Gravel	Nelson	
Griffin	Packwood	

NAYS—63

Alken	Ervin	Pell
Allen	Fannin	Prouty
Allott	Fong	Randolph
Baker	Gurney	Ribicoff
Bellmon	Holland	Russell
Bennett	Hollings	Scott
Bible	Inouye	Smith, Maine
Boggs	Jackson	Smith, Ill.
Byrd, Va.	Jordan, N.C.	Sparkman
Byrd, W. Va.	Jordan, Idaho	Spong
Cannon	Long	Stennis
Cook	Mansfield	Stevens
Cooper	McCarthy	Symington
Cotton	McClellan	Talmadge
Cranston	McIntyre	Thurmond
Curtis	Metcalfe	Tower
Dodd	Miller	Tydings
Dole	Montoya	Williams, N.J.
Dominick	Moss	Williams, Del.
Eastland	Mundt	Yarborough
Ellender	Muskie	Young, Ohio

NOT VOTING—15

Bayh	Hansen	Magnuson
Burdick	Harris	McGee
Fulbright	Hartke	McGovern
Goldwater	Hruska	Murphy
Gore	Kennedy	Young, N. Dak.

So Mr. BROOKE's amendment was rejected.

Mr. STENNIS. Mr. President, I move to reconsider the vote by which the amendment was rejected.

Mr. MANSFIELD. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

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

The bill was ordered to be engrossed for a third reading and was read the third time.

Mr. STENNIS obtained the floor.

Mr. SCOTT. Mr. President, will the Senator yield?

Mr. STENNIS. I yield to the Senator from Pennsylvania.

LEGISLATIVE PROGRAM—ORDER FOR ADJOURNMENT UNTIL 10 A.M. TOMORROW

Mr. SCOTT. Mr. President, I rise to ask the distinguished majority leader about the order of business for the remainder of the week.

Mr. MANSFIELD. Mr. President, in response to the question raised by the distinguished acting minority leader, may I say, first, speaking personally, that I am delighted that the grueling consideration which this bill has received is at long last coming to an end; and I want to express my deep personal gratitude and thanks to the distinguished Senator from Mississippi, who has been on the floor constantly for well over 2 months and who has conducted himself with such integrity, such understanding, and such tolerance.

To get back to the question at hand, first, I ask unanimous consent that when the Senate completes its business today, it stand in adjournment until 10 o'clock tomorrow morning.

The PRESIDING OFFICER. Is there objection? The Chair hears none, and it is so ordered.

Mr. MANSFIELD. Second, it is the intention of the joint leadership to lay before the Senate Calendar No. 273, H.R. 11271, an act to authorize appropriations to the National Aeronautics and Space Administration. That will be the business tomorrow. The ranking minority member the distinguished Senator from Maine (Mrs. SMITH), and the chairman of the committee, the distinguished senior Senator from New Mexico (Mr. ANDERSON), as well as the distinguished Senator from Nevada (Mr. CANNON), are all prepared to take it up at that time.

The remainder of the schedule will follow as was outlined on yesterday. And the merchant marine bill, I assume, will be up early next week.

Mr. SCOTT. Aside from final passage on the pending bill, does the majority leader expect any other votes tonight?

Mr. MANSFIELD. No. I would hope, though, that the NASA bill would be laid before the Senate and that preliminary statements might be made.

AUTHORITY FOR COMMITTEE ON FINANCE TO MEET TOMORROW

Mr. LONG. Mr. President, will the Senator yield?

Mr. MANSFIELD. I yield.

Mr. LONG. The Committee on Finance has scheduled a meeting for tomorrow. Would the Senator ask that that committee meet tomorrow?

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Committee on Finance be authorized to meet during the session of the Senate tomorrow.

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

AUTHORIZATION OF APPROPRIATIONS FOR FISCAL YEAR 1970 FOR MILITARY PROCUREMENT, RESEARCH AND DEVELOPMENT, AND FOR THE CONSTRUCTION OF MISSILE TEST FACILITIES AT KWAJALEIN MISSILE RANGE, AND RESERVE COMPONENT STRENGTH

The Senate resumed the consideration of the bill (S. 2546) to authorize appropriations during the fiscal year 1970 for procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, 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.

Mr. STENNIS. Mr. President, I have no extended remarks to make. I do want to place some insertions in the RECORD. Two or three Senators have asked me to yield to them for a minute, and I said I would do so.

Mr. President, I ask unanimous consent to have printed at this point in the RECORD a speech I had prepared in connection with the so-called bomber threat, which has to do with our bomber defense plans. That was not questioned in any of the amendments, and I think it should be given in explanation.

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

Matters involved in the defense of the continental United States against manned bombers were considered by a special ad hoc subcommittee comprised of myself, as Chairman, and Senators Inouye, McIntyre, Smith, Dominick and Murphy. The subcommittee primarily studied and examined the following:

1. The existing continental air defense system and its present and future capabilities;
2. The threat presented by the present and projected manned bomber force of the Soviet Union;
3. The \$60 million FY 1970 request for R&D funds for an airborne warning and control system (AWACS); and
4. The \$18.5 million request for R&D funds for an improved manned interceptor.

The only existing manned bomber threat is, of course, posed by the Soviet Union. There is sharp disagreement between the Air Force and the rest of the intelligence community as to the nature, extent and gravity of this threat. According to the National Intelligence Estimate, the Soviet bomber threat is limited and its heavy bomber force is expected to continue its gradual decline. The Air Force dissents and portrays a threat of significantly greater proportions.

The proposed airborne warning and control system (AWACS) aircraft would provide surveillance, warning and control for the interceptor force. It would have a look-down radar capability and would patrol hundreds of miles beyond our borders. It would be tied in with the Over-The-Horizon radars and other warning systems to provide early warn-

ing of a mass bomber attack. The estimated research and development and investment cost involved in the proposed force could ultimately involve billions of dollars. Both the Secretary of Defense and the Department of the Air Force supported the AWACS proposal.

However, there was a sharp division on the improved interceptor. The FY 1970 budget statement by former Secretary of Defense Clifford recommended the research and development program for the F-106X as the approved interceptor. The F-106X was also supported by the Chairman of the Joint Chiefs of Staff and by the Director of Defense Research and Engineering. However, it was not supported by the Air Force. General McConnell, the Air Force Chief of Staff, indicated that he wanted an interceptor with a greater capability than the F-106X, such as the F-12 or something similar. Secretary Seamans stated that he had not had sufficient time to study the problem adequately so as to be able to arrive at a firm recommendation. Under these circumstances it is difficult to see how the Congress can approve a manned interceptor at this time since the cost of an F-12 force would be several times that of the F-106X. An F-12 type interceptor would, of course, be much more expensive than the F-106X.

The Committee concluded that it should not authorize a full-scale go-ahead on either AWACS or an improved interceptor at this time because we feel the manned bomber threat is limited and will probably decrease; there is no evidence of a new Soviet bomber or long-range air-to-surface missile in either development or production; it makes no sense to spend billions of dollars to protect against the relatively small fraction of the nuclear threat represented by manned bombers without a thick defense against ICBMs; and the cost and technology of the proposed systems are still uncertain. In addition, we do not think that these programs have a sufficiently high national priority at this time to justify a full-scale go-ahead.

On the other hand, we believe that the promising new radar concept involved in AWACS as proposed should be kept alive and that the matter of the improved interceptor should be further explored. Therefore, we have recommended a reduction in the AWACS authorization from \$60 million to \$15 million. We believe that this latter amount, together with FY 1969 funds, will permit the pursuit of the new radar concept and keep the technology alive. We have recommended a reduction in the improved interceptor request to \$2.5 million. This will only provide funds for necessary cost and design studies and analyses so that firm and specific recommendations can be made next year.

We have also recommended that the relatively small amounts requested for modifications and engineering services for the NIKE-HERCULES system (19.6 million) and research and development on the Over-The-Horizon (OTH) "backscatter" radar system (\$3 million) be approved. This latter system is designed to provide long-range surveillance, detection and in tracking and identification of aircraft.

Before leaving the subject of continental air defense, I would like to point out that much greater funding is involved in this area than is generally recognized. The Air Force portion of this system has a total research and development and investment cost of about \$11.3 billion. The annual operation and maintenance cost of the Air Force portion of the continental air defense system is about \$1.4 billion. The Army's Hercules force had a total of investment cost of about \$2 billion and an annual operating and maintenance cost of about \$150 million.

Because of the large amounts involved, and the uncertainty about the threat and in the other areas, I am calling on the De-

partment of Defense to make a special review and analysis of the entire matter. This should include an assessment of the bomber threat, the need for an air defense system, and the size and type of system required.

In this review, I think it would be proper for the Defense Department to rely primarily on the National Intelligence Estimate to measure the extent and gravity of the threat but, of course, the differing views of the Air Force and other defense agencies, if any exist, should not be entirely ignored.

As a part of its study, the Defense Department should make a judgment as to the mission of continental air defense both now and for the future, the weapons and systems required and proper to fill the mission, and estimates of the research and development, investment and ten year operating cost of the proposed system. I want to see a reassessment of the entire bomber defense program with respect to its relative priority in defense spending, and a conscientious effort to resolve the differences of opinion which now exist with respect to the bomber threat and air defense requirements, and the proper mission.

I expect the Department of Defense, after completion of its study and analysis, to submit to the Committee on Armed Services a written report containing its findings, determinations and recommendations. I hope that this will enable us to make an intelligent decision which will contribute to a solution of this perplexing problem. At the same time, the military should be warned not to consider this as an invitation to submit a shopping list for expensive new systems which are militarily unsound and economically unfeasible. We will insist on realism, prudence and sound judgment based on facts and hard requirements.

Mr. STENNIS. Mr. President, for the information of Senators, there was one amendment that went for a study; that was on the tank, the most modern tank, and it never was officially reported back here. That was disposed of by the amendment being withdrawn after the committee had met and considered the new evidence and voted unanimously to continue the tank. I ask unanimous consent to have printed at this point in the RECORD a brief explanation of what happened in connection with the tank.

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

MBT-70

Mr. President, I should like to present to the Senate a brief report on the Committee's action regarding the Main Battle Tank, known as the MBT-70.

As the Senate may recall, this item was the subject of Amendment No. 86 introduced by Senator Eagleton and Senator Hatfield under which all the funds for the MBT-70 in the pending authorization bill would have been stricken. This amount was \$30 million in RDT&E funds and \$25.4 million of advance procurement funds for the purchase of models of the tank.

I should note at this point, Mr. President, that the amount recommended by the Department of Defense was \$44.9 million for RDT&E and \$25.4 million for the procurement activity. In the Committee, therefore, the R&D funds were reduced by \$14.9 million and the funds for the pilot models were left undisturbed.

The Senate may recall Amendment No. 86 was temporarily withdrawn with the understanding that the General Accounting Office would submit to the Committee on Armed Services a study covering two points. First, the reasons for the increases in the cost of this joint research program and, secondly, other feasible alternatives to the develop-

ment of the MBT-70 together with the cost of each. There was a further understanding that if the Committee on Armed Services received this report and made recommendation to the Senate prior to the completion of action on this entire bill, and if the Committee recommended that the funds now included in the bill remain, then the amendment would not be resubmitted.

The Committee met today and considered (1) the report of the GAO and (2) a letter from Secretary Laird on the matter together with testimony from Deputy Secretary of Defense Packard. In substance, the Department of Defense informed the Committee that a freeze had been placed on any advance engineering funds expenditures and that the R&D effort will be on a minimum sustaining basis of \$12 million through December. In the meantime, by the end of December, the Department of Defense will have completed its extensive re-examination of the MBT-70 which is now underway.

I should observe, Mr. President, that the Department recommended not only the retention of the \$25.4 Million but restoration of the \$14.9 Million deleted by the Committee. The Department, however, did indicate that they could get along with the \$30 Million in R&D funds although the program would be on an obviously more austere basis.

Mr. President, after considering all of the information at hand, the Committee decided to reaffirm its original recommendation as contained in the bill which provides for \$25.4 Million for the advance procurement effort and \$30 Million for R&D.

The Committee is convinced that the Department of Defense is now undertaking a most intensive review of the MBT-70 program with a view toward making a fundamental decision as to whether or not they can come up with a sound tank on a cost effective basis.

Mr. President, I should also emphasize that prior to any new program for this tank, the Department of Defense will fully advise the Committee of any recommendations it may reach following its study to be completed in December.

Mr. STENNIS. Mr. President, I have a brief statement that I think I should make with reference to the Cook amendment which was agreed to yesterday. There was no extended debate, and I make this statement just for clarification, as well as a statement on the Cooper amendment.

Mr. President, the Senate yesterday completed action on the amendment proposed by Senator Cook which was adopted by a vote of 71 to 10.

I am not attempting to raise any further issues regarding this amendment but would like to make the following comment in the interest of further clarification.

I think it is fair to say that this amendment will not cause any change in policy from what the Department of Defense intends to do with respect to these manpower reductions during fiscal year 1970. As the Senate knows, what the amendment in effect does is to establish an overall ceiling of 3,461,000 persons on active duty as of June 30, 1970, the last day of the fiscal year, and to provide that manpower reductions made in Vietnam will be accordingly reflected in this total for June 30, 1970.

As the Senate knows, the Navy has already announced there will be a 72,000 reduction in military personnel during this fiscal year. While no other reductions have been actually announced, Mr. Laird has stated that military expenditures will

be reduced by \$3 billion for this fiscal year. Of this total, \$1.5 billion have been announced with another \$1.5 billion yet to come. I have not been advised of what reductions will take place to meet the last increment of the \$1.5 billion. The only place, however, that large financial savings can take place within this fiscal year is in manpower and operations and maintenance.

Therefore, Mr. President, in view of what has already been announced by the Department of Defense and what we can anticipate, I do not see how the amendment either adds or detracts from the intended manpower program. At the same time, the amendment serves as a statement of Senate policy with respect to this phase of manpower reductions in the Department of Defense.

Mr. President, as the Senate knows, we had an extended colloquy yesterday regarding the amendment offered by the Senator from Kentucky (Mr. COOPER) which was adopted by a vote of 86 to 0.

There were two viewpoints expressed with regard to the meaning of the language of the amendment. Without belaboring the matter, I would like to reiterate the principal point I made yesterday which is that title IV of this bill and its predecessor provisions have never been construed as a limitation on the use of funds for the U.S. forces. Furthermore, this amendment, as now worded, does not provide for any limitation on the use of funds for U.S. forces for the stated purposes in the amendment. The entire purpose of title IV is to provide authority under which Department of Defense appropriations may be used to assist the Vietnamese and other free world forces in Vietnam other than those of the United States and to assist local forces in Laos and Thailand.

Without the language of title IV, there would be no authority to use funds appropriated to the Department of Defense to support forces other than U.S. forces.

I hope this will serve to clarify this matter.

Mr. President, I am delighted to yield to the Senator from Maine. Let me especially thank her over and over again, with great emphasis on her wonderful work in preparation of this bill and in the debate and her attendance in the Chamber.

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

Mrs. SMITH of Maine. I thank the distinguished chairman for his kind words and for yielding to me.

Mr. President, as we complete action on this bill, I want to express my deep admiration and appreciation for the manner in which the distinguished chairman of the Armed Services Committee has managed this bill on the Senate floor for 2 months and several months of the most painstaking hearings, inquiries, and deliberations on the original bill as requested by the Department of Defense and the President.

Under most trying circumstances, he has been impeccable in his fairness and his firmness. For in the nearly 20 years that it has been my privilege to serve in the Senate, I have never seen a commit-

tee challenged as has been the Armed Services Committee for the past 2 months.

Much good has come out of that protracted and intense challenge. The debate has been excellent. The participation of more Members of the Senate has been all for the better. Never has the Senate known more about what it was voting on than on this bill.

This has set a healthy pattern. For I fully anticipate that from now on all major committees of the Senate can fully expect to be challenged on major legislation they report out—all major committees from now on should anticipate such protracted and intense challenge as that which has been leveled at the Armed Services Committee for the past 2 months.

Yes, Mr. President, from now on I expect the U.S. Senate to be truly the deliberative legislative body for which such great claims have been made in the past. And I hope that all other committee chairmen in meeting the anticipated protracted and intense challenges directed at their committees will follow the example of the distinguished chairman of the Armed Services Committee and acquit themselves in the admirable manner in which he has conducted himself.

Mr. STENNIS. I thank the Senator from Maine humbly and with the greatest and warmest appreciation.

I yield to the Senator from Wisconsin.

Mr. NELSON. Mr. President, I thank the Senator from Mississippi for yielding to me. I would like to join in endorsing the comments just made by the distinguished Senator from Maine about the chairman of the Committee on Armed Services and the bill.

Mr. President, I shall vote against the procurement bill, as I did last year, because it contains the authorization of an appropriation for deployment of the anti-ballistic-missile system. My sole purpose is to express my continuing opposition to the deployment of a system which in my judgment escalates the arms race without adding to the security of the Nation. In fact, it will lessen the security of both great powers as well as the rest of the world.

With a few exceptions I support the balance of the appropriations in this measure. Furthermore, it should be said that the extended debate has been a valuable contribution to the expanding dialog over military spending.

I ask unanimous consent that statements I made on April 18 and 19, 1968, and August 6, 1969, in opposition to deployment of the ABM be printed at this point in the RECORD.

There being no objection, the statements were ordered to be printed in the RECORD, as follows:

[From the CONGRESSIONAL RECORD,
Apr. 18, 1968]

STATEMENT BY SENATOR GAYLORD NELSON

The price tag on this proposal is now \$5 billion. As we all know, it will be higher. We are told it is aimed against China missiles only. It is conceded by everyone that at best it would be effective against a crude, unsophisticated delivery system. On February 2 of this year, Defense Secretary McNamara testified before the Armed Services Commit-

tee that this was a Chinese oriented system. When Senator DOMINICK asked, "If a Soviet missile should come within that particular defense system you could handle that one?" Secretary McNamara replied:

"If it were only one missile, yes. However, if it were the size attack the Soviets are capable of mounting today, the answer is 'No.'"

In a speech a few months ago on September 18, 1967, the Defense Secretary said:

"Our strategic offensive forces are immense. All of these flexible and highly reliable forces are equipped with devices that insure their penetration of Soviet defenses."

Mr. McNamara said further:

"None of the [ABM] systems at the present or foreseeable state of the art would provide an impenetrable shield over the United States. There is clearly no point . . . in spending \$40 billion if it is not going to buy us any significant improvement in our security. Every ABM system that is now feasible involves firing defensive missiles at incoming offensive warheads in an effort to destroy them. But what many commentators on this issue overlook is that any such system can rather obviously be defeated by an enemy simply sending more offensive warheads, or dummy warheads, than there are defense missiles capable of disposing of them."

He reminded his audience that the United States has "already initiated offensive weapons programs costing several billions in order to offset the small present Soviet ABM deployments."

Secretary McNamara pointed out that four distinguished scientific advisers to three Presidents—Eisenhower, Kennedy and Johnson—"have unanimously recommended against the deployment of an ABM system designed to protect our population against a Soviet attack." He went on to say:

"We have the power not only to destroy completely China's entire nuclear offensive forces, but to devastate her society as well."

He went on to elaborate on the folly of spending "\$4 billion, \$40 billion, or \$400 billion—and at the end of all the spending, and at the end of all deployment, and at the end of all the effort, to be relatively at the same point of balance on the security scale that we are now."

So, nevertheless, we are now in the treadmill process of spending \$5 billion on a system that may not work at all and, at best, could have some brief, some transitory value until China slightly refined its delivery system, which everyone concedes they can easily do—and certainly will.

What incredible manner of logic is this? We can, as Mr. McNamara put it, totally destroy "China's entire nuclear offensive forces" and "devastate her society as well," but, he says, we should install this system because "one can conceive conditions under which China might miscalculate."

I respectfully suggest to Mr. McNamara that the fertile human mind can conceive of almost any condition it wants to. With that assumption, any proposition can be logically supported.

It is, I think, a weird process of reasoning that causes us to spend \$5 billion on a system of doubtful and certainly temporary value on the belief that China might be insane enough sometime to attack us knowing it would result in devastation for their whole society.

We cannot even wait to conclude our first round of folly in Vietnam before launching into a second round of folly in a nuclear missile race.

In 1965, when we intervened in Vietnam with a military ground troop commitment, it was argued, among other things, that it was a necessary move to contain China. High State Department, including the Secretary of State and other officials, used the same argument to justify each stage of the escalation.

Now we are there with over a half million troops and draining our Treasury at the rate of \$25 billion a year in an enterprise we wish we had never undertaken in the first place.

China has not a single troop in the war, but somehow we are supposed to be containing China by fighting the Vietnamese.

Now, again, under the guise of defending ourselves against the same enemy, China, we are launching a little "thin missile system" which, like the Vietnam war, will balloon into a big thing—and, like Vietnam, 5 years from now we will all be saying, how in Heaven's name did we ever get trapped into this? Well, it is not easy, but it can and will be done if we work at it hard enough.

I think the truth of the matter is, this is not an anti-Chinese system at all, but the first step in construction of a major heavy ABM system. Of course, many of the proponents—I emphasize this—of the thin system do not intend that result any more than they intended a big war in Vietnam, but that, nevertheless, will be the result.

The signposts along the route we are traveling are clear and we can read them down that route as far as the eye can see—they read: We escalate; they escalate; we escalate; and so forth, until we reach the end of the line, wherever that may be. As Mr. McNamara put it, we can spend \$4 billion, \$40 billion, or \$400 billion on an ABM system and at the end be relatively at the same point of balance on the security scale that we are now.

In commenting on the futility of it all, Dr. Jerome Wiesner, science adviser to the President, said:

"Defense against thermonuclear attack is impossible."

Dr. Ralph Lapp stated:

"I believe that for every wrinkle you introduce into defense there are 10 more wrinkles that can be introduced in the power of the offense."

I am aware that the Joint Chiefs and the military hierarchy favor the heavy ABM just as they favored intervention in Vietnam, and we who oppose it will be told now, as we were then, that we are wrong and the military knows what is best. And again, 5 years from now, if we are still around, we will have the doubtful honor of pointing to our sad mistake—and we will be told then, as now, to quit talking about the past—that is history—let us talk about the future. And so mankind goes down his merry road to disaster.

There is, of course, no doubt that this authorization will pass. This is an election year and we all know that the two biggest words in the English language are "national defense," "national defense." If you just shout them loud enough you are in the clear—you win and your opponent loses. It is just plain unpatriotic to question any appropriation for national defense. Defense against what? It does not matter what, or where, or how, or whether it makes any rational sense at all—just utter the magic words and you are in the clear.

We know that the military-industrial complex favors this appropriation; we know that Congress supports it; I assume that the public does, too. But I do not and I will not vote for it. I cannot in good conscience vote for a program that will launch us into a spiraling missile escalation which has no end and no purpose either. If that is bad politics, at least it is good sense and that is something worthwhile nowadays. For my part, I would rather leave here with my conscience than stay here without it.

In conclusion, may I say, how much better it would be if we just poured this money into our troubled cities for programs to right what is wrong in America. Lest we do that soon, we may not have a worthwhile society left here in America for the ABM to defend.

Mr. President, I ask unanimous consent to have printed at this point in the Record an article entitled "Experts See 'Thin' ABM Vul-

nerable," published in the Washington Post of Sunday, March 3, 1968; an article entitled "Defense: The Missile Nobody Needs," written by William E. Jackson, Jr., and published in the New Republic of October 28, 1967; and an article entitled "Anti-Ballistic-Missile Systems," written by Richard L. Garwin and Hans A. Bethe, and published in the Scientific American of March 1968.

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

"[From the Washington Post, Mar. 3, 1968]

"EXPERTS SEE 'THIN' ABM VULNERABLE

"The Chinese will be able to build missiles that will penetrate the so-called 'light' ABM system the United States intends to construct, according to statements by two groups of American scientists.

"An article in the March issue of Scientific American by Richard L. Garwin and Hans A. Bethe, both long associated with the development of American nuclear weapons, argues that the proposed system "will add little, if anything, to the influences that should restrain China indefinitely from an attack on the U.S."

"The two scientists argue that the Chinese can surmount the American system, 'whose characteristics and capabilities have been well publicized.' Their article discusses this possibility in considerable technical detail.

"Bethe is a Nobel Prize winning physicist. Garwin, a Columbia University physicist, was recently reported to have gone to South Vietnam, a report setting off rumors that nuclear weapons were being deployed there. But Pentagon officials later said he went instead to Thailand.

"The Federation of American Scientists, in a statement, called the ABM system 'irresponsible on fiscal grounds' and 'pointless on military grounds.' The Federation statement said that 'the basic technical fact is that this system can be easily neutralized by the Chinese by using relatively simple and cheap penetration aids or by developing different means of weapons delivery.'

"Both the Garwin-Bethe article and the FAS statement express fear that the 'light' ABM system, approved last September by Defense Secretary Robert S. McNamara, will not stop there. Both believe there will be great pressure to expand the system into one designed to protect against Soviet ICBMs at a cost of \$40 billion or more.

"The FAS statement is also critical of incoming Defense Secretary Clark M. Clifford's statement that he will seek 'clear-cut nuclear superiority' over the Soviet Union. The statement said that 'at today's level of weaponry there can be no such thing.'"

[From the CONGRESSIONAL RECORD, Apr. 19, 1968]

STATEMENT BY SENATOR GAYLORD NELSON

Mr. President, my remarks are addressed to the bill itself, which I am going to vote against.

There are, it seems to me, any number of routes a country may follow down the road to disaster. We seem to be traveling several roads at the same time; namely, the war in Vietnam, the destruction of our environment, and the disintegration of our great cities.

One would think that these manmade disasters would be sufficient for any country to contend with at one time. But, apparently, not.

We are now about to trigger a missile race with Russia, an offensive and defensive missile escalation that literally will have no end.

The so-called thin missile system is not aimed at China at all. That is ridiculous. It is simply an opening wedge for the installation of a heavy system aimed at Russia which will cost us \$30 to \$40 billion,

when the system will be obsolete anyway. We will have succeeded only in exacerbating the balance of terror.

Mr. President, I will not vote for this bill because it involves this authorization for the Sentinel thin missile system.

I predict that every single Member of this body who votes for this bill which will start this escalation by construction of the thin missile system, will regret his vote and the honest ones will publicly apologize for it in less than half a dozen years.

[From the CONGRESSIONAL RECORD, Aug. 6, 1969]

SENATOR NELSON SPEAKS OUT ON ABM

Mr. NELSON. Mr. President, more than 4 years ago, in the spring of 1965, I was here on the floor of the Senate arguing and voting against appropriations to launch a land war in Vietnam. The same pundits of the press, the same generals in the Pentagon, and the same Members of Congress, were then making the same arguments for intervention in the war in Vietnam that they are now making for deployment of the ABM. There is hardly a single proponent for intervention in the war in Vietnam in all America who now does not wish we could turn the clock back to avoid that tragic mistake. Five years from now, in my judgment, they will be confessing their mistake on the ABM as they are now confessing, privately and publicly, their mistake on Vietnam.

On April 18, 1968, I introduced the first amendment to delete appropriations for the anti-ballistic-missile system. That amendment received only 17 votes. Since that time there has been increasing widespread debate over the wisdom of deploying this weapons system and increasing opposition to it until, it appears now, the Senate is about equally divided. It is interesting to note that the membership of the Foreign Relations Committee, which conducted extensive hearings on this issue is divided 10 to 4 against deployment and the Armed Services Committee is divided 10 to 8 in favor of deployment. Thus, a majority of 18 to 14 on these two committees is opposed to deployment.

In any event, as I see it, the most disturbing thing about the Safeguard proposal to deploy antiballistic missiles is its disastrously bad timing. At this very point the United States and Russia are in a position to begin negotiations which could put an end to the arms race. This is the heart of the issue before us. We can either take the initiative now to push for arms control agreements or we can add fuel to the escalating weapons race by deploying an anti-ballistic-missile system. Whatever merits the proponents claim for an ABM, Russia knows that we have sufficient nuclear warheads in hardened missile sites on the ground, in bombers, and in inaccessible submarines to retaliate with devastating force upon any country that attacks us. Russia occupies the same relative posture of strength toward us.

If under these circumstances it is not possible for the great powers to move for negotiations to deescalate the arms race, we may as well concede it never can be done. If that is the gloomy prospect we can resign ourselves to an endless weapons race that dramatically increases insecurity in the world, dissipates critical resources and contributes to the growing disillusionment with political systems here and elsewhere which are so remarkably efficient at making war and so utterly incapable of creating a peace.

What we should do now is postpone on-site deployment of the ABM while we continue research and development. If at some later date compelling reasons arise for deployment, that issue can be decided then. At the time we announce the postponement, we should initiate talks for deescalation. All elements are now present for mutually beneficial negotiations.

This is the first time such an opportunity

has appeared in 20 years. If we pass it up we may have to wait another 20 years. The world cannot afford that.

If we deploy a new weapons system Russia responds with another and we react with something else. After the Safeguard system, each side expands from a thin system to a thick, one, and then to the multiple warhead—MIRV—and then to construction of launching sites on the bottom of the ocean, and so on without end.

Former Secretary of Defense Robert McNamara said it well:

"It is precisely this process of action and reaction upon which the arms race feeds, at great cost to both sides and benefit to neither."

In the growing debate over the military budget in general and the ABM in particular, we are really witnessing the opening of a much broader debate over a much larger question—what are and what should be our national priorities? How long can we continue to ignore critical social, political, and economic problems on the homefront and still maintain the unity of our people? We can spend all our resources for defense, and have nothing left to defend. We can populate our country with shiny new missiles and other glamorous armaments and ignore the continuing decay of our cities, the overwhelming pollution of our rivers and lakes and air, the children who go hungry and sick in this affluent society, the educational institutions that limp along for lack of funds.

The PRESIDING OFFICER. The Senator's time has expired.

Mr. NELSON. Mr. President, I ask for one more minute.

Mr. FULBRIGHT. I yield the Senator from Wisconsin 2 additional minutes.

The PRESIDING OFFICER. The Senator is recognized for an additional 2 minutes.

Mr. NELSON. It is not remarkable that almost any weapons system the mind of man can conceive we will fund to the patriotic chant of "national defense" when in fact each step up the escalation ladder brings us closer to a certain end spelled "international disaster." Is it not ironic that we spend \$350 million a year on chemical agents and disease organisms that would wipe out whole populations of people but we have to close Job Corps camps and send unfortunate boys and girls back to the streets because we need to save \$57 million in the current budget? Does not it give one cause to ponder the character of a society that can enthusiastically spend \$25 billion for the moon landing and fund only \$214 million in a lamentably insignificant effort to stay the pollution of our rivers, lakes and streams? Remarkable though the achievement, to what avail do we discover the physical composition of all the barren planets in our solar system while man's depredations destroy those characteristics that distinguish this planet from all the rest?

A year ago, the U.S. Senate was debating another version of the ABM—the Sentinel program. I opposed that system, and said that if it was bad politics to do so, at least it was good sense, and that is something worthwhile nowadays.

Right now we have a "sufficiency" of arms capability that is almost beyond comprehension. Future plans for our Polaris submarines will give them 6,000 underwater warheads poised for action. Add to this right now 1,000 land-based Minuteman missiles, 7,000 tactical nuclear weapons in Europe, plus another 1,000 for our bombers. Enough to snuff out any country and the rest of the world. How much is enough? Between the United States and Russia there are stockpiled enough nuclear weapons to equal 15 tons of TNT for every man, woman, and child on earth.

Over the weeks all the arguments pro and con have been made. There is really nothing

to add. I would emphasize once more, however, that all experts agree that any antiballistic-missile system can be quite simply neutralized by saturation. It is only necessary to make a photographic count of the ABM silos and produce enough offensive missiles to absorb the system. This point is not in dispute. Is anyone in doubt that either side would do exactly that in the event the other deployed an ABM? We in fact have already responded to the limited deployment of 72 antiballistic missiles around Moscow in precisely this fashion. They may protect Moscow for a limited time against attack by China, but they offer no defense against our system. They know that and so do we.

Every Member of the Senate has viewed the Defense Department chart that shows how many offensive missiles it will require to neutralize both phase I and phase II of our proposed ABM system. The Russians know what that number is as well as we do since it is a relatively simple mathematical calculation. Thus, I wonder why the Defense Department has not made the chart public as suggested by the distinguished Senator from Missouri, Senator SYMINGTON. It would seem obvious that the American public is entitled to know as much about that chart as the Russians do.

Of course, one response the proponents make to the saturation argument is that we can expand our ABM if they try to neutralize our system, as they will certainly do, and therein lies the catalytic agent for a dramatic escalation of the arms race.

Former Defense Secretary McNamara graphically described the folly of spending when he said:

"\$4 billion, \$40 billion, or \$400 billion—and at the end of all the spending, and at the end of all deployment, and at the end of all the effort, to be relatively at the same point of balance on the security scale that we are now."

Certainly we cannot expect to throw a new weapons system into the arms race and then join the Russians in meaningful arms control negotiations.

Mr. THURMOND. Mr. President, will the Senator yield to me?

Mr. STENNIS. I yield to the Senator from South Carolina.

Mr. THURMOND. Mr. President, I wish to take this opportunity to commend the able Senator from Mississippi for the splendid manner in which he handled the bill. I have never seen a bill challenged to a greater extent than was this particular bill since I have been in the Senate. I feel that the bill we are voting upon is a good bill. There were some compromises accepted that I would not have preferred but I think these matters can be ironed out in conference. On the whole, I think we have an excellent bill.

The Senator from Mississippi has shown great patience and he has been very courteous to everyone in connection with the bill. In my opinion he rendered a great service to our Nation in handling the bill as he did.

I also wish to commend the distinguished ranking member on the Republican side, the Senator from Maine (Mrs. SMITH). I have worked closely with her during consideration of the bill. She is well qualified on military matters, she is very knowledgeable, and it is always a pleasure to work with her.

It has been my pleasure to work with members of the Committee on Armed Services in the consideration of the bill. I am sure that all of those who intro-

duced amendments thought that the amendments had merit. Those matters have now been disposed of and I hope that we can all join hands in supporting the bill on final passage.

Mr. President, we have just witnessed a lengthy debate, covering over 6 weeks, on the 1970 fiscal year military authorization bill. A number of amendments were proposed which would have deleted or reduced the authorization for major weapons or weapons systems, or would have curtailed research and development in some key areas. All of these systems which reached the floor in the form of this bill were considered vital and essential to the future security of this Nation by the President, the Secretary of Defense, and by the Senate Armed Services Committee.

In the final moments of consideration on this legislation I am frank to say I am concerned and disturbed by this situation and by the approach to our defense budget and military posture which produces it.

It is not difficult to understand that much of this opposition stems from frustration with the war in Vietnam and with impatience over meeting current economic needs. However, in this period of frustration, we must guard against overreaction by cutting the defense budget excessively and in the wrong places. We must not make reductions or deletions which will weaken our future defense forces to the point they cannot support adequately our national policy objectives.

Mr. President, we know that modern weapon systems are not cheap, but we have also learned by bitter experience that adequate preparedness, even at today's prices, is a bargain if it accomplishes the purpose of deterring aggression and preventing war. I hope our memories are not so short that we ignore the lessons of history. They have taught us that the price of freedom is both high and recurring.

The unprecedented delay in passing this bill and the vigorous attacks on the important programs which it would authorize suggests to me that the time has come to discuss the relationship between adequate military preparedness and peace in our world. What I really have in mind, I suppose, is the fact that it is absolutely essential that we maintain a credible deterrent. Former Chief of Staff of the Army, Gen. Harold K. Johnson, defined deterrence in these terms:

Deterrent is a state of mind and it is conditioned by perceptions as well as the actualities of force effectiveness and judgment as to the willingness to employ those forces. Deterrence is not so much what we believe as what the other person believes.

I lay particular stress on General Johnson's reference to the necessity for "actualities of force effectiveness."

In discussing deterrence and the relationship between adequate military preparedness and peace, I think it is important that we recognize two things very clearly.

First, we must face the fact that we are dealing primarily with weapons designed for the future and our actions on this bill will not drastically affect our military

posture next year or the year after. However, the decisions we make on this bill will have vital implications on our defense posture and the effectiveness of our deterrence in 1975, 1980, and beyond. It takes years to develop, produce, and deploy highly sophisticated complex and costly weapon systems. Therefore, it is essential today that we correctly interpret the future threat and make at this time decisions necessary to counter it. Delays, stretchouts, and deferrals will dramatically increase the risk that we will not be adequately prepared in time of need.

Second, let us recognize the significant change in our defense policy and the rather dramatic shift in the balance of power over the past 10 or 15 years. In the 1950's our policy was based on maintaining clear and manifest military superiority, particularly in the strategic field. In the 1960's, however, this policy changed quietly but significantly. One of the reasons were erroneous assumptions as to the future threat. In 1965, former Secretary of Defense McNamara said:

The Soviet leaders have decided that they have lost the quantitative race, and they are not seeking to engage us in that conflict.

He also said:

There is no indication that they (the Soviets) are catching up or planning to catch up. There is no indication that they are in a race at this time.

These now clearly erroneous assumptions impacted drastically on our defense planning.

These critical and erroneous assumptions fostered new defense thinking in the early 1960's to the effect that if we held down or reduced military expenditures, particularly for strategic forces . . . the Soviets would follow our lead. Consequently, we deemphasized the development and production of new weapon systems, at least partly in hope of reciprocal and comparable Soviet action. These hopes were vain; the results were precisely the opposite. The Soviets accelerated significantly the buildup of their strategic weapons delivery capability to the extent that their ICBM forces are now at least equal in number and collectively much greater in total megatonnage. They have also greatly increased their submarine-launched ballistic missiles. They have had an intensive naval ship construction program and are well on the way to becoming a first-class naval power. They have produced several high-performance interceptor and fighter aircraft. On the ground they continue to maintain large and formidable armies facing the NATO countries and have modernized and improved the weaponry which these ground forces possess. Intelligence estimates are that they will continue to modernize and expand their forces.

In short, it conclusively appears that the Soviets have regarded the U.S. unilateral initiative in holding down expenditures for strategic forces as presenting them with a unique and historic opportunity to achieve strategic superiority. Can we now close our eyes to the possible consequences?

Even in the face of its strategic infe-

riority to the United States, the Soviet Union's ambitious policy of expanding Communism was well illustrated by the Berlin and Cuban crises, by its strong support of the militant Arabs in the Near Eastern crisis of 1967, and by last year's military occupation of Czechoslovakia. In view of its often declared long-range ambition to shape the world according to its own dogma, it would be the height of folly for us to assume that the Soviets will not follow an even more aggressive policy and undertake even more extensive and dangerous adventures if they attain demonstrable and clear military superiority over us.

This brings me again to the price of military preparedness and to the fact that it is absolutely necessary if we are to preserve the peace. Peace simply cannot be bought by the United States by giving up all of our alliances and commitments, by unilateral arms limitations, by giving up superiority as the goal for our strategic forces, or by permanently yielding the strategic and technical initiative to the Soviet Union. This political fact of life has been made very clear to the possible detriment of U.S. security by the recent abrupt increases in Soviet rates of strategic offensive force deployments and expenditures for production and military research and development. If we continue such a policy for an extended period, the "balance of terror" may swing drastically to the side of the Soviets and we and our allies may become an easy prey for aggression.

I stress that the assumptions we make as to Soviet intent and capabilities are of paramount importance in shaping the future of our Military Establishment. We must not indulge in fuzzy thinking on this point. The political aims and military objectives that inspire Soviet decision are important factors in analyzing the character of the arms race. While we know that Soviet strategic doctrine has as its goal strategic superiority over the United States, we cannot look into the Soviet mind and determine their intentions. Therefore, the element of the Soviet strategic situation that should cause us the most concern is their capability in the strategic field rather than our assessment of what their intent may be—an assessment which has proved wrong so often in the past.

Let us never forget that, in the view of the Communists, political considerations—particularly international political considerations—are closely blended with the military aspects of every problem and often assume dominance over them. All available evidence suggests that the present Soviet leaders recognize clearly they may have to fight a nuclear war with the United States and that, if they do, they plan to have forces in being which will achieve their military objectives and support their postwar political aims. Their policies, programs, training, and doctrine are based on the thought that a nuclear war may be unavoidable and, indeed, at some point in time, may be advantageous to them. Therefore, I totally reject the suggestion that the danger is that we may have more, rather than less, military might than we need.

These are the facts which we must keep in mind in deciding to build or not to build a particular weapon and sometimes this decision must be based on need and not on cost. The high cost of weapons is one of the sacrifices we must pay in order to remain free. We all wish the world were different and that it was not necessary to expend valuable resources for defense. However, we must live in the world as it is, not as we want it to be.

Freedom comes at a price. The price we pay to preserve peace is military preparedness. If we fail to pay for adequate defense now and our weakness invites attack, we will pay many times as much in dollars and infinitely more in lives. We should also remember that, if through military weakness, we lose our freedom, we also lose our ability to improve the lot of our poor and relieve the plight of our cities.

Finally, let me say that preaching peace is easy; achieving it is most difficult. Peace has been the goal of mankind for thousands of years and the noblest and most intelligent of our statesmen have striven earnestly for it. All have been unsuccessful. Under the circumstances, the executive department and the military should not—indeed, must not—hesitate to ask for the weapons needed to insure our survival. For our part, we must not shirk our duty to provide them solely on considerations of cost.

Let me say that the tentative agreement to enter into discussions with the U.S.S.R. looking toward a treaty, limiting and controlling strategic weapons, has my wish for success. However, the gains which the Soviets have made in strategic weaponry and the fact that they have approached or achieved parity with us in this field gives the talks added importance. It is imperative that we bargain from a position of strength, and we must not be beguiled into suspending action necessary to assure that we remain strong on the perhaps illusory hope that a satisfactory agreement will be reached.

Finally, Mr. President, I say again that deterrence must be credible, both to our allies and to our potential enemies. In addition, it must be sufficiently clear and unambiguous to provide the basis for hard decisions by the President. If he is not very sure of the effectiveness of our deterrence, then in some future crisis he might make concessions which he should not and need not make. We can prevent this by providing him a strong Military Establishment and the vital and essential weapons and weapons systems which he, acting on the advice of our top civilian and military experts in the field, has requested.

Mr. STENNIS. Mr. President, I yield to the Senator from Alaska.

THE NEED FOR THE LIT

Mr. STEVENS. Mr. President, since the chairman of the Committee on Armed Services is present, I would like to comment upon the deletion from the Defense authorization bill of the \$1 million line item for the U.S. Air Force proposed light intratheater transport program—LIT. It is my understanding that the other body favored the funding for the LIT.

For the past 6 years the Air Force has been doing its homework to prepare the concept formulation package for the LIT in order to replace the obsolete aircraft in the tactical airlift fleet. The Air Force concluded that the V/STOL turboprop tilt wing with four engines is the best choice for the LIT, considering cost effectiveness and technical status. The earliest the LIT aircraft could be introduced into active inventory is the late 1970's.

For the U.S. military the V/STOL LIT would provide a more cost effective interface between the Air Force's C-5A's and C-141's and the Army's helicopters than continuing the present aircraft systems or buying other types of new aircraft. The use of a V/STOL LIT would reduce the requirement for construction of expensive runways in foreign countries and provide a bigger payload capacity.

The gross weight is less than 100,000 pounds and the cabin volume is similar to the C-130 Hercules. Rate of climb is up to 10,000 feet per minute and the speed is 450 miles per hour.

The LIT can transport 5 to 17 tons in a vertical landing over a radius of 250 miles depending upon the temperature. A ground roll of 500 feet will permit an increase of 8 tons over the vertical payload. The low forward speed of 30 to 50 knots which the aircraft needs to become airborne or land in the STOL mode will permit it to operate safely from truly random unprepared sites or combat damaged runways.

The proposed LIT would provide a substantial increase in our long-range rescue capability. Compared to helicopters, the LIT could fly several times farther, several times faster, and pickup payloads several times more than current helicopters. Under sea level standard temperature conditions the tilt wing LIT would be able to fly 1,000 miles radius to a rescue site at a speed of 450 miles per hour, search for 30 minutes, hover for 30 minutes while picking up a payload of 7½ tons and return at 450 miles per hour. Medical treatment of evacuees could begin immediately on the return trip since the LIT's large cabin can accommodate paramedic rescue teams and their equipment. The ability of a tilt wing to perform rescues over water, desert, and forested area was demonstrated by the XC-142.

A commercial version of the V/STOL LIT is urgently needed to aid in the development of remote areas such as those in my State of Alaska. In many cases the time, cost, and damage to our terrain required to construct runways could be avoided or reduced if we had a V/STOL. For example, under conditions that would be encountered in developing the oil fields on our north slope of Alaska, the LIT could deliver 17 tons of heavy construction equipment in a vertical landing at a distance of 140 miles to a remote site. The outstanding STOL capability of the LIT would permit this radius to be increased to 500 miles if only a 1,000-foot strip were available. This aircraft would give us an entire new capability to provide support in civil disasters such as earthquakes, hurricanes, and floods. In

addition, the low noise and high safety margins of a V/STOL LIT make it a potential solution to the Nation's short-haul air transportation problems, such as the northeast corridor.

The tilt-wing technology required for LIT was demonstrated in hundreds of flight test hours by the USAF's XC-142, which was virtually a one-half scale LIT. In addition, two other tilt-wing aircraft have flown successfully—Canadair CL-84 and the Boeing Vertol VZ-2—and extensive wind tunnel test have been conducted by both industry and NASA.

The triservice XC-142 evaluation results were as follows:

Hover and conversion to forward flight was easily accomplished and required no unusual pilot skills.

The tilt-wing concept, which was judged suitable for operational use, provided a significantly increased capability through the use of super STOL with 35 to 40 knot takeoff speed.

The Air Force planning for the LIT includes a modified procurement approach that incorporates the "lessons learned" from recent programs and meets recent criticism directed toward our defense procurement program. Significantly greater research and development of critical components and accomplishment of technical milestones are required before funding is continued.

In the case of LIT, full scale propeller demonstration and wind tunnel tests were initiated by the Air Force with fiscal year 1969 funds. Fiscal year 1970 funds are required to continue this effort and to initiate additional competitive development of critical subsystem hardware. This approach gets at the heart of the problem which has caused many of our programs difficulty; that is, the perfection of those critical and unique subsystems prior to the development and production of the total system in order to minimize program risk. This approach minimizes the technical, schedule and cost risk necessary to develop a cost-effective transport system from a proven concept.

Mr. President, in light of the potential benefits of the LIT which I have briefly described, and contingent upon inclusion of the LIT line item in the House bill will the committee keep an open mind on the question of restoring the LIT in joint conference?

I do wish to ask the chairman of the committee a question. In view of the fact that the bill that we are about to vote on has deleted the first \$1 million for the light intratheater transport program, I would like to know if the chairman would keep an open mind on this question going into conference. I understand the House is very much in favor of this program. The program could bring a great many benefits to my State and we are very much interested in the program.

Mr. STENNIS. Mr. President, I assure the Senator that even though we took that matter out of the bill it had merit. If it is in the House bill in conference it will be considered by us.

Mr. PEARSON. Mr. President, will the Senator yield?

Mr. STENNIS. Mr. President, I yield to

the Senator from Kansas who has an inquiry about the bill.

Mr. PEARSON. I thank the Senator for yielding.

My inquiry is perhaps to make a record and direct attention to the fact that the Department of Defense in January and April of 1969 made a request for the tactical fighter aircraft A-37B in the amount of 96 units. In the judgment and wisdom of the Committee on Armed Services, this figure was cut to 36.

The first aircraft authorized in this bill would have come into the inventory in December of 1970. I think also that the determination by the committee that perhaps the conflict in Vietnam might be very much reduced by that time had a bearing on the matter.

This is an inexpensive, small aircraft, used especially by the 604th Tactical Fighter Squadron in Vietnam today. It is the only aircraft specifically designed for close support and counterinsurgency work. I think the record shows that in combat it sustained only one-fifth in the way of ground fire and hits. It has great maneuverability, has a tight turn radius and can deliver its armaments and move out in a very rapid manner. It has proved its value in Vietnam.

I prepared no amendment. I understand the House looks with considerable favor on this particular procurement. I would hope the conferees at the proper time would review again the role, capacity, and capability of this particular aircraft.

Mr. STENNIS. We will certainly do that. There is nothing the matter with the airplane. The first delivery was to be the latter part of 1970 for use only in Vietnam. We took it out under those conditions but we certainly will weigh the matter.

I thank the Senator for his comments.

Mr. PEARSON. I thank the Senator from Mississippi.

SAM-D MISSILE

Mr. KENNEDY. Mr. President, where we can make savings in the Federal budget, we should. I believe that this goes for the Defense budgets as well as all others. But whenever we cut administration requests, whether in Defense or any other matters, I think we should take the utmost care to subject the items to the closest scrutiny.

We should commend the Members of the Committee on Armed Services for their long and careful scrutiny of this Defense procurement bill, now before us. After extensive hearings and executive sessions, the committee brought to the floor a bill \$1.9 billion below the Nixon administration's April 15 request, and \$3.1 billion below the Johnson administration's January 14 request. I do not think we should overlook this fact of billion-dollar-plus Defense budget savings, all the work of the Committee on Armed Services. Nor do I think we should fail to commend the Committee Chairman, JOHN STENNIS, for his fair, astute and open management of the bill.

I noted in the committee's report that \$75 million for development of the SAM-D missile was deleted from the bill. This action was taken on the recommendation of the Research and Development Sub-

committee, chaired by the distinguished Senator from New Hampshire (Mr. McINTYRE), and with the approval of the full Committee on Armed Services.

The committee chairman, in a Senate speech on July 8, explained the deletion of \$75 million for SAM-D in these words:

The Committee did not feel that defense against enemy bombers was sufficient priority to justify research on this of the magnitude requested.

I should point out also that the Committee has directed the Secretary of Defense to study the entire matter of bomber defenses, because of the wide divergence between Air Force and national intelligence estimates of the Soviet manned bomber threat. This is, I think, a significant step in sorting out the essential from the marginal in Defense programs.

But I should like to state my understanding of the role of the SAM-D missile. It is not a missile to be used in bomber defense of the continental United States. Rather, it is a field weapon to be deployed in the field by the Army, both at home and abroad. It is to be a replacement, eventually, for both the Nike-Hercules and the Hawk missiles. The Nike-Hercules, now, has a dual role—continental defense, and defense of the field army. Thus, it is not difficult to understand why the study of the manned bomber threat swept into its ambit the SAM-D.

I would hope that this new information I have developed on the deletion of SAM-D development funds would receive the same close scrutiny given to all the other items in this bill by the members of the Armed Services Committee, before final action on it is completed.

Let me say again how significant the work of the committee has been in achieving some economies in our Defense budget, and that the Members deserve our praise for their farsightedness.

DOMESTIC APPLICATIONS OF DEFENSE RESEARCH

Mr. BROOKE. Mr. President, in the extended consideration we have given to this bill in committee and on the floor, I have come increasingly to see the need for efforts to maximize the return on the heavy investment we are making in defense programs. Many of these expenditures are in the nature of contingency expenses; we buy weapons and support many programs on the explicit premise that by acquiring them we will reduce the need for ever having to use them. It is generally conceded among economists that expenditures of this character are an economic drain rather than a productive investment, since they rarely contribute directly to increasing the Nation's productive capacity. Thus, it is extremely important that we identify and take advantage of those elements of the defense budget which do promise valuable return to the society as a whole.

One of the most promising of such areas is the large program of defense research, which often has led to useful new technologies for other sectors of the economy. Yet it is widely recognized that the spin-off from defense research to other applications has been substantially less than could have and should have been the case. The reason for this lies in

the absence of any systematic effort to insure maximum civilian benefits from the vast sums spent on defense research and development.

I believe we should remedy this defect. I am pleased to submit today, together with the distinguished junior Senator from California (Mr. CRANSTON), an amendment which I believe would go far toward increasing the domestic return on the Nation's expenditures for defense research.

This amendment to S. 2546 would create an Interagency Advisory Council on Domestic Applications of Defense Research and would authorize the Department of Defense to use some of its funds to support research of mutual interest to it and other agencies—HUD, HEW—with promise of significant benefits. There are a number of examples of such work:

Spin-off of military radar and computer technology to domestic air traffic control, a great variety of transportation technologies, experimental work on housing on military bases, certain categories of manpower training and educational research, methods of delivering quality medical care to large populations, and many others.

Many institutions doing defense research are seeking an opportunity to apply their skills to the Nation's domestic problems. Presently, there is no good mechanism for encouraging such domestic applications. This amendment seeks to establish such a mechanism, and to insure that the large sums expended for defense research include a special effort to realize useful applications outside the strictly military area.

This proposal is compatible with other efforts underway in the department to employ the large resources it commands in ways which assist other sectors of our society. Discussions with prominent members of the research community revealed substantial interest in this kind of idea, both as a means of realizing important short-term benefits and as a method of reallocating over a period of time some fraction of our defense capabilities to nondefense applications. The intent would be that, as nondefense research programs expand in the coming years, sponsorship and supervision of work begun under the auspices of the proposed council would shift to other departments.

The Interagency Advisory Council would be composed of one member from the Department of Defense, to be designated by the Secretary of Defense; one member from the Department of Health, Education, and Welfare, to be designated by the Secretary of Health, Education, and Welfare; one member from the Department of Housing and Urban Development, to be designated by the Secretary of Housing and Urban Development; one member from the Department of Transportation, to be designated by the Secretary of Transportation; and one member from the Office of Economic Opportunity, to be designated by the Director of the Office of Economic Opportunity. This five-member council would be chaired by the council member designated by the Secretary of Housing and Urban Development.

The specific functions of the Council would be threefold. They would review proposed research programs and projects submitted to them by the aforementioned research institutions. In doing so, the Council would accept for consideration research projects that are of mutual interest to the Department of Defense and one or more of the participating departments or agencies. Additional categories of research acceptable for consideration would be those bearing on such important national needs as the Council should specify, including but not limited to the physical and social aspects of cities, housing, education and transportation. Their deliberations would permit them to take cognizance of the valuable capabilities created by various institutions for related defense research programs.

The Council's second function would be to make appropriate recommendations to the Director of Defense Research and Engineering of the Department of Defense with regard to the merits of the proposals submitted for consideration.

Finally, the Council would be charged with reviewing the results of research conducted under its auspices and would advise the Director of Defense Research and Engineering as to the desirability of continuing, modifying, terminating, or transferring such research activities.

It is important, in my opinion, to note that the activities of this Council will preclude the fixation of an "unrestricted" characterization that might otherwise attach to grants of this nature. The makeup of the Council itself insures that the Federal personnel most familiar with the domestic problems confronting our Nation will have a voice in recommending the allocation of these funds.

While the Secretary of Defense will naturally rely on the advice and recommendations submitted by the Council, his decision will be controlling and final. For the purposes of this proposal, he may authorize up to 5 percent of the total funds expended in each fiscal year by the Department of Defense under contracts with the designated institutions performing defense research. In addition, no institution would be permitted to receive more than \$5 million under this title in any one fiscal year. This approach recognizes that the Secretary is in the best position to judge what proportion of the defense research budget should be made available in light of both our defense requirements and the potential domestic payoffs that continue to emerge from the research community.

By adopting the proposal that I am now suggesting, we could achieve a double benefit over and above the existing grant procedures. It would maximize the utility of research on which defense moneys are presently expended; but more important, it will establish a mechanism by which new avenues might be explored and later developed through the regular channels of domestic research funding.

This measure does not require a major shift in our defense policy. It potentially represents only one of several efforts currently underway in the Department of Defense to focus its massive resources on this Nation's internal deficiencies.

Mentioning one very briefly, the Domestic Action Council was established among high echelon personnel to seek ways in which the military can apply their resources to underdeveloped domestic areas while they perform their unquestionably vital defense role.

Our proposal is modest. Its central purpose is to continue that which has already begun. Defense research will continue to uncover ideas and solutions that have wide application. The proposal would increase the likelihood that we will realize those applications.

I ask unanimous consent that the text of the proposed amendment be printed in the RECORD.

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

"TITLE VI—SPECIAL RESEARCH GRANTS

"Sec. 601. (a) There is hereby established an interagency advisory council to be known as the Interagency Advisory Council on Domestic Applications of Defense Research (hereinafter in this title referred to as the 'Council').

"(b) The Council shall be composed of the following members:

"(1) One member from the Department of Defense, to be designated by the Secretary of Defense.

"(2) One member from the Department of Health, Education, and Welfare, to be designated by the Secretary of Health, Education, and Welfare.

"(3) One member from the Department of Housing and Urban Development, to be designated by the Secretary of Housing and Urban Development.

"(4) One member from the Department of Transportation, to be designated by the Secretary of Transportation.

"(5) One member from the Office of Economic Opportunity, to be designated by the Director of the Office of Economic Opportunity.

"(c) The member of the Council designated by the Secretary of Housing and Urban Development shall serve as Chairman of the Council.

"(d) Three members of the Council shall constitute a quorum; and a vacancy in the Council shall not affect its powers but shall be filled in the manner in which the original appointment was made.

"Sec. 602. (a) It shall be the function of the Council to study and evaluate proposed research programs and projects submitted to it pursuant to this title. The Council shall accept for consideration research projects that are of mutual interest to the Department of Defense and one or more of the participating departments or agencies, and such other categories of research bearing on important national needs as the Council may specify, including physical and social aspects of cities, housing, education, transportation, and other domestic problems.

"(b) The Council shall advise the Director of Defense Research and Engineering of the Department of Defense regarding research proposals submitted to it for consideration pursuant to subsection (a) and shall make such recommendations to the Director as it deems appropriate as to the merits of proposals submitted to it for consideration.

"(c) The Council shall review the results of research conducted under its auspices and shall advise the Director of Defense, Research and Engineering of the Department of Defense as to the desirability of continuing, modifying, or terminating such research activities.

"Sec. 603. (a) The Secretary of Defense is authorized to make grants to colleges, universities, and other not-for-profit institutions engaged in research and/or develop-

ment activities sponsored by the Department of Defense for the purpose of supporting selected research programs and projects promising significant domestic benefits. Proposals for such research shall be submitted to and reviewed by the Council. The decision of the Secretary of Defense with respect to which, if any, research proposals approved by the Council will be sponsored shall be final.

"(b) The total amount in grants made under this title in any fiscal year shall not exceed an amount equal to 5 per centum of the total funds expended in such fiscal year by the Department of Defense under contracts entered into with colleges, universities, and other not-for-profit institutions for the performance of defense research.

"(c) In no case shall any one institution receive more than \$5,000,000 under this title in any one fiscal year.

"Sec. 604. Research grants made by the Secretary of Defense under this title shall be made subject to such rules and regulations as the Secretary may prescribe after consultation with the Council."

Mr. STENNIS. Mr. President, I have a summary of remarks that I shall make later about the bill. I shall forgo that now.

I wish to say that the real modern weapons, the ones I think are most needed and so vital to our needs in the mid-1970's, were all left in the bill. There are some scars on some of them in the voting, but they are left in the bill and I think that will prove to be a sound decision on the part of the Senate.

I thank all those who did considerable work on the bill.

Mr. President, I am most grateful for the assistance and counsel of members of the Armed Services Committee. I have respect and a personal interest in each one of them and look forward to our further services together.

The services of our Chief of Staff, Mr. Edward Braswell, have been outstanding; his dedication is always of the very highest and his knowledge of the many, many items in the bill has been excellent and invaluable. Other members of our staff, including the members of the preparedness staff, have been outstanding and highly valuable.

The PRESIDING OFFICER. The question is on the passage of the bill.

Mr. RUSSELL. Mr. President, I ask for the yeas and nays.

The yeas and nays were ordered.

The PRESIDING OFFICER. The bill having been read the third time, the question is, Shall it pass? The yeas and nays have been ordered, and the clerk will call the roll.

The legislative clerk called the roll.

Mr. BYRD of West Virginia. I announce that the Senator from Washington (Mr. MAGNUSON), and the Senator from Tennessee (Mr. GORE) are absent on official business.

I also announce that the Senator from Indiana (Mr. BAYH), the Senator from North Dakota (Mr. BURDICK), the Senator from Arkansas (Mr. FULBRIGHT), the Senator from Indiana (Mr. HARTKE), the Senator from Wyoming (Mr. MCGEE), the Senator from South Dakota (Mr. MCGOVERN), and the Senator from Massachusetts (Mr. KENNEDY) are necessarily absent.

I further announce that, if present and voting, the Senator from Indiana (Mr.

BAYH), the Senator from North Dakota (Mr. BURDICK), the Senator from Washington (Mr. MAGNUSON), and the Senator from Wyoming (Mr. MCGEE) would each vote "yea."

On this vote, the Senator from Indiana (Mr. HARTKE) is paired with the Senator from Arkansas (Mr. FULBRIGHT). If present and voting, the Senator from Indiana would vote "yea" and the Senator from Arkansas would vote "nay."

Mr. SCOTT. I announce that the Senator from Arizona (Mr. GOLDWATER), the Senator from Wyoming (Mr. HANSEN), the Senator from Nebraska (Mr. HRUSKA), and the Senator from California (Mr. MURPHY) are necessarily absent.

The Senator from North Dakota (Mr. YOUNG) is absent on official business.

If present and voting, the Senator from Arizona (Mr. GOLDWATER), the Senator from Wyoming (Mr. HANSEN), the Senator from Nebraska (Mr. HRUSKA), the Senator from California (Mr. MURPHY), and the Senator from North Dakota (Mr. YOUNG) would each vote "yea."

The result was announced—yeas 81, nays 5, as follows:

[No. 95 Leg.]

YEAS—81

Aiken	Fannin	Packwood
Allen	Fong	Pastore
Allott	Gravel	Pearson
Anderson	Griffin	Pell
Baker	Gurney	Percy
Bellmon	Harris	Prouty
Bennett	Holland	Proxmire
Bible	Hollings	Randolph
Boggs	Hughes	Ribicoff
Brooke	Inouye	Russell
Byrd, Va.	Jackson	Saxbe
Byrd, W. Va.	Javits	Schweiker
Cannon	Jordan, N.C.	Scott
Case	Jordan, Idaho	Smith, Maine
Church	Long	Smith, Ill.
Cook	Mansfield	Sparkman
Cooper	Mathias	Spong
Cotton	McCarthy	Stennis
Cranston	McClellan	Stevens
Curtis	McIntyre	Symington
Dodd	Metcalf	Talmadge
Dole	Miller	Thurmond
Dominick	Mondale	Tower
Eagleton	Montoya	Tydings
Eastland	Moss	Williams, N.J.
Ellender	Mundt	Williams, Del.
Ervin	Muskie	Yarborough

NAYS—5

Goodell	Hatfield	Young, Ohio
Hart	Nelson	

NOT VOTING—14

Bayh	Hansen	McGee
Burdick	Hartke	McGovern
Fulbright	Hruska	Murphy
Goldwater	Kennedy	Young, N. Dak.
Gore	Magnuson	

So the bill (S. 2546) was passed, as follows:

S. 2546

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I—PROCUREMENT

SEC. 101. Funds are hereby authorized to be appropriated during the fiscal year 1970 for the use of the Armed Forces of the United States for procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, as authorized by law, in amounts as follows:

AIRCRAFT

For aircraft: for the Army, \$484,400,000; for the Navy and the Marine Corps, \$2,287,200,000; for the Air Force, \$3,965,700,000 of which \$400,400,000 is authorized only for procurement of F-4 aircraft: *Provided*, That none of the funds herein authorized shall be used for the procurement of A-7 aircraft.

MISSILES

For missiles: for the Army, \$922,500,000; for the Navy, \$851,300,000; for the Marine Corps, \$20,100,000; for the Air Force, \$1,466,000,000.

NAVAL VESSELS

For naval vessels: for the Navy, \$2,568,200,000.

TRACKED COMBAT VEHICLES

For tracked combat vehicles: for the Army, \$276,900,000; for the Marine Corps, \$37,700,000.

TITLE II—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

SEC. 201. Funds are hereby authorized to be appropriated during the fiscal year 1970 for the use of the Armed Forces of the United States for research, development, test, and evaluation, as authorized by law, in amounts as follows:

For the Army, \$1,626,707,000;

For the Navy (including the Marine Corps), \$1,911,343,000;

For the Air Force, \$3,041,211,000; and

For the Defense Agencies, \$454,625,000.

SEC. 202. There is hereby authorized to be appropriated to the Department of Defense during fiscal year 1970 for use as an emergency fund for research, development, test, and evaluation or procurement or production related thereto, \$75,000,000.

SEC. 203. Construction of research, development, and test facilities at the Kwajalein Missile Range is authorized in the amount of \$12,700,000, and funds are hereby authorized to be appropriated for this purpose.

SEC. 204. (a) After December 31, 1969, none of the funds authorized for appropriation by this or any other Act for the use of the Armed Forces shall be used for payments under a contract or agreement with any Federal Contract Research Center if the annual compensation of any officer or employee of such center exceeds \$45,000, except with the approval of the President of the United States.

(b) The President shall notify the Committees on Armed Services of the Senate and the House of Representatives promptly of any approvals authorized under subsection (a), together with a detailed statement of the reasons therefor.

SEC. 205. None of the funds authorized to be appropriated by this Act may be used to carry out any research project or study unless such project or study has a direct and apparent relationship to a specific military function or operation.

TITLE III—RESERVE FORCES

SEC. 301. For the fiscal year beginning July 1, 1969, and ending June 30, 1970, the Selected Reserve of each reserve component of the Armed Forces will be programmed to attain an average strength of not less than the following:

(1) The Army National Guard of the United States, 395,291.

(2) The Army Reserve, 256,264.

(3) The Naval Reserve, 129,000.

(4) The Marine Corps Reserve, 49,489.

(5) The Air National Guard of the United States, 86,999.

(6) The Air Force Reserve, 50,775.

(7) The Coast Guard Reserve, 17,500.

SEC. 302. The average strength prescribed by section 301 of this title for the Selected Reserve of any reserve component shall be proportionately reduced by (1) the total authorized strength of units organized to serve as units of the Selected Reserve of such component which are ordered to active duty (other than for training) at any time during the fiscal year, and (2) the total number of individual members not in units organized to serve as units of the Selected Reserve of such component who are ordered to active duty (other than for training or for unsatisfactory participation in training) without their consent at any time during the

fiscal year. Whenever any such units or such individual members are released from active duty during any fiscal year, the average strength for such fiscal year for the Selected Reserve of such reserve component shall be proportionately increased by the total authorized strength of such units and by the total number of such individual members.

TITLE IV—GENERAL PROVISIONS

SEC. 401. Subsection (a) of section 401 of Public Law 89-367 approved March 15, 1966 (80 Stat. 37), as amended, is hereby amended to read as follows:

"Not to exceed \$2,500,000,000 of the funds authorized for appropriation for the use of the Armed Forces of the United States under this or any other Act are authorized to be made available for their stated purposes (1) to support Vietnamese and other free world forces in Vietnam, (2) to support local forces in Laos and Thailand, but support to such local forces shall be limited, except where protection of United States personnel is directly concerned, to the providing of supplies, materiel, equipment, and facilities, including maintenance thereof, and to the providing of training for such local forces, and (3) for related costs, during the fiscal year 1970 on such terms and conditions under Presidential regulations as the Secretary of Defense may determine."

CHEMICAL AND BIOLOGICAL WARFARE

SEC. 402. (a) The Secretary of Defense shall submit semiannual reports to the Congress on or before January 31 and on or before July 31 of each year setting forth the purposes of and the amounts spent during the preceding six-month period for research, development, test, evaluation, and procurement of lethal and nonlethal chemical and biological agents. The Secretary shall include in such reports an explanation of such expenditures including the necessity therefor.

(b) None of the funds authorized to be appropriated by this or any other Act may be used for the procurement of delivery systems specifically designed to disseminate lethal chemical agents, or any disease-producing biological micro-organisms, or biological toxins, or for the procurement of any part or component of such delivery system.

(c) None of the funds authorized to be appropriated by this or any other Act may be used for future deployment and storage of any lethal chemical agent or any disease-producing biological micro-organisms or any biological toxin at any place outside the United States, or for the deployment at any place outside the United States of delivery systems designed to disseminate any such agent or micro-organisms or toxin unless the country exercising jurisdiction over such place has prior notice of such action. In the case of any place outside the United States which is under the jurisdiction or control of the Government of the United States, no such action may be taken unless prior notice of such action has been given to the Committee on Armed Services, the Committee on Foreign Relations, the Committee on Appropriations and, when appropriate, the Committee on Interior and Insular Affairs of the Senate, and the Committee on Armed Services, the Committee on Foreign Affairs, the Committee on Appropriations and, when appropriate, the Committee on Interior and Insular Affairs of the House of Representatives. As used in this section, the term "United States" means the several States and the District of Columbia.

(d) (1) None of the funds authorized to be appropriated by this Act or any other Act shall be used for the transportation of any lethal chemical or biological agents to or from any military installation in the United States, its territories or possessions, unless the Surgeon General of the Public Health Service has determined that such transportation will not present a hazard to the public health.

(2) The Secretary of Defense, except dur-

ing a war declared by Congress or during a national emergency declared by Congress or the President after the enactment of this legislation, shall provide written notification to the Congress, to the Secretary of Transportation, to the Secretary of Health, Education, and Welfare, and to the Interstate Commerce Commission at least thirty days in advance of any operation involving the transportation of lethal chemical or biological agents to or from any military installation in the United States, its territories or possessions. The Secretary of Defense shall provide appropriate notification to the Governor of any State through which such agents will be transported.

(3) The Department of Defense shall detoxify all lethal chemical or biological agents before their transportation for disposal as provided for in subsections (d) (1) and (d) (2) of this section whenever it is practical to do so.

(e) None of the funds authorized by this or any other Act shall be used for the testing, development, transportation, storage, or disposal of any chemical or biological weapon outside of the continental limits of the United States unless the Secretary of State determines that such testing, development, transportation, storage, or disposal will not violate international law and reports such determination to the Committee on Foreign Relations of the Senate and the Committee on Foreign Affairs of the House of Representatives, and to the appropriate international organizations, or organs thereof, whenever required by treaty or other international agreement.

(f) None of the funds authorized to be appropriated by this or any other Act shall be used for the open air testing of lethal chemical agents, or any disease-producing biological microorganisms, or biological toxins except upon a determination by the Secretary of Defense, under guidelines provided by the President of the United States, that an open air test is necessary for the national security, and then only after a separate determination by the Surgeon General of the Public Health Service, within thirty days of the determination of the Secretary of Defense, that the test proposed will not present a hazard to the public health. The Secretary of Defense shall report his determination and that of the Surgeon General, to the Committee on Armed Services, the Committee on Labor and Public Welfare, and the Committee on Appropriations of the Senate and to the Committee on Armed Services, the Committee on Interstate and Foreign Commerce, and the Committee on Appropriations of the House of Representatives at least thirty days prior to any actual test. The Secretary of Defense shall set forth in his report the name of the agents, micro-organisms, or toxins to be tested, the time and place of any test, and the reasons therefor.

(g) (1) Except as provided in subsection (g) (2) of this section, no funds authorized to be appropriated by this, or any other later enacted Act may be expended for research, development, test, evaluation, or procurement of any chemical or biological weapon, including any such weapon used for incapacitation, defoliation, or other military operations.

(g) (2) The prohibition contained in subsection (g) (1) of this section shall not apply with respect to funds authorized to be appropriated by this Act.

SEC. 403. (a) As used in this section—
(1) The term "former military officer" means a former or retired commissioned officer of the Armed Forces of the United States who—

(A) served on active duty for any period of time as a member of a regular component of the Armed Forces in the grade of colonel (or equivalent) or above,

(B) served on active duty for a period of ten years or more and, at any time during the five-year period immediately preceding his last discharge or release from active duty,

was directly engaged in the procurement of any weapon system or directly engaged in the negotiation, renegotiation, approval, or disapproval of any contract for the procurement of services or materials for or in connection with any weapon system, or

(C) served, for any period of time during the five-year period immediately preceding his last discharge or release from active duty, as a representative of the Department of Defense at the factory or plant of a defense contractor in connection with work being performed by such contractor on any weapon system.

(2) The term "former civilian employee" means any former civilian officer or employee of the Department of Defense—

(A) whose annual salary at any time during the five-year period immediately preceding the termination of his last employment with the Department of Defense was equal to or greater than the minimum annual salary rate at such time for positions in GS-15,

(B) who was directly engaged, at any time during the five-year period immediately preceding the termination of his last employment with the Department of Defense, in the procurement of any weapon system or directly engaged in the negotiation, renegotiation, approval, or disapproval of any contract for the procurement of services or materials for or in connection with any weapon system, or

(C) who served, for any period of time during the five-year period immediately preceding the termination of his last employment with the Department of Defense as a representative of the Department of Defense at the factory or plant of a defense contractor in connection with work being performed by such contractor or any weapon system.

(3) The term "defense contractor" means any individual, firm, corporation, partnership, association, or other legal entity, which provides services and materials to or for the Department of Defense in connection with any weapon system.

(4) The term "services and materials" means either services or materials or services and materials which are provided as a part of or in connection with any weapon system.

(5) The term "weapon system" means any aircraft, vessel, tracked combat vehicle, or missile, or any part or component thereof.

(6) The term "Department of Defense" includes any military department thereof.

(b) Any former military officer or former civilian employee who—

(1) was employed for any period of time during any calendar year by a defense contractor,

(2) represented any defense contractor during any calendar year at any hearing, trial, appeal, or other action in which the United States was a party and which involved services and materials provided or to be provided to the United States by such contractor, or

(3) represented any such contractor in any transaction with the Department of Defense involving services or materials provided or to be provided by such contractor to the Department of Defense,

shall file with the Secretary of Defense, in such form and manner as the Secretary may prescribe, not later than March 1 of the next succeeding calendar year, a report containing the following information:

(1) His name and address.

(2) The name and address of the defense contractor by whom he was employed or whom he represented.

(3) The title of the position held by him with the defense contractor.

(4) A brief description of his duties with the defense contractor.

(5) His military grade while on active duty or his gross annual salary while employed by the Department of Defense, as the case may be.

(6) A brief description of his military duties while on active duty or while employed by the Department of Defense during the three-year period immediately preceding his release from active duty or the termination of his civilian employment, as the case may be.

(7) A description of any work performed by him in connection with any weapon system while serving on active duty or while employed by the Department of Defense, as the case may be, if the defense contractor by whom he is employed is providing substantial services or materials for such weapon system, or is negotiating or bidding to provide substantial services or materials for such weapon system.

(8) The date on which he was released from active duty or the termination of his civilian employment with the Department of Defense, as the case may be, and the date on which his employment with the defense contractor began and, if no longer employed by such defense contractor, the date on which his employment with such defense contractor terminated.

(9) Such other pertinent information as the Secretary of Defense may require.

(c) Any employee of the Department of Defense who was previously employed by a defense contractor in any calendar year and—

(1) whose annual salary in the Department of Defense is equal to or greater than the minimum annual salary rate for positions in GS-15,

(2) who is directly engaged in the procurement of any weapon system or is directly engaged in the negotiation, renegotiation, approval, or disapproval of any contract for the procurement of services or materials for or in connection with any weapon system, or

(3) who is serving or has served as a representative of the Department of Defense at the factory or plant of a defense contractor in connection with work being performed by such contractor on any weapon system,

shall file with the Secretary of Defense, in such form and manner as the Secretary may prescribe, not later than March 1 of the next succeeding calendar year, a report containing the following information:

(1) His name and address.

(2) The title of his position with the Department of Defense.

(3) A brief description of his duties with the Department of Defense.

(4) The name and address of the defense contractor by whom he was employed.

(5) The title of his position with such defense contractor.

(6) A brief description of his duties at the time he was employed by such defense contractor.

(7) A description of any work performed by him in connection with any weapon system while he was employed by the defense contractor or while performing any legal services for such contractor, if such contractor is providing substantial services or materials for such weapon system or is negotiating or bidding to provide substantial services or materials for such weapon system.

(8) The date on which his employment with such contractor terminated and the date on which his employment with the Department of Defense began thereafter.

(9) Such other pertinent information as the Secretary of Defense may require.

(d) (1) No former military officer or former civilian employee shall be required to file a report under this section for any year in which he was employed by a defense contractor if the total cost to the United States of services and materials provided the United States by such contractor during such year was less than \$10,000,000; and no employee of the Department of Defense shall be required to file a report under this section if the total cost to the United States of services and materials provided the United States by

the defense contractor by whom such employee was employed was less than \$10,000,000 in each of the applicable calendar years that he was employed by such contractor.

(2) No former or retired military officer or former civilian employee shall be required to file a report under this section for any calendar year on account of active duty performed or employment with the Department of Defense if such active duty or employment was terminated three years or more prior to the beginning of such calendar year; and no employee of the Department of Defense shall be required to file a report under this section for any calendar year on account of employment with or services performed for a defense contractor if such employment was terminated or such services were performed three years or more prior to the beginning of such calendar year.

(e) The Secretary of Defense shall, not later than May 1 of each year, file with the President of the Senate and the Speaker of the House of Representatives a report containing a list of the names of persons who have filed reports with him for the preceding calendar year pursuant to subsections (b) and (c) of this section. The Secretary shall include after each name so much information as he deems appropriate, and shall list the names of such persons under the defense contractor for whom they worked or for whom they performed services.

(f) Any former military officer or former civilian employee whose employment with a defense contractor terminated during any calendar year shall be required to file a report pursuant to subsection (b) of this section for such year if he would otherwise be required to file under such subsection; and any person whose employment with the Department of Defense terminated during any calendar year shall be required to file a report pursuant to subsection (c) of this section for such year if he would otherwise be required to file under such subsection.

(g) The Secretary shall maintain a file containing the information filed with him pursuant to subsections (b) and (c) of this section and such file shall be open for public inspection at all times during the regular workday.

(h) Any person who fails to comply with the filing requirements of this section shall be guilty of a misdemeanor and shall, upon conviction thereof, be punished by not more than six months in prison or a fine of not more than \$1,000, or both.

(i) No person shall be required to file a report pursuant to this section for any year prior to the calendar year 1970.

SEC. 404. (a) Prior to April 30, 1970, Congress shall complete a comprehensive study and investigation of the past and projected costs and effectiveness of attack aircraft carriers and their task forces and a thorough review of the considerations which went into the decision to maintain the present number of attack carriers. The results of this comprehensive study shall be considered prior to any authorization or appropriation for the production or procurement of the nuclear aircraft carrier designated as CVAN-70.

(b) The committee shall call on all government agencies and such outside consultants as the committee may deem necessary.

SEC. 405. Funds authorized for appropriation under the provisions of this Act shall not be available for payment of independent research and development, bid and proposal, and other technical effort costs in a total amount in excess of \$468,000,000. The foregoing limitation shall not apply in the case of formally advertised contracts or to other firmly fixed price contracts competitively awarded.

SEC. 406 (a) The Comptroller General of the United States (hereinafter in this section referred to as the "Comptroller General") is authorized and directed, as soon as practicable after the date of enactment

of this section, to conduct a study and review on a selective basis of the profits made by contractors and subcontractors on contracts on which there is no formally advertised competitive bidding entered into by the Department of the Army, the Department of the Navy, the Department of the Air Force, the Coast Guard, and the National Aeronautics and Space Administration under the authority of chapter 137 of title 10, United States Code, and on contracts entered into by the Atomic Energy Commission to meet requirements of the Department of Defense. The results of such study and review shall be submitted to the Congress as soon as practicable, but in no event later than December 31, 1970. The Comptroller General is further authorized, upon request of the Committee on Armed Services of the Senate or the Committee on Armed Services of the House of Representatives, to conduct a study and review regarding the amount of profit which has been or may be realized under any contract referred to in the first sentence of this subsection. The Comptroller General shall submit to the committee which requested such study and review a written report of the results of such study and review as soon as practicable.

(b) Any contractor or subcontractor referred to in subsection (a) of this section shall, upon the request of the Comptroller General, prepare and submit to the General Accounting Office such information as the Comptroller General determines necessary or appropriate in conducting any study and review authorized by subsection (a) of this section. Information required under this subsection shall be submitted by a contractor or subcontractor in response to a written request made by the Comptroller General and shall be submitted in such form and detail as the Comptroller General may prescribe and shall be submitted within a reasonable period of time.

(c) In order to determine the costs, including all types of direct and indirect costs, of performing any contract or subcontract referred to in subsection (a) of this section, and to determine the profit, if any, realized under any such contract or subcontract, either on a percentage of cost basis or a return on private capital employed basis, the Comptroller General and authorized representatives of the General Accounting Office are authorized to audit and inspect and to make copies of any books, accounts, or other records of any such contractor or subcontractor.

(d) (1) The Comptroller General, or any officer or employee designated by him for such purpose, may sign and issue subpoenas requiring the production of such books, accounts, or other records as may be material to the study and review carried out by the Comptroller General under this section.

(2) Within five days after the service upon any person of any subpoena issued under this subsection relating to any contract or subcontract, such person may file in the district court of the United States for the judicial district in which such person transacts or has transacted business relating to that contract or subcontract, and serve upon the Comptroller General, a petition for an order of such court modifying or setting aside that subpoena or demand. Such petition shall specify each ground upon which the petitioner relies in seeking such relief, and may be based upon any constitutional or other legal right or privilege of such person. Such court shall have jurisdiction to hear and determine any matter presented by such petition and to enter thereon such order or orders as it shall determine to be just and proper.

(e) In case of disobedience to a subpoena, the Comptroller General or his designee may invoke the aid of any district court of the United States in requiring the production of books, accounts, or other records. Any district

court of the United States within the jurisdiction in which the contractor or subcontractor is found or resides or in which the contractor or subcontractor transacts business may, in case of contumacy or refusal to obey a subpoena issued by the Comptroller General, issue an order requiring the contractor or subcontractor to produce books, accounts, and other records; and any failure to obey such order of the court shall be punished by the court as a contempt thereof.

(f) No book, account, or other record, or copy of any book, account, or record, of any contractor or subcontractor obtained by the Comptroller General under authority of this section which is not necessary for determining the profitability on any contract between such contractor or subcontractor and the Department of Defense shall be available for examination, without the consent of such contractor or subcontractor, by any individual other than a duly authorized officer or employee of the General Accounting Office; and no officer or employee of the General Accounting Office shall disclose, to any person not authorized by the Comptroller General to receive such information, any information obtained under authority of this section relating to cost, expense, or profitability on any nondefense business transaction of any contractor or subcontractor.

(g) The Comptroller General shall not disclose in any report made by him to the Congress or to either Committee on Armed Services under authority of this section any confidential information relating to the cost, expense, or profit of any contractor or subcontractor on any nondefense business transaction of such contractor or subcontractor.

Sec. 407. Notwithstanding the provisions of the Act entitled "An Act to suspend restrictions on the authorized personnel strength of the Armed Forces, and for other purposes", approved August 3, 1950 (64 Stat. 408), or any other provision of law, the total actual active duty personnel strength of the Armed Forces of the United States exclusive of personnel of the Coast Guard, personnel of reserve components on active duty for training purposes only and personnel of the Armed Forces employed in the Selective Service System shall not exceed 3,461,000 on the last day of the fiscal year 1970. In addition, whenever the total number of persons serving on active duty in Vietnam is reduced on or after July 1, 1969, this limitation of 3,461,000 shall be reduced by a like number. Nothing in this section shall be construed as requiring the reduction of the active duty personnel strength of any component of the Armed Forces below the level for such component prescribed by law. The foregoing provisions of this section shall not apply during any national emergency declared by the President or the Congress after the date of enactment of this section.

TITLE V—QUARTERLY CONTRACT REPORTING AND GAO AUDITS

Sec. 501. (a) The Secretary of Defense, in cooperation with the Comptroller General, shall develop a reporting system for major contracts entered into by the Department of Defense, any department or agency thereof, or any armed service of the United States, for the development or procurement of any weapons system or other need of the United States.

(b) The Secretary of Defense shall cause a review to be made of each major contract as specified in subsection (a) during each period of three calendar months and shall make a finding with respect to each such contract as to—

(1) the estimates at the time the contract was entered into of the contractor and the procuring agency as to the cost of the contract, with separate estimates for (a) research, development, testing, and engineering, and for (b) production;

(2) the contractor's and agency's subse-

quent estimates of cost for completion of the contract up to the time of the review;

(3) the reasons for any significant rise or decline from prior cost estimates;

(4) the options available for additional procurement, whether the agency intends to exercise such options, and the expected cost of exercising such options;

(5) the estimates of the contractor and the procuring agency, at the time the contract was entered into, of the time for completion of the contract, any subsequent estimates of both as to the time for completion, and the reasons for any significant increases therein;

(6) the estimates of the contractor and procuring agency as to performance capabilities of the subject matter of the contract, and the reasons for any significant actual or estimated shortcomings therein compared to the performance capabilities called for under the original contract or subsequent estimates; and

(7) such other information as the Secretary of Defense shall determine to be pertinent in the evaluation of costs incurred and expected to be incurred and the effectiveness of performance achieved and anticipated under the contract.

(c) The Secretary of Defense after consultation with the Comptroller General and with the chairman of the Committees on Armed Services and the Committees on Appropriations of the Senate and the House of Representatives shall prescribe criteria for the determination of major contracts under subsection (a).

(d) The Secretary of Defense shall transmit quarterly to the Congress and to the Committees on Armed Services and to the Committees on Appropriations of the Senate and the House of Representatives reports made pursuant to subsection (b), which shall include a full and complete statement of the findings made as a result of each contract review.

(e) The Comptroller General shall, through test checks, and other means, make an independent audit of the reporting system developed by the Secretary of Defense and shall furnish to the Congress and to the Committees on Armed Services and the Committees on Appropriations not less than once each year a report as to the adequacy of the reporting system, and any recommended improvements.

(f) The Comptroller General shall make independent audits of major contracts where in his opinion the costs incurred and to be incurred, the delivery schedules, and the effectiveness of performance achieved and anticipated are such as to warrant such audits and he shall report his findings to the Congress and to the Committees on Armed Services and the Committees on Appropriations of the Senate and of the House of Representatives.

(g) Procuring agencies and contractors holding contracts selected by the Comptroller General for audit under subsection (f) shall file with the General Accounting Office such data, in such form and detail as may be prescribed by the Comptroller General, as the Comptroller General deems necessary or appropriate to assist him in carrying out his audits. The Comptroller General and any authorized representative of the General Accounting Office is entitled, until three years after final payment under the contract or subcontract as the case may be, by subpoena, inspection, authorization, or otherwise, to audit, obtain such information from, make such inspection and copies of, the books, records, and other writings of the procuring agency, the contractor, and subcontractors, and to take the sworn statement of any contractor or subcontractor or officer or employee of any contractor or subcontractor, as may be necessary or appropriate in the discretion of the Comptroller General, relating to contracts selected for audit.

(h) The United States district court for

any district in which the contractor or subcontractor or his officer or employee is found or resides or in which the contractor or subcontractor transacts business shall have jurisdiction to issue an order requiring such contractor, subcontractor, officer, or employee to furnish such information, or to permit the inspection and copying of such records, as may be requested by the Comptroller General under this section. Any failure to obey such order of the court may be punished by such court as a contempt thereof.

(1) There are hereby authorized to be appropriated such sums as may be required to carry this section into effect.

Mr. STENNIS. Mr. President, I move to reconsider the vote by which the bill was passed.

Mr. BYRD of West Virginia. Mr. President, I move to lay that motion on the table.

The PRESIDING OFFICER (Mr. GRAVEL in the chair). The question is on agreeing to the motion to lay on the table the motion to reconsider.

The motion to lay on the table was agreed to.

Mr. STENNIS. Mr. President, I ask unanimous consent that the Secretary of the Senate be authorized to make technical and clerical corrections in the engrossment of S. 2546 and that the bill as passed by the Senate be printed.

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

Mr. MANSFIELD. Mr. President, before the Senate adjourns this evening there is one matter that I must refer to again. So at this time and on behalf of the entire Senate I rise in gratitude to the chairman of the Committee on Armed Services, the able and distinguished Senator from Mississippi (Mr. STENNIS). I am confident that I speak for every Member when I say that Senator STENNIS, during the lengthy consideration of this bill, has exhibited the fine qualities that have for so long marked him as a Senator's Senator, a public servant whose record of achievement is unsurpassed.

Throughout the many days and weeks and months of debate, even the most casual observer could not help but marvel at the careful diligence, the devoted service and the outstanding advocacy displayed at all times by Senator STENNIS. But even more impressive, perhaps, was the remarkable patience and indulgence exhibited by the distinguished chairman. That is only characteristic, however, of this gracious and outstanding man from Mississippi.

To my recollection it has been years since a legislative proposal has been considered at such length and with such great intensity. But as long and intense as has been its consideration, Senator STENNIS carried the burden of presenting the measure and its many detailed and complex features with the greatest skill and understanding. Collectively, our hat goes off to JOHN STENNIS. With his handling of this year's military procurement authorization measure leading to its overwhelming adoption, he has established an example of the highest order. The Senate is profoundly grateful.

Joining Senator STENNIS with her unsurpassed cooperation and support was the distinguished senior Senator from Maine (Mrs. SMITH). As the ranking

minority member of the Committee on Armed Services she devoted her equally talented skill and ability to the successful presentation of this measure. Some may call it incongruous indeed to find in this gracious and charming lady such a broad authority on our entire defense system. But it does not need saying that her expertise in the area of the military is unsurpassed.

May I say also that the remainder of the committee members deserve equally high praise. The Senator from Missouri (Mr. SYMINGTON), the Senator from Washington (Mr. JACKSON), the Senator from Nevada (Mr. CANNON), the Senator from New Hampshire (Mr. McINTYRE), the Senator from Hawaii (Mr. INOUE), the Senator from Colorado (Mr. DOMINICK), the Senator from Massachusetts (Mr. BROOKE), and the others, all joined to assist so well during the lengthy consideration of this bill. The Senate is well aware also of the long hours the committee applied to its consideration even before it reached the floor, and it is grateful.

Before closing, it should be said that as long and as thorough as the debate has been there is no question in my mind that with it, the Senate has asserted afresh its constitutional role to understand and appraise our defense strategy and needs; the Senate has sought—in some cases for the first time—to answer the many questions that have been raised over the years. Certainly not all of the questions have been answered. But already we are a vastly more informed Senate. And, henceforth I believe that the decisions that should be made by the Senate and the Congress, will be made by the Senate and the Congress.

Of course, all Members may take pride in the probe that has occurred thus far. Perhaps a few should be singled out for their leadership. The Senator from Kentucky (Mr. COOPER) and the Senator from Michigan (Mr. HART) made outstanding contributions as did the Senator from Illinois (Mr. PERCY) and the Senator from Minnesota (Mr. MONDALE). We were greatly pleased moreover to witness the contributions of some of our more recent Members. Those who come immediately to mind are the Senator from Missouri (Mr. EAGLETON), the Senator from Kentucky (Mr. COOK), the Senator from New York (Mr. GOODELL), the Senator from Pennsylvania (Mr. SCHWEIKER), and the Senator from California (Mr. CRANSTON). There are many others, on both sides of the aisle, who similarly deserve our thanks.

Finally, let me just say that I believe we may all take great pride in this achievement. In the years ahead I think this moment in the annals of the Senate may well go down as one of great historical importance. For this, we may be especially grateful, may I say once again, to the distinguished Senator from Mississippi.

DEFENSE SPENDING AND NATIONAL PRIORITIES

Mr. MUSKIE. Mr. President, during the past 3 weeks, we have debated at great length and in great detail a number of specific items in the military procurement and research and development authorization bill. This year's floor de-

bate on the military budget has been unique, both in the time we have devoted to it and the quality of the arguments advanced for and against particular military weapons systems.

There are several characteristics of the issues we have been debating which make our decisions terribly important and terribly difficult. We are dealing with the national security of the United States. The consequences of a wrong decision could, some day, be very serious. One does not lightly jump to a decision on such matters. On the other hand, the budgetary costs over the years ahead of the weapons systems we have been asked to approve are in many cases staggering. The F-14, for example, if ultimately used in its various versions to replace the existing planes of the Navy and Marine Corps, would cost some \$25 billion over the next 10 years to procure and operate. Unless such a weapons system is truly vital to our national security, a decision to proceed with its procurement would waste a huge amount of resources which are desperately needed at home, to clean up pollution, to improve education, to build housing, and to provide decent urban transportation. Finally, the issues we have been debating are necessarily exceedingly complex, for they deal with the means of meeting uncertain military contingencies in an uncertain and ever-changing world, against potential enemies whose motives and future actions are impossible to foresee.

For these reasons, the decision about how to vote on each of the amendments offered to the committee bill has in no case been an easy one. After much deliberation, I have voted for some amendments, deleting or postponing particular weapons systems, and against others, thereby upholding the committee's recommendation to proceed with procurement. There are, I believe, some general principles which can be applied in making individual decisions about these matters. These are the ones I have used in making up my own mind on the issues which have been raised in this debate.

After 3 weeks of discussion, necessarily devoted to the specific merits of particular military programs, I think it is desirable to step back and review more broadly the problems with which we have been dealing, and to discuss the general principles upon which we ought to base particular decisions about the military budget. After all, next year will bring forth another military authorization bill. We will again be called upon to make provision for the national security, while trying to insure that scarce budgetary resources are not wasted upon low priority or ineffective military spending.

The press has billed our debate as a revolt against the military, as a revulsion against the military budget, and as a major challenge to our own Armed Services Committee. The fact that specific items of this authorization bill have been questioned more sharply and debated in more depth on the floor of the Senate than ever before lends some apparent color of truth to this image. Yet it is a vast and dangerous oversimplification.

In the first place, the Armed Services Committee itself, after much questioning and extensive work, reduced the \$22 bil-

lion requested authorization by almost \$2 billion to \$20 billion. This \$2 billion reduction, made by the committee, is much larger than the aggregate dollar value of all the major amendments submitted during floor debate. We were not, therefore, voting upon a set of committee recommendations which passively reflected every spending wish of the Pentagon.

At this point, I should like to commend the distinguished chairman of the committee, the Senator from Mississippi (Mr. STENNIS), and my colleague from Maine, the ranking Republican member, for the quality of work which they have done, not only during the debate, but before the bill was brought to the floor of the Senate.

On the other side of the coin, even had all of the proposed amendments passed, the resulting authorization bill would still have provided for large-scale improvement and modernization of our Armed Forces. Even had the nuclear aircraft carrier been deleted, the bill would still have authorized some \$2.25 billion for Navy shipbuilding, a figure well above the amounts appropriated in most recent years. The bill provides for large improvements in our nuclear missile forces, both land and sea based; for major modernization of our Air Force; for additional nuclear attack submarines; for 800 new helicopters for the Army; for new amphibious forces and new antisubmarine patrol planes in the Navy and for over \$7 billion in research and development funds.

In short, the debate on defense procurement has not been, nor should it ever be allowed to become, a simple-minded division into promilitary and antimilitary sentiments. Rather we must be concerned with balancing the national security requirements of the United States against our other needs and our total resources. In today's world of rapidly advancing technology, available to our political enemies as well as to ourselves, adequate provision for national defense necessarily entails a large military budget.

But our domestic needs are also urgent. An excessively large military budget coupled with polluted air and water, congested cities, falling educational standards, and racial discontent is not the hallmark of a strong and secure nation. Our problem is not to choose up sides for or against military spending in general, but to take a selective approach to the military budget, approving those programs whose contributions to our national security are sufficient to justify their heavy costs, and turning down those which fail to pass this test. There are, I think, certain basic principles we can use in applying that test.

First, for the foreseeable future the provisions of strong and flexible armed forces—both nuclear and conventional—will remain a necessity for our national security. Early initiation of strategic arms limitation negotiations with the Soviets, and conclusion of an enforceable agreement can indeed reduce the burden of armaments for both sides. But no miracle will be wrought, nor should one be expected. This is said not to downgrade the importance of negotiations, but

only to remind ourselves that negotiations will be difficult, and will cover matters which relate to only a part of our military budget.

Second, strategic nuclear forces constitute only a third of our military budget. Conventional forces take up the other two-thirds. These in turn are not primarily required to defend the continental United States, but to protect our vital interests in other parts of the world. As a consequence, the size, composition, and equipment of those forces depends upon what we judge those interests to be, particularly in Europe, in Southeast Asia, and in the Middle East. As the administration considers the future role of the United States, especially in Southeast Asia, it is incumbent upon them to come before the Senate and present the alternatives. Not only does the Constitution, through its treaty clause, give the Senate a major role in deciding these matters, but once decided, we shall be asked to provide the authorization and the funds for the military strength to back up those decisions. In doing so, we must assure ourselves that the military forces provided are neither excessive for the task at hand nor so weak as to destroy the credibility of our commitments.

Two illustrations from the recent debate come to mind. Should we decide, as a nation, to scale down our commitments and our direct involvement in Southeast Asia, the Navy's 15 attack carrier task forces clearly become too large a force for the interests they are designed to protect. But even if we do not scale down our overseas military commitments, sufficient evidence has been presented to question seriously the need for all 15 of those carrier task forces. That is why I voted for a study to determine whether we need to spend the tremendous sums involved in a carrier force of the present size.

In the case of the C-5A, again, a significant scaling down of our overseas commitments would quite possibly eliminate the need for additional squadrons. But barring such a redefinition of American overseas interests, it seemed to me that the mobility provided by the C-5A's would warrant the purchase of at least one additional squadron of planes, and would indeed make it possible to protect our interests with a smaller overseas troop contingent. As a consequence, despite the disturbing escalation in C-5A's costs, I voted against the amendment which would have deleted the funds to purchase an additional squadron of C-5A's.

Third, we must resist the temptation to buy security cheaply by relying on the threat of our tactical nuclear weapons for the protection of our interests abroad. To meet conventional threats against what we have decided are our true interests, we should have sufficient conventional forces. There is every likelihood that the use of tactical nuclear weapons would soon escalate to massive proportions. Let us define our interests realistically, and then be prepared to defend them with conventional forces.

Fourth, no amount of funds can buy absolute security. Doubling the size of our Armed Forces and our military budget would not guarantee us against every

possible threat or every possible contingency. Perfect security does not exist in the modern world. Of necessity, therefore, we must seek something less than perfect security. Of all the myriad possible future threats against our security, we must decide which ones are worthwhile to try to protect against, taking into account the costs of doing so and the domestic needs we sacrifice by diverting resources to military programs.

On this basis, it has always seemed to me both unfair and evidence of shallow thinking to accuse someone who opposes an individual weapons system as a unilateral disarmer. Even the most vocal of "hawks" would not propose that we spend an additional \$40 billion annually on our military budget. Yet this judgment itself implies that he is willing to forgo weapons or forces which might, at least marginally, protect us against certain remote contingencies. Conversely, the most ardent "dove" would not suggest that we cut our military budget to zero. All of us must necessarily be selective in what we propose and what we oppose in the way of military programs. Labels of "unilateral disarmer" or "captive of the military-industrial complex" are no substitute for hard thought and conscientious judgment.

Fifth, we must ask ourselves, What is the role of the individual Senator in making decisions about particular military programs? To what extent must we rely on the expert judgment of military men, and to what extent can we, and should we, apply our own judgments? The Constitution gives to civilian authorities, both in the Executive and in the Congress, the final power to make decisions about the military budget. And despite the growth of modern technology and the resulting complexity of current weapons systems, this decision of the Founding Fathers remains, in my view, a wise one. How one leads an infantry division in combat, deploys a carrier task force, or develops a logistic supply line, are matters which can and should be primarily left to military experts. On the other hand, the definition of U.S. interests throughout the world which must be protected against military threats is a question which only the President and Congress can decide.

In between these two extremes are questions which relate to the major force levels and weapons needed to protect those vital interests. Do we need an advanced strategic bomber? Should we operate 15 carrier task forces? Must we build new major air defense systems against the possibility of an as yet non-existent Soviet bomber threat? On these questions, we need the judgment of both military men and political leaders. On the one hand, we require military expertise to help us judge the capability of particular forces and weapons, both our own and those of our potential adversaries. On the other hand, we need to decide whether or not the gain in national security is worth the accompanying budgetary cost and sacrifice of other domestic goals. That is a political judgment which only the President and Congress can make. Finally, in any governmental institution—be it the Department of Agriculture or the Pentagon—

the natural human tendency is to overstate the benefits and understate the costs of one's own program. And here Congress must play the watchdog to scrutinize inflated claims and check excessive spending.

To use an analogy, we must when education legislation is before us listen respectfully but critically to the advice of professional educators. We must gain from, but not be captive of, their professional expertise. In a similar vein, congressional decisions to delete a particular military budget request should not be looked upon as an attack upon either the competence or the dedication of military professionals, but rather as the legitimate exercise of that broad policy judgment given us by the Constitution to be applied equally to matters domestic and military.

In passing judgment on the military budget, in accordance with these major principles, Congress could be greatly helped by the provision of better information from the executive branch.

Of necessity, we must pass upon specific items in the military authorization and appropriation bill. But these judgments would be greatly aided if the individual pieces could be set in a larger framework. I have two particular points in mind.

In the 3 years immediately preceding our major involvement in Vietnam, we were spending about \$50 billion per year on the military budget. With those funds we were not only maintaining, but also substantially increasing the size and combat capabilities of our nuclear and conventional forces. By 1972 or 1973, taking into account increases in the general price level and military pay raises, it would take about \$65 billion to have the same purchasing power as the \$50 billion did prior to 1965. For these \$65 billion, therefore, we should be able not only to maintain, but also to improve our military capabilities. Yet, according to a number of recent estimates, the military programs and forces currently programmed for the early 1970's, quite apart from the costs of Vietnam, will cost between \$75 and \$80 billion per year—an amount \$10 to \$15 billion higher than the pre-Vietnam levels adjusted to current wages and prices. To act intelligently on the specific items which make up this total, Congress needs an explanation of this apparent increase. Is this projection of future military costs correct? If it is, what are the major new programs causing the increase? What changes in the world situations or in the nature of the threats facing us justify the large additional sum? Are there not areas of lower priority which can be pruned to make room for these increases? It is questions like this, Mr. President, legitimate questions, which have prompted the challenge to this military authorization bill which has been led by such distinguished, capable leaders in the Senate as the Senator from Wisconsin (Mr. PROXMIRE).

More generally, Congress needs to be provided with an overall projection of future military spending, in order to act adequately with respect to its domestic

requirements as well as to its security interests.

The major budgetary impact of the military systems we have approved this year will not be felt at once but only in future years. The authorization bill before us carries \$240 million for the Navy's F-14A. But, as I pointed out earlier, the 10-year cost of replacing existing aircraft with F-14's will amount to at least \$25 billion. The Safeguard ABM accounts for only \$759 million in this bill, but will require at least \$12 billion in procurement and operating costs over the next 5 years. We cannot act intelligently in authorizing individual systems unless we know the total consequences of our actions, not only system by system but for the military budget as a whole. In effect, under current practice, we are asked to authorize the foundations of the building without any notion of what the completed structure will look like.

The burden of my remarks today has been twofold. In the intelligent exercise of congressional judgment on the military budget, there is no room for easy slogans or simple formulas. We must be selective in what we approve and what we delete. In every military spending decision, we must balance the potential gain in national security against the sacrifice of domestic needs which it requires. As a consequence, neither a general approval nor a general condemnation of military spending meets the test of intelligent judgment. Reasoned opposition to a specific military proposal does not turn a man into a unilateral disarmament, nor does approval stamp a man as a captive of the military-industrial complex. To make better judgments on individual military proposals, however, Congress does require fuller information from the executive branch. I think, Mr. President, that as a result of the debate over these weeks, this year, we will get better information. Most important, Congress needs to know the long-run budgetary and military consequences of the action it is currently asked to take.

I am confident, Mr. President, that the current debate, extended and informed by the facts to which I have referred, can lead to a more effective and balanced treatment of our defense and domestic needs.

So, Mr. President, may I again compliment the Senator from Wisconsin and all his colleagues who have undertaken the burden and the time and the energy necessary to do what I think has been a public service of the highest order.

Mr. PROXMIRE. Mr. President, will the Senator yield?

Mr. MUSKIE. I yield.

Mr. PROXMIRE. I commend the Senator from Maine on what I think is an excellent speech. It is too bad that sometimes speeches have to be delivered so late in the day that they do not have the kind of audience they merit. This is certainly an example of that.

The Senator has put the debate into a very useful perspective. He has pointed out that these were selective cuts. These were not aimed at diminishing our Armed Forces. In fact, they were aimed at trying to strengthen our Armed Forces, and

it was a matter of judgment as to whether they were or not.

Furthermore, when the Senator called for long-term projections, this is an area in which it would seem to me we should be able to get this long-term projection—not just in terms of what one weapons system may cost in the long run, but what the overall military budget is likely to look like 3, 4, or 5 years from now. Without that kind of judgment, it is very hard for us to make a wise decision on these basic authorizations that begin something that cannot be stopped without a great loss of funds.

Finally, as the Senator has said, neither approval nor condemnation of military spending is what is called for and what is useful or what is really the subject of this debate. It is a matter of using discrimination and judgment and understanding to try to determine what is necessary to make this country as strong as possible at a cost consistent with a stable economy and consistent with meeting our very big and serious domestic needs.

The Senator has put this into a most useful perspective, and I thank him very much.

Mr. MUSKIE. I thank the Senator from Wisconsin.

May I say that I deliberately did not undertake to deliver this speech before the vote on the military authorization bill, because I wanted to begin the debate on the next military authorization bill with this speech. So whether or not it was listened to by many on the floor today is not so important as whether or not I have succeeded in identifying some of the questions and at least the character of the debate we will have in the years ahead.

Mr. HART. Mr. President, will the Senator yield?

Mr. MUSKIE. I yield.

Mr. HART. Mr. President, I think there is no problem, when the junior Senator from Maine rises to speak, as to whether there is a live audience of a considerable number or just a few of us; because his is one of those rare voices in the country which is listened to and read and the message retained. I am sure that though few are here and fortunate enough to hear it tonight, what he has said will remain in the conscience of this country for a long time. Hopefully, it will broaden the understanding of each of us with respect to our actions on specific proposals in the months ahead and will increase the understanding across the country of the problem that confronts the Senate and Congress specifically, but involves each of us, whatever our role in our society.

To put it beautifully, I, for the first time, tonight voted against this basic military authorization bill. It was a very difficult vote, one unlikely to be explained very effectively. But I can say "Amen" to everything the Senator from Maine has just said.

This is not an either/or proposition. No, certainly it is not an attack on the military. I hope the military will always be an honored profession. Our security does involve the maintenance of strength adequate to reasonably anticipated tests.

Many of us, including the Senator from Wisconsin and the Senator from Maine, sought to modify some of the authorizations and, speaking generally, we failed in every case.

Mr. President, when you come to the final rollcall, if you have voted to correct what you think to be mistakes in the authorization and you failed every time you then go ahead and vote "yes" on the final rollcall. If you do, you do it on the basis that there is more good in the bill, that it is more wise than unwise, whether you figure the ratio at \$15 billion to \$5 billion, or \$16 billion to \$3 billion. That has been my course in the years I have been permitted to serve here.

But tonight struck me as the time, if I was ever going to do it, to vote "no" as a further indication that there are increasing numbers of us who seek to get a message to those who prepare the requests for military spending—and I believe they have gotten the message already—to insure that in any budget of \$80 billion there are things we do not need and that our survival does not hinge upon the full \$80 billion. This \$20 billion is the first effort.

There is waste in our family spending, unless we are at the raw poverty level. But what would the situation be if as a family we had \$20 billion or \$80 billion to spend?

To vote "no" is to express the concern that the unmet domestic needs—while prayer and good works are welcomed in their solution—without exception require a lot of money. We kid ourselves if we think that except from the \$80 billion on the military side there is going to be very much money rescued from total Federal spending to apply to what the Senator from Maine has given national leadership in attempting to restore our water and air, and what the Senator from Wisconsin has sought to do in connection with housing in the low- and middle-income markets of this country. These programs and programs like them require lots of money. Like it or not, these programs require much money.

The Pentagon is placed on record by the "nay" vote tonight to double check every request it makes of us.

I thank the members of the Committee on Armed Services and several Senators who have undertaken leadership in the last 2 months for their efforts to indicate the Senate is double checking these requests.

Finally, as we fold the tent on this military authorization bill after more than 2 months of debate it is in order to remind Senators that last year on the same bill we spent 2 days.

I thank the Senator from Maine for yielding.

Mr. MUSKIE, I thank the distinguished Senator from Michigan. I wish to add that his good opinion and judgment have always been of value to me since we came to the Senate together 10 years ago. I had no doubt as I was delivering my remarks tonight that my position would not be too different from his. I think I understood before he said so why he voted "no" to the military authorization bill.

He does understand and his record demonstrates the need for providing for our national security interests. He also understands from time to time courageous voices must cast votes such as he cast today, if they are the only effective protests which will reach the ears of the Pentagon, other corners of Government, and throughout the country to influence the decisions which are going to be made in the future.

I think really the claim I made a moment ago about beginning the debate on next year's authorization bill with my remarks was too hasty. I think the debate was begun with the "nay" vote by the Senator from Michigan and his colleagues who voted the same way.

MESSAGE FROM THE HOUSE

A message from the House of Representatives, by Mr. Hackney, one of its reading clerks, announced that the House had passed a bill (H.R. 8904) for the relief of Paul Anthony Kelly, in which it requested the concurrence of the Senate.

HOUSE BILL REFERRED

The bill (H.R. 8904) for the relief of Paul Anthony Kelly, was read twice by its title and referred to the Committee on the Judiciary.

AUTHORIZATION OF APPROPRIATIONS TO THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, 1970

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of Order No. 273, H.R. 11271.

The PRESIDING OFFICER. The bill will be stated by title.

The LEGISLATIVE CLERK. A bill (H.R. 11271) to authorize appropriations to the National Aeronautics and Space Administration for research and development, construction of facilities, and research and program management, and for other purposes.

The PRESIDING OFFICER. Is there objection to the present consideration of the bill?

There being no objection, the Senate proceeded to consider the bill, which had been reported from the Committee on Aeronautics and Space Sciences with an amendment to strike out all after the enacting clause and insert:

That there is hereby authorized to be appropriated to the National Aeronautics and Space Administration:

(a) For "Research and development," for the following programs:

- (1) Apollo, \$1,691,100,000;
- (2) Space flight operations, \$225,627,000;
- (3) Advanced missions, \$2,500,000;
- (4) Physics and astronomy, \$117,600,000;
- (5) Lunar and planetary exploration, \$138,800,000;
- (6) Bioscience, \$20,400,000;
- (7) Space applications, \$128,400,000;
- (8) Launch vehicle procurement, \$112,600,000;
- (9) Sustaining university program, \$9,000,000;
- (10) Space vehicle systems, \$27,500,000;
- (11) Electronics systems, \$33,550,000;
- (12) Human factor systems, \$22,100,000;

- (13) Basic research, \$20,250,000;
- (14) Space power and electric propulsion systems, \$36,950,000;
- (15) Nuclear rockets, \$50,000,000;
- (16) Chemical propulsion, \$22,850,000;
- (17) Aeronautical vehicles, \$77,700,000;
- (18) Tracking and data acquisition, \$278,000,000;
- (19) Technology utilization, \$5,000,000.

(b) For "Construction of facilities," including land acquisitions, as follows:

- (1) Electronics Research Center, Cambridge, Massachusetts, \$8,088,000;
- (2) Goddard Space Flight Center, Greenbelt, Maryland, \$670,000;
- (3) John F. Kennedy Space Center, NASA, Kennedy Space Center, Florida, \$12,500,000;
- (4) Langley Research Center, Hampton, Virginia, \$4,767,000;
- (5) Manned Spacecraft Center, Houston, Texas, \$1,750,000;
- (6) Wallops Station, Wallops Island, Virginia, \$500,000;
- (7) Various locations, \$26,425,000;
- (8) Facility planning and design not otherwise provided for, \$3,500,000.

(c) For "Research and program management," \$637,400,000.

(d) Appropriations for "Research and development" may be used (1) for any items of a capital nature (other than acquisition of land) which may be required for the performance of research and development contracts, and (2) for grants to nonprofit institutions of higher education, or to nonprofit organizations whose primary purpose is the conduct of scientific research, for purchase or construction of additional research facilities; and title to such facilities shall be vested in the United States unless the Administrator determines that the national program of aeronautical and space activities will best be served by vesting title in any such grantee institution or organization. Each such grant shall be made under such conditions as the Administrator shall determine to be required to insure that the United States will receive therefrom benefit adequate to justify the making of that grant. None of the funds appropriated for "Research and development" pursuant to this Act may be used for construction of any major facility, the estimated cost of which, including collateral equipment, exceeds \$250,000, unless the Administrator or his designee has notified the Speaker of the House of Representatives and the President of the Senate and the Committee on Science and Astronautics of the House of Representatives and the Committee on Aeronautical and Space Sciences of the Senate of the nature, location, and estimated cost of such facility.

(e) When so specified in an appropriation Act, (1) any amount appropriated for "Research and development" or for "Construction of facilities" may remain available without fiscal year limitation, and (2) maintenance and operation of facilities, and support services contracts may be entered into under the "Research and program management" appropriation for periods not in excess of twelve months beginning at any time during the fiscal year.

(f) Appropriations made pursuant to subsection 1(c) may be used, but not to exceed \$35,000, for scientific consultations or extraordinary expenses upon the approval or authority of the Administrator and his determination shall be final and conclusive upon the accounting officers of the Government.

(g) No part of the funds appropriated pursuant to subsection 1(c) for maintenance, repairs, alterations, and minor construction shall be used for the construction of any new facility the estimated cost of which, including collateral equipment, exceeds \$100,000.

(h) No part of the funds appropriated pursuant to subsection (a) of this section

may be used for grants to any nonprofit institution of higher learning unless the Administrator or his designee determines at the time of the grant that recruiting personnel of any of the Armed Forces of the United States are not being barred from the premises or property of such institution except that this subsection shall not apply if the Administrator or his designee determines that the grant is a continuation or renewal of a previous grant to such institution which is likely to make a significant contribution to the aeronautical and space activities of the United States. The Secretary of Defense shall furnish to the Administrator or his designee within sixty days after the date of enactment of this Act and each January 30 and June 30 thereafter the names of any nonprofit institutions of higher learning which the Secretary of Defense determines on the date of each such report are barring such recruiting personnel from premises or property of any such institution.

SEC. 2. Authorization is hereby granted whereby any of the amounts prescribed in paragraphs (1), (2), (3), (4), (5), (6), and (7) of subsection 1(b) may, in the discretion of the Administrator of the National Aeronautics and Space Administration, be varied upward 5 per centum to meet unusual cost variations, but the total cost of all work authorized under such paragraphs shall not exceed the total of the amounts specified in such paragraphs.

SEC. 3. Not to exceed one-half of 1 per centum of the funds appropriated pursuant to subsection 1(a) hereof may be transferred to the "Construction of facilities" appropriation, and, when so transferred, together with \$10,000,000 of the funds appropriated pursuant to subsection 1(b) hereof (other than funds appropriated pursuant to paragraph (8) of such subsection) shall be available for expenditure to construct, expand, or modify laboratories and other installations at any location (including locations specified in subsection 1(b)), if (1) the Administrator determines such action to be necessary because of changes in the national program of aeronautical and space activities or new scientific or engineering developments, and (2) he determines that deferral of such action until the enactment of the next authorization Act would be inconsistent with the interest of the Nation in aeronautical and space activities. The funds so made available may be expended to acquire, construct, convert, rehabilitate or install permanent or temporary public works, including land acquisition, site preparation, appurtenances, utilities, and equipment. No portion of such sums may be obligated for expenditure or expended to construct, expand, or modify laboratories and other installations unless (A) a period of thirty days has passed after the Administrator or his designee has transmitted to the Speaker of the House of Representatives and to the President of the Senate and to the committee on Science and Astronautics of the House of Representatives and to the Committee on Aeronautical and Space Sciences of the Senate a written report containing a full and complete statement concerning (1) the nature of such construction, expansion, or modification, (2) the cost thereof including the cost of any real estate action pertaining thereto, and (3) the reason why such construction, expansion, or modification is necessary in the national interest, or (B) each such committee before the expiration of such period has transmitted to the Administrator written notice to the effect that such committee has no objection to the proposed action.

SEC. 4. Notwithstanding any other provision of this Act—

(1) no amount appropriated pursuant to this Act may be used for any program deleted by the Congress from requests as originally

made to either the House Committee on Science and Astronautics or the Senate Committee on Aeronautical and Space Sciences,

(2) no amount appropriated pursuant to this Act may be used for any program in excess of the amount actually authorized for that particular program by section 1(a) and 1(c), and

(3) no amount appropriated pursuant to this Act may be used for any program which has not been presented to or requested of either such committee,

unless (A) a period of thirty days has passed after the receipt by the Speaker of the House of Representatives and the President of the Senate and each such committee of notice given by the Administrator or his designee containing a full and complete statement of the action proposed to be taken and the facts and circumstances relied upon in support of such proposed action, or (B) each such committee before the expiration of such period has transmitted to the Administrator written notice to the effect that such committee has no objection to the proposed action.

SEC. 5. It is the sense of the Congress that it is in the national interest that consideration be given to geographical distribution of Federal research funds whenever feasible, and that the National Aeronautics and Space Administration should explore ways and means of distributing its research and development funds whenever feasible.

SEC. 6. This Act may be cited as the "National Aeronautics and Space Administration Authorization Act, 1970".

Mr. CANNON. Mr President, on behalf of the Senator from New Mexico (Mr. ANDERSON), distinguished chairman of the Committee on Aeronautical and Space Sciences, I am making the opening statement in support of H.R. 11271.

Mr. President, we have before us today H.R. 11271 to authorize appropriations to the National Aeronautics and Space Administration for fiscal year 1970 for research and development, construction of facilities, and research and program management, and for other purposes. Mr. President, before I go into the specifics of this bill I would like to extend my appreciation to the senior Senator from Maine (Mrs. SMITH) for her conscientious assistance and support during our consideration of this authorization request.

On my own behalf, I want to also compliment the distinguished Senator from Maine for the very fine job she has done in the handling, development, and presentation of this important bill.

This is the 12th annual budget for the National Aeronautics and Space Administration, and it is presented at a time when the Nation has just achieved the lunar landing objectives established in 1961—a feat unparalleled in the history of mankind. The original authorization request for fiscal year 1970 was for \$3,760,527,000; however, this was amended on April 15, 1969, to a revised total of \$3,715,527,000 by the new administration, a reduction of \$45 million, all of which was made in research and development. This request for \$3,715,527,000 is \$297,546,000 less than the amount authorized for fiscal year 1969 but, perhaps more significant, it will establish a program level very close to the fiscal year 1969 operating plan approved for the National Aeronautics and Space Administration. Last year I stated to the Senate that a program at this level would, in my judgment, barely

enable us to move forward in this important area of science and technology. The committee, however, agreed that the fiscal situation necessitated a carefully scrutinized and very modest program until we could see some relief from the need for fiscal austerity. Our review of fiscal year 1969 activities at this time reveals that the fiscal year 1969 program was indeed a minimum one. This year we find the situation not measurably changed and, therefore, again we must take a careful measure of national needs—one of which, in my opinion, is to maintain a strong national posture in research and technology. The bill which we are recommending required a careful structuring of the many NASA programs and a most judicious use of resources in order to operate at this budget level and still make minimal progress on very modest future projects judged essential to maintain our space preeminence. The committee in its deliberations took into account the fact that the budget request for the National Aeronautics and Space Administration had undergone reviews by two administrations prior to analysis by the committee; and possibly a more important factor considered in reporting out this bill that we have just completed the first decade in space and were about to undertake the now successful Apollo 11 lunar landing attempt, all of which dictates that a longer look ahead is required.

In this regard, the President earlier this year constituted a Space Task Group to examine the long-range objectives for the national space program and to make recommendations to him on September 1, 1969. Therefore, Mr. President, it was the committee's belief that we should recommend not only a sound, orderly, and austere ongoing program for fiscal year 1970, but also one which at the same time would have the necessary ingredients and flexibility with which to respond to significant recommendations of the Space Task Group. These recommendations were released on September 15 and a brief review within the time available indicates that they are compatible with the program provided for in H.R. 11271, as amended, and recommended by your committee.

The bill contains \$3,019,927,000 for research and development, an amount \$13.5 million more than requested; \$58.2 million for the construction of facilities program, which agrees with the administration request; and finally \$637,400,000 for research and program management, representing a cut of \$13.5 million. For clarification I might add that the latter category is a retitling of the appropriations category previously entitled "Administrative operations" with the thought that the title "Research and program management" would be more descriptive of the activities involved. The authorization for research and development is identical in all respects to the administration's request with one exception—a \$13.5 million increase for the nuclear rocket program. I will discuss this item more fully later in my statement, but briefly, this is the only program in existence designed to provide the Nation with a large space propulsion capability. This development should have

been initiated in fiscal year 1969 to maintain momentum in the technical progress demonstrated in the program. The modest increase is intended to assist in recovering some of the momentum lost due to the delay in initiation of engine development.

In the construction of facilities program your committee is recommending only those facilities which are necessary for continuing previously authorized projects in an efficient manner, which represent a national need as illustrated by the aircraft noise reduction laboratory proposed for the Langley Research Center and which represent major maintenance or alterations essential to maintain the large NASA plant in good working order. The research and program management request has been reduced \$13.5 million on the belief that NASA can and should effect more economies in manpower utilization both in its direct and contractor support activities. In making this recommendation your committee recognized that NASA had reduced its permanent employment during the prior fiscal year; however, the committee continues to be concerned about the growth of this part of the budget when major programs of the agency have matured and the agency itself should have attained a degree of stability warranting careful examination of its staffing patterns.

REVIEW OF PAST YEAR

Senators may recall that last year at this time NASA was still recovering from the Apollo 204 spacecraft fire at the Kennedy Space Center in January 1967, a recovery that took much longer than originally forecast. The first manned Apollo flight—Apollo 7—was launched October 11, 1968, and that highly successful flight provided assurance that the redesign of the spacecraft and the other corrective measures undertaken as a result of the Apollo 204 accident had been most effective. Following the analysis of the difficulties experienced during the second unmanned Saturn V flight, Apollo 6, on April 4, 1968, a judgment was made that the Saturn V was capable of supporting a manned mission safely and this, combined with the October experience with the Apollo spacecraft, led to the decision to undertake the highly successful Apollo 8 flight around the moon and into lunar orbit in December last year. Continued success in the Apollo manned flight program was achieved by Apollo 9 which demonstrated the operation of all lunar landing hardware in an earth orbital exercise, and by Apollo 10 which demonstrated crew, space vehicles and mission support facilities performance during a manned lunar mission including lunar module separation, exercise, rendezvous and docking in lunar orbit. These progressive, successful performances led NASA to the decision to undertake the lunar landing objective with Apollo 11 launched on July 16, 1969.

I am sure every Member of this body is aware of the historic achievement with the landing of Apollo 11 on the moon on July 20 and the successful return to earth on July 24. This is an achievement in which the entire Nation should take great pride.

As I am certain all of you are familiar

with the Apollo flight successes, you may not be as fully aware of some very significant achievements in other areas of responsibility of the National Aeronautics and Space Administration. On November 8, 1968, NASA launched successfully Pioneer IX, an interplanetary scientific spacecraft to collect data on electromagnetic and plasma properties of the interplanetary medium. This launch also carried a "piggyback" satellite—TETRS-2, a network training satellite. This was followed on December 7 by the launch of the second orbiting astronomical observatory. This spacecraft, at 4,436 pounds, is the heaviest, most complex unmanned scientific spacecraft we have launched and is designed to investigate celestial objects in the ultraviolet region of the electromagnetic spectrum. This spacecraft is still operating properly.

The Mariner VI and Mariner VII spacecraft were launched on February 24 and March 27, 1969, respectively, on fly-by missions to the planet Mars to perform investigations of the Martian atmospheric structure and to return television pictures of surface topography. Both missions were very successful. Mariner VI passed within 2,100 miles of the surface on July 31 and returned both approach and fly-by television pictures. Mariner VII, essentially a twin spacecraft, arrived at the planet Mars on August 5, flew within 2,000 miles of the planet utilizing a different approach pattern, and also returned excellent data.

On April 14, 1969, Nimbus III, a meteorological development satellite, was launched into a 600-nautical-mile orbit and demonstrated the ability to make vertical measurements of atmospheric temperature. NASA, in its role of supporting other organizations with launch services, launched three weather satellites for the Environmental Science Services Administration and three communications satellites for Intelsat.

NASA continued its work in advanced research and technology, including a demonstration project on the reduction of aircraft engine noise from commercial jet aircraft, and continued to make significant progress in the technology phase of the nuclear rocket program as evidenced by successful experimental engine testing. In fact, recently the experimental engine was run at full power for the first time at the Nuclear Rocket Development Station in Nevada. This engine is the springboard for the flight engine development, the initiation of which is included in the nuclear rocket program in this budget.

Mr. President, at this point, if there be no objection, I ask unanimous consent to have printed in the RECORD a chart showing the NASA authorization request, the action of the House in passing H.R. 11271, and the actions of your committee as set forth in H.R. 11271 as amended.

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

CONGRESSIONAL ADJUSTMENTS TO NASA, FISCAL YEAR 1970 REQUEST—SUMMARY

[In thousands of dollars]

	Budget request	House action	Senate committee action
Research and development:			
Apollo	\$1,691,100	\$1,766,800	\$1,691,100
Space flight operations	225,627	344,827	225,627
Advanced missions	2,500	2,500	2,500
Physics and astronomy	117,600	112,600	117,600
Lunar and planetary exploration	138,800	131,800	138,800
Bioscience	20,400	27,400	20,400
Space applications	128,400	138,400	128,400
Launch vehicle procurement	112,600	114,200	112,600
Sustaining university program	9,000	9,000	9,000
Space vehicle systems	27,500	30,000	27,500
Electronics systems	33,550	35,000	33,550
Human factor systems	22,100	23,600	22,100
Basic research	20,250	21,400	20,250
Space power and electric propulsion systems	36,950	39,900	36,950
Nuclear rockets	36,500	50,000	36,500
Chemical propulsion	22,850	28,100	22,850
Aeronautical vehicles	77,700	80,900	77,700
Tracking and data acquisition	278,000	293,000	278,000
Technology utilization	5,000	5,000	5,000
Total	3,006,427	3,264,427	3,019,927
Construction of facilities:			
Electronics Research Center	8,088	8,088	8,088
Goddard Space Flight Center	670	670	670
John F. Kennedy Space Center	12,500	12,500	12,500
Langley Research Center	4,767	4,767	4,767
Manned Spacecraft Center	1,750	1,750	1,750
Wallops Station	500	500	500
Various locations	26,425	26,425	26,425
Facility planning and design	3,500	3,500	3,500
Total	58,200	58,200	58,200
Research and program management	650,900	643,750	637,400
Grand total	3,715,527	3,966,377	3,715,527

Mr. CANNON. Mr. President, your committee is recommending \$3,019,927,000 for research and development, \$58,200,000 for the construction of facilities, and \$637,400,000 for research and program management. The bill total of \$3,715,527,000 represents an amount \$250,850,000 below the House action on H.R.

11271, and an amount equal to the NASA request.

The recommended amount of \$3,019,927,000 for research and development is \$13.5 million above the NASA request and \$244,500,000 below the amount approved by the House. \$1,619,100,000 is for the Apollo program, a program which repre-

sents the establishment of this Nation's capability and superiority in manned space flight and which was demonstrated so superbly for all the world to see during the Apollo 11 mission. This success, however, makes it imperative that provision be made for maintaining this national achievement and, therefore, your committee is recommending an ongoing program utilizing available Apollo hardware to continue a program of lunar exploration beyond the very preliminary look possible during the initial landing. This program will be conducted at a slower pace as represented by a tentative schedule of three launches per year as opposed to the 2½-month launch interval—five per year—on which the Apollo program has been operating. Briefly, lunar exploration envisions visits to other areas of the moon—possibly as many as nine over a period of 3 years—and the implantation of scientific instruments and the conduct of other scientifically directed activity to expand our knowledge of this earth's satellite.

Your committee is also recommending the continuation of the previously authorized and initiated earth orbital manned space flight activity identified as Apollo Applications. This year, however, Apollo Applications has been included as a project in a new program item in the bill entitled "Space Flight Operations" which also encompasses earth orbital space station studies and follow-on launch vehicle production. The recommended amount for this program is \$225,627,000, of which \$134,327,900 is for Apollo Applications. The objectives of the Apollo Applications project continue unchanged with flights of 28- and 56-day duration in earth orbit designed to test the ability of man to live and perform useful work in space for extended periods of time. To look ahead toward the objective of increasing the use of space technology for earth applications your committee is recommending a modest amount of \$9 million for space station and low-cost transportation system studies. In addition, this program line item supports the significant decisions, reflected in the amended budget submitted to the Congress, to continue production of the Saturn V launch vehicle. Your committee fully supports this decision and is recommending approval of \$46 million to start production of three more launch vehicles inasmuch as this is the only large booster in the Nation's stable and one which has performed admirably. Therefore, we believe it is only prudent to continue to have this capability available to the Nation. In summary, your committee is recommending a manned space flight budget of \$1,919,227,000, an amount about \$360 million below last year's authorization and \$258 million under the agency's operating plan for fiscal year 1969. H.R. 11271 as approved by the House authorizes \$204,900,000 above the administration's request and above that amount which your committee recommends for manned space flight. These increases were reviewed with NASA witnesses during the committee hearings and as a result, it is your committee's judgment that these additional amounts are not necessary or warranted at this time.

For the programs in the Office of Space Science and Applications, H.R. 11271, as amended, contains a total of \$517,800,000, a net increase of about \$41 million above the amount authorized in fiscal year 1969. The principal reason for this increase is the funding for the Mariner-Mars 1971 and the Viking-Mars 1973 unmanned planetary spacecraft projects and funding for the earth resources and other applications technology satellites, all of which were authorized in prior years. These programs are in an advanced development stage thereby requiring significant increases in funding over that required last year. There are, however, reductions in the physics and astronomy and the bioscience programs amounting to \$26 million below the fiscal year 1969 authorization. In addition to continuing support for the Mars planetary projects, your committee is recommending \$3 million to initiate a Venus-Mercury Mariner-type spacecraft mission in 1973 to take advantage of the positioning of the planets at that time which permits reaching Mercury with less energy and at less cost. This is a rare opportunity and I believe it is important that we take advantage of it in order to obtain basic knowledge of this planet about which we know practically nothing. This represents, of course, a new start but the mission does utilize a proven and relatively economical spacecraft, and it is the type of scientific mission which I think we should encourage NASA to employ. For these reasons, the committee did not agree with the deletion of this flight project by the House. The physics and astronomy program will be conducted at the \$117.6 million level, slightly less than that for fiscal year 1969. The orbiting astronomical observatory project will be continued and hopefully will produce another spacecraft as successful as OAO-II which I have already referred to. The complex orbiting geophysical observatory spacecraft is being phased out with the final launch on June 5, 1969, and NASA is proposing to introduce small scientific spacecraft to continue the scientific investigations in the environment previously covered by the geophysical observatories. Similarly NASA is proposing to start two small astronomy explorers and again the committee endorses the adoption of the smaller, less complex and less expensive spacecraft as proposed herein and as recommended by the Space Science Board.

The administration in the budget amendment submitted in April 1969, recommended cancellation of the biosatellite F spacecraft scheduled to be the second 30-day primate mission. The first primate mission was launched June 28, 1969, and was terminated on July 7 due to progressively poorer response from the primate. The primate died shortly after recovery. Cancellation of biosatellite F followed the cancellation last fall of the two 21-day biosatellite flights scheduled to carry plantlife and body cell experiments. Your committee has examined this program quite carefully both prior to and during the hearings, and it concurs with NASA's plan to undertake a thorough examination of the objectives of this program including a special re-

view by the National Academy of Sciences. Following the reexamination, a determination will be made as to the optimum methods for achieving the program objectives. In view of this status your committee recommends adoption of the administration's budget request of \$20.4 million, a reduction of \$12 million in the original budget and a reduction of some \$13 million in the funding authorized for this program in fiscal year 1969. Your committee, therefore, does not agree with the action of the House in reinstating the biosatellite F mission.

Your committee is recommending \$128.4 million, an increase of about \$30 million above fiscal year 1969 for the projects encompassed by the space applications program. In view of the potential benefits to terrestrial problems, your committee undertook a special review of the earth resources survey project and heard witnesses from the Department of Commerce's Environmental Science Services Administration, the Department of the Interior's Geological Survey, and the Department of Agriculture. Your committee recommends full support of the earth resources survey project budgeted at \$25.1 million and is urging that NASA give priority attention to development of the earth resources technology satellite. The House bill has increased by \$10 million the amount allocated to this project; however, testimony before the committee did not indicate that more than doubling the allocation in one fiscal year would improve the schedule. Your committee is also recommending the approval of \$3.6 million to initiate the synchronous meteorological satellite project as a significant step toward improving the meteorological data being returned to earth since it is designed to provide continuous coverage of weather systems. In addition, \$41 million is included for the ongoing applications technology satellite project which is designed to develop improved spacecraft technology in the areas of communications, meteorology, and general spacecraft technology.

An amount of \$112.6 million is proposed for the procurement of launch vehicles for the unmanned space flight projects. This amount is controlled by the scheduling of the various flight projects and, therefore, is necessary in order to support the programs already approved.

The House made several additions and deletions to the space science and applications programs, most of which I have mentioned. The net effect of these adjustments is a \$6.6 million increase in the total amount for these programs above that proposed by your committee. Aside from the monetary increase, the effect of these adjustments on selected project proposals for research activities is quite severe in some cases and your committee does not agree that these should be made.

H.R. 11271, as amended, includes \$290.9 million for the programs administered by the Office of Advanced Research and Technology in NASA. These programs encompass the advanced research and technology efforts which underlie future advances in aeronautics and space as well as contribute to the general advancement of scientific knowledge in the United States. The total amount for this

group of programs is about \$5 million above the fiscal year 1969 operating level. Your committee considers this entire area vital to maintain national technological strength; and while your committee is recommending approval of the budget request in every program except one—the nuclear rocket program where an increase of \$13.5 million is included—if the fiscal constraints were not so critical at this time, I believe we would have recommended increases in additional programs. The nuclear rocket program involves the development of a space nuclear propulsion capability at a thrust level far beyond that attainable through other approaches at this time, and your committee is firmly convinced that the Nation should continue to pursue this development most energetically to assure that the capability will be available to the Nation to support those activities it may desire to undertake in the future. In addition, this program which has had a highly successful technology phase, solidly evidenced by testing successes, has recently demonstrated the successful performance at full power of the experimental engine which will be the foundation for the 75,000-pound thrust NERVA engine development. This bill includes \$50 million, an increase of \$13.5 million above the NASA request for the nuclear rocket program for the initiation of the 75,000-pound thrust nuclear engine development—an action which was deferred from fiscal year 1969. Your committee is convinced that this work must be initiated in fiscal year 1970 or the capability to do so will be lost and will be most expensive to regain. The House concurs fully in the funding recommendation for this program.

I will speak briefly on the aeronautics program of NASA. The fact that it is a prime responsibility of the agency is often forgotten in the larger context of space activity. Nevertheless aeronautical research, and its products, based upon studies by this committee, make a substantial dollar contribution to the economy of the Nation aside from travel conveniences we frequently avail ourselves of. The program line item budget for aeronautics that your committee recommends for fiscal year 1970 is \$77.7 million. This represents an increase of \$2.8 million over the fiscal year 1969 authorization, and I believe that this is well warranted and deserves your support.

Aside from the nuclear rocket program with which your committee is in agreement with the House, the House has approved minor increases in each advanced research and technology program. These total \$18 million for seven programs. While these may have merit, the fact that an overall program balance has been established by NASA and that each increase is very small and, therefore, difficult to measure, your committee is not convinced from its review that these increases should be made.

An amount of \$278 million is recommended for the tracking and data acquisition program. This program supports both manned and unmanned space flights in tracking the spacecraft, issuing commands, retrieving data, maintaining communications—all of which is vital to the success of all space flight

activity. The amount recommended is essentially the same as that in the fiscal year 1969 operating plan—a year of extensive flight activity—and it reflects a reduction of \$20 million from the original budget request. NASA witnesses testified that with the proposed stretchout of the launch interval and the reduction in the number of Apollo flights per year following the lunar landing, the program can provide the proper level of support with this budget for fiscal year 1970. Accordingly your committee does not agree with the House-approved amount of \$293 million, an increase of \$15 million for this program.

Your committee recommends a continuation of the sustaining university program at the \$9 million level established in fiscal year 1969. Your committee supports an increase of \$1.2 million in the technology utilization program in fiscal year 1970 for a total authorization of \$5 million to provide for the dissemination of research and technology developed in the space program to the community at large.

CONSTRUCTION OF FACILITIES

The administration requested \$58.2 million for the NASA construction of facilities program. Your committee is recommending adoption of this request which also has been approved by the House. The largest single amount in the request is \$17 million, which is the second and final increment of funding for the two 210-foot deep space antennas now being constructed in Australia and Spain. These are essential to the conduct of the unmanned planetary missions approved in prior years and for which hardware is now in active development. Another significant item is \$8,088,000 for the construction of a combined computer and instrumentation research laboratory at the electronics research center. This facility represents a continuation of the facility construction program now under way at this center. This project will provide research facilities for scientific personnel engaged in these technical areas and will, when completed, release space now being rented for this purpose. A third major facility proposed for authorization in H.R. 11271 is an aircraft noise reduction laboratory estimated to cost \$4,767,000 and to be located at the Langley Research Center. With the increasing concern about noise in the environment, particularly that generated by aircraft operations, NASA has been repeatedly urged to increase its efforts on noise research and noise reduction. It is the purpose of this facility to provide the laboratory space with which to undertake this responsibility—a capability which does not otherwise exist in this Nation today. The remaining projects in the construction of facilities authorization category may be classified as supplements to existing facilities, major maintenance items, or modifications designed to improve their efficiency or utility in support of approved activities at the various NASA installations.

RESEARCH AND PROGRAM MANAGEMENT

Your committee is recommending \$637.4 million for research and program management, a reduction of \$13.5 million in the administration's request. As

I mentioned previously, this authorization category was formerly known as administrative operations and has been retitled to make it more descriptive of the activities represented in this category. Research and program management funding provides for personnel, travel, and other expenses associated with program direction and administration, for the conduct of in-house research programs and for the operation of NASA installations of which there are 11. Approximately 71 percent of the amount recommended is for salaries and related personnel expenses. The remainder supports the several NASA centers with housekeeping, utility, computer, and other services and supplies.

Your committee recognizes that a large percentage of NASA's personnel complement is scientists, engineers, and supporting technicians, and it also notes that there has been some reduction in the permanent positions in the agency in fiscal year 1969. However, your committee is convinced that economies can be made throughout this appropriations category and accordingly is recommending a reduction of \$13.5 million for a total authorization of \$637,400,000. The House approved \$643,750,000, a reduction of \$7,150,000 in the NASA request.

LEGISLATIVE CHANGES

The House approved four legislative amendments which were not included in the administration's fiscal year 1970 budget request for NASA. Without expressing agreement or disagreement with the rationale in these amendments, your committee has not included them in its amendment to the House bill recognizing the fact that these amendments will be in conference and subject to further consideration by the conferees.

Your committee in its final deliberation on this bill recommended the reinsertion of an amendment introduced by Senator CURRIS and approved by the Congress last year. This amendment included as section 1, subsection (h) would bar the use of fiscal year 1970 funds for the payment of grants to any college or university whose administration refused to permit recruiters from the military services to conduct recruiting activities on campus. The Administrator of NASA may make an exception if termination of funding of a project is found to have an adverse effect on the aeronautics and space program.

This concludes my statement, Mr. President. I believe this is a carefully structured program, and also one that is a minimum with which to maintain our capability and preserve the leadership position in space that we have worked so long and diligently to attain. I urge the support of my colleagues for this bill.

Mrs. SMITH of Maine. Mr. President, I would like to thank the able junior Senator from Nevada for his kind remarks, and also commend the distinguished chairman of our committee for his excellent handling of the NASA authorization hearings.

Inasmuch as the chairman's statement contains a thorough analysis of each major activity to be authorized, I will not take the time of the Senate for further explanation. However, I would

like to make some overall observations of the NASA bill and of our space exploration efforts to date.

Our Nation has fulfilled its first major commitment—landing a man on the moon and returning him safely to earth before the end of the decade. This spectacular scientific achievement has brought accolades to our Nation from every part of the world. But of even greater significance—this achievement demonstrates that we are maintaining a strong scientific and technological base which is so necessary to our country's continued growth and prosperity.

Notwithstanding the successes accomplished by NASA, not only in the lunar program but in the various unmanned space exploration programs as well, I point out to my colleagues that the bill before you is extremely minimal in regard to the amounts authorized. You will note that the committee is recommending an authorization of about \$3.7 billion which is equal to President Nixon's revised budget request and \$45 million less than the original budget submitted by President Johnson. By further comparison, the recommended authorization is \$250 million less than the amount authorized by the House and over \$435 million less than the total amount recommended by your committee in the last fiscal year.

I believe the bill clearly illustrates that the committee is fully mindful of the tremendous economic pressures facing our country today. The bill contains no funds for crash programs, but rather contains minimum authorization amounts necessary to assure a continued return from our space investments.

It is for the above reasons that I fully support the NASA authorization bill, H.R. 11271, and, as ranking minority member of your Space Committee, I join the chairman in commending its passage to our colleagues.

REDUCTIONS IN THE NASA BUDGET

Mr. BYRD of West Virginia. Mr. President, at the request of the senior Senator from New Mexico (Mr. ANDERSON), I ask unanimous consent to have printed in the RECORD a statement of facts regarding the reductions in the NASA budget.

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

SOME FACTS REGARDING THE REDUCTIONS IN THE NASA BUDGET

The bill reported by the Committee recommends an FY 1970 authorization for NASA of \$3,715,527,000. This is identical to the Administration's request.

It is \$250 million less than the amount provided in the NASA authorization bill already passed by the House.

It is \$655 million below the request of last year.

It is \$435 million below the Committee's recommendation for last year.

It is \$297 million less than the amount authorized for last year.

It is \$280 million less than the amount appropriated to NASA last year.

NASA's authorization has been reduced every year beginning with FY 1965 so that the amount, \$3,715,527,000, recommended by the Committee for FY 1970 is \$1.6 billion less than the amount, \$5.35 billion, authorized in FY 1964. This is a reduction every year for six years amounting to 30 percent.

Expenditures in NASA during the past four fiscal years have been reduced from about \$6 billion in FY 1966 to less than \$4 billion estimated for FY 1970—a reduction of over \$2 billion or 33 percent during a period of four years.

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

The PRESIDING OFFICER. The amendment will be read.

The assistant legislative clerk proceeded to read the amendment.

Mr. PROXMIRE. 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, ordered to be printed in the RECORD, is as follows:

AMENDMENT NO. 3

At the end of the Act add a new section as follows:

"SEC. 7. (a) As used in this section—

"(1) The term 'aerospace contractor' means any individual, firm, corporation, partnership, association, or other legal entity, which provides services and materials to or for the National Aeronautics and Space Administration in connection with any aerospace system.

"(2) The term 'services and materials' means either services or materials or services and materials which are provided as a part of or in connection with any aerospace system.

"(3) The term 'aerospace system' includes, but is not limited to, any rocket, launch vehicle, rocket engine, propellant, spacecraft, command module, service module, landing module, tracking device, communications device, or any part or component thereof, which is used in either manned or unmanned space-flight operations.

"(b) Any former employee of the National Aeronautics and Space Administration who at any time during the five-year period immediately preceding his termination of employment with the National Aeronautics and Space Administration was directly engaged in the procurement of any aerospace system or directly engaged in the negotiation, renegotiation, approval, or disapproval of any contract for the procurement of services or materials for or in connection with any aerospace system; or who served during the five-year period immediately preceding his termination of employment with the National Aeronautics and Space Administration at the factory or plant of an aerospace contractor in connection with work being performed by such contractor on any aerospace system; or who was employed by the National Aeronautics and Space Administration during the five year period preceding the termination of his employment at an annual salary rate of GS-15 or higher; and who

"(1) was employed for any period of time during any calendar year by an aerospace contractor,

"(2) represented any aerospace contractor during any calendar year at any hearing, trial, appeal, or other action in which the United States was a party and which involved services and materials provided or to be provided to the United States by such contractor, or

"(3) represented any such contractor in any transaction with the National Aeronautics and Space Administration involving services or materials provided or to be provided by such contractor to the National Aeronautics and Space Administration, shall file with the Administrator, in such form and manner as the Administrator may prescribe, not later than March 1 of the next

succeeding calendar year, a report containing the following information:

"(1) His name and address.

"(2) The name and address of the aerospace contractor by whom he was employed or whom he represented.

"(3) The title of the position held by him with the aerospace contractor.

"(4) A brief description of his duties with the aerospace contractor.

"(5) A brief description of his duties while employed by the National Aeronautics and Space Administration during the three-year period immediately preceding his termination of employment.

"(6) A description of any work performed by him in connection with any aerospace system while employed by the National Aeronautics and Space Administration, if the aerospace contractor by whom he is employed is providing substantial services or materials for such aerospace system, or is negotiating or bidding to provide substantial services or materials for such aerospace system.

"(7) The date of the termination of his employment with the National Aeronautics and Space Administration, and the date on which his employment with the aerospace contractor began and, if no longer employed by such aerospace contractor, the date on which his employment with such aerospace contractor terminated.

"(8) Such other pertinent information as the Administrator may require.

"(c) Any employee of the National Aeronautics and Space Administration who was previously employed by an aerospace contractor in any calendar year and—

"(1) who is directly engaged in the procurement of any aerospace system or is directly engaged in the negotiation, renegotiation, approval, or disapproval of any contract for the procurement of services or materials for or in connection with any aerospace system, or

"(2) who is serving or has served as a representative of the National Aeronautics and Space Administration at the factory or plant of an aerospace contractor in connection with work being performed by such contractor on any aerospace system, shall file with the Administrator, in such form and manner as the Administrator may prescribe, not later than March 1 of the next succeeding calendar year, a report containing the following information:

"(1) His name and address.

"(2) The title of his position with the National Aeronautics and Space Administration.

"(3) A brief description of his duties with the National Aeronautics and Space Administration.

"(4) The name and address of the aerospace contractor by whom he was employed.

"(5) The title of his position with such aerospace contractor.

"(6) A brief description of his duties at the time he was employed by such aerospace contractor.

"(7) A description of any work performed by him in connection with any aerospace system while he was employed by the aerospace contractor or while performing any legal services for such contractor, if such contractor is providing substantial services or materials for such aerospace system or is negotiating or bidding to provide substantial services or materials for such aerospace system.

"(8) The data on which his employment with such contractor terminated and the date on which his employment with the National Aeronautics and Space Administration began thereafter.

"(9) Such other pertinent information as the Administrator may require.

"(d) (1) No former employee of the National Aeronautics and Space Administration shall be required to file a report under this section for any year in which he was employed by an aerospace contractor if the total

cost to the United States of services and materials provided the United States by such contractor during such year was less than \$10,000,000; and no employee of the National Aeronautics and Space Administration shall be required to file a report under this section if the total cost to the United States of services and materials provided the United States by the aerospace contractor by whom such employee was employed was less than \$10,000,000 in each of the applicable calendar years that he was employed by such contractor.

"(2) No former National Aeronautics and Space Administration employee shall be required to file a report under this section for any calendar year on account of employment with the National Aeronautics and Space Administration if such active duty or employment was terminated three years or more prior to the beginning of such calendar year; and no employee of the National Aeronautics and Space Administration shall be required to file a report under this section for any calendar year on account of employment with or services performed for an aerospace contractor if such employment was terminated or such services were performed three years or more prior to the beginning of such calendar year.

"(e) The Administrator shall, not later than May 1 of each year, file with the President of the Senate and the Speaker of the House of Representatives a report containing a list of the names of persons who have filed reports with him for the preceding calendar year pursuant to subsections (b) and (c) of this section. The Administrator shall include after each name so much information as he deems appropriate, and shall list the names of such persons under the aerospace contractor for whom they worked or for whom they performed services.

"(f) Any former employee of the National Aeronautics and Space Administration whose employment with an aerospace contractor terminated during any calendar year shall be required to file a report pursuant to subsection (b) of this section for such year if he would otherwise be required to file under such subsection; and any person whose employment with the National Aeronautics and Space Administration terminated during any calendar year shall be required to file a report pursuant to subsection (c) of this section for such year if he would otherwise be required to file under such subsection.

"(g) The Administrator shall maintain a file containing the information filed with him pursuant to subsections (b) and (c) of this section and such file shall be open for public inspection at all times during the regular workday.

"(h) Any person who fails to comply with the filing requirements of this section shall be guilty of a misdemeanor and shall, upon conviction thereof, be punished by not more than six months in prison or a fine of not more than \$1,000, or both.

"(i) No person shall be required to file a report pursuant to this section for any year prior to the calendar year 1970."

Mr. PROXMIRE. Mr. President, this amendment is a companion to another amendment I offered to the 1970 military authorization bill. That amendment was agreed to by the Senate on September 9, 1969, by a vote of 90 to 0.

I have discussed this amendment with the distinguished Senator from Nevada (Mr. CANNON) and the distinguished Senator from Maine (Mrs. SMITH). It is my understanding that there is no opposition to the amendment on the part of the leadership of the bill. I shall briefly make a few remarks to explain the amendment for the Record.

SUNLIGHT IS A GREAT DISINFECTANT

Mr. President, the fundamental purpose of this amendment is exactly the same as the one that was adopted for the military authorization bill: sunlight is a great disinfectant. The amendment would require former employees of NASA, who worked on procurement or other contractual work while at NASA, and who now work for companies who do more than \$10,000,000 of business annually with NASA, to disclose certain facts to the NASA Administrator by March 1 of each year. The amendment would also apply to any former NASA employee whose annual salary was GS-15 or higher, whether or not he worked directly on procurement.

The information to be disclosed would include their names, title and description of their work at NASA during the 5 years prior to retirement, the date of retirement, the date of employment with the contractor, and the title and description of their work with the contractor. In addition the amendment would require a declaration of any work on planning, research, or decisionmaking on any product, contract, aerospace system or component in which the employee was involved while at NASA and in which his employer was involved while at NASA and in which his employer has a substantial interest.

The amendment would not require any salary information to be divulged.

DISCLOSURE ALSO REQUIRED FOR FORMER AEROSPACE EMPLOYEES

Similarly, the amendment calls for the same type of disclosure by present NASA employees who previously worked for an aerospace contractor doing more than \$10,000,000 in business with NASA. It requires disclosure by them of any work by them on specific products, research, aerospace systems or components in which his previous employer had a substantial interest, in order that conflicts may not develop.

The amendment requires that the information be open to inspection by the press and public at NASA.

The amendment also calls for the Administrator to make an annual report to Congress by May 1 of each year giving the information in an organized and tabulated form. While the reporting requirement in the bill has been written in general terms, in order to avoid requiring an excessive amount of data, it is nonetheless the intent of this provision that the pertinent information be provided or summarized.

DATA TO BE OPEN FOR PUBLIC INSPECTION

Mr. President, essentially what my amendment would do is to make this information available on a regular basis to Congress, to the press, and to the public. While I am certain that the number of conflicts that do arise in the two-way traffic that exists between NASA and aerospace contractors is relatively small, and while I am even more certain that the number of deliberately created conflicts are very small indeed, this amendment will go a long way toward eliminating those conflicts that do exist now, or those that might otherwise arise in the future. This in turn will insure that contracts between the space agency and

aerospace contractors are negotiated and executed on an arms-length basis.

AMERICAN TAXPAYER ENTITLED TO 100 CENTS ON THE DOLLAR

The American taxpayer is entitled to receive 100 cents of benefits for every dollar that is spent on the U.S. space program. My amendment seeks to make good on this obligation.

Mr. President, when I offered a similar amendment in connection with the military authorization bill the distinguished Senator from Maine suggested that this amendment should not simply apply to the military but to other procurement programs. I think this was an excellent suggestion and this is the principal reason I have offered the amendment today. I intend to offer it to other procurement measures as they come up.

Mrs. SMITH of Maine. Mr. President, will the Senator from Wisconsin yield for a question?

Mr. PROXMIRE. I am happy to yield to the distinguished Senator from Maine.

Mrs. SMITH of Maine. Would the Senator advise me if his amendment covers the \$100 a day consultants?

Mr. PROXMIRE. We handle this the same way we handle the \$100 consultants in the military. In other words, if it is within the definition here of those who work for a contractor who does a \$10 million business a year with NASA, they would be covered.

Mrs. SMITH of Maine. I thank the Senator from Wisconsin very much.

Mr. CANNON. Mr. President, will the Senator from Wisconsin yield?

Mr. PROXMIRE. I yield.

Mr. CANNON. I have discussed this with the distinguished Senator. I believe it is a good amendment. I supported it and voted for it when it came up on the military authorization bill. I think that if we are going to have it in that area, we should have it in other areas dealing with the Government. I therefore am willing to accept the amendment.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Wisconsin.

The amendment was agreed to.

Mr. PROXMIRE. Mr. President, I want to apologize to my colleagues for bringing up these amendments at this late hour. It is late. I know that all of us would like to go home for dinner. This is an imposition on my fellow colleagues. At the same time, I should like to explain why it is necessary to do this now. I understand that the Senate will convene tomorrow at 10 o'clock a.m., and I shall be tied up in hearings at that time and will not be able to be here at that time.

Thus, this is the only time these amendments could be offered and I do wish to discuss them, even though the circumstances are such that I do not intend to press them to a vote at this time. I intend merely to explain them and explain why I think it is necessary for the Senate to consider the points I raise.

THE 1970 NASA AUTHORIZATION: AN APPROPRIATE TIME FOR REAPPRAISAL

Mr. President, as the Senate considers H.R. 11271, the NASA authorization bill for fiscal 1970, I think this is an appro-

prate time to ask a few questions about where the space program is going, and what we hope to accomplish during the next decade.

This is certainly an apt time for re-evaluation. It was at the beginning of the 1960's that President Kennedy made his historic speech to a joint session of Congress that committed the United States to go to the moon within the decade. This challenge set the Nation's space program into high gear. Cape Canaveral—now Cape Kennedy—was expanded, the Manned Space Center in Houston came into being, the aerospace industry geared up its facilities, NASA built its personnel up to 420,000 employees, overwhelming media coverage of space flights whipped up public enthusiasm for the moon landing goal, and Congress played its role by providing funds of up to \$6 billion a year for space activities.

Two months ago, the Nation achieved its goal of landing a man on the moon.

I know of no previous instance where the will of an entire Nation was galvanized to such an extent upon a single goal. Few would deny the outstanding nature of this achievement. Some have compared it to Columbus' voyage to the New World; President Nixon has said that the 8-day journey of Apollo 11 was the greatest week since the Creation.

MOON LANDING DOES NOT CURE SOCIAL PROBLEMS

Whether one agrees or disagrees with these statements is not particularly important. What is important, and what has tended to get lost in the single-mindedness of this mission and the glow of the praise and glory heaped on Apollo 11, is the tremendous sacrifice that this country made in order to reach the moon before midnight, December 31, 1969. While \$24 billion was being spent to put a man on the moon, our urban ghettos exploded, our poverty programs languished, our surface transportation system choked to a crawl, our housing shortage became more acute, our national crime statistics grew to alarming proportions. And we have suffered one of the most serious periods of inflation in our history with more inflation to come—far more—in part from our space spawning. In addition, far too little progress was achieved in the key areas of education, medical research, and environmental control. And many Americans are one the verge of a taxpayers' revolt. While our attention has been focused on the heavens, our social problems have festered to a critical level.

Mr. President, the United States can no longer afford the luxury of spending untold billions on space while domestic ills go unheeded. Now that the moon landing goal has been achieved, the time is ripe for a wholesale reappraisal of the space program: Where is it going? What do we hope to accomplish? How soon should we—not can we—achieve our objectives? And, what are the prospects for international cooperation in this area?

Mr. President, these questions should be answered before Congress approves the NASA authorization bill for the present fiscal year. It would be irresponsible of us to do otherwise. We have reached a turning point in our exploration of the universe. We cannot go on blindly with the space program as it is—

including three manned flights to the moon a year—without giving heed to other legitimate demands on our resources.

TIME TO REASSESS PRIORITIES

Now is the time, Mr. President, to reassess our spending priorities in these areas.

INTERNATIONAL COOPERATION IN SPACE

Perhaps the most important question that we should be asking ourselves is: Must we go it alone?

When the space age opened on October 4, 1957, with the dramatic flight of Sputnik I, the United States and the Soviet Union entered into a breakneck race to be first with a man on the moon. In recent years, though, there appears to have been a slackening in the Soviet effort, prompted perhaps by the Soviet realization that the space race was not worth the tremendous investment of limited Soviet resources. For the past few years, the United States has had the field to itself. Not entirely to itself, of course, but we have steadily moved far out in front of the Russians.

This solitary position at the head of the space race has brought some intangible but significant dividends in terms of international prestige. Having achieved this preeminent position, however, we can afford—in terms of prestige—to share the knowledge we have gained, and the opportunity to extend the reaches of that knowledge, with the international community. Moreover, considering the gigantic costs of space exploration that lie ahead, I believe we cannot afford to proceed in this area without first exploring the possibilities of opening up our space program to the international community.

Accordingly, Mr. President, I hereby introduce a new section 7 to the 1970 NASA authorization bill, H.R. 11271, as follows:

Sec. 7. Of the funds authorized pursuant to subsection 1(a)(1), \$300,000,000 which has been earmarked for operations of the Apollo missions shall not be obligated or expended until the Administrator, in consultation with the State Department, has fully explored the possibilities of international cooperation and cost-sharing in space exploration, and has reported to Congress on the results of these efforts. These efforts shall include, but not be limited to,

(a) the possibility of establishing an international consortium, modeled after the INTELSAT communications consortium, with NASA as manager of the operations, modeled after the Communications Satellite Corporation (COMSAT) (established pursuant to Public Law 87-624); or

(b) the possibility of bringing the exploration of space exclusively within the jurisdiction and control of the United Nations, which would establish a United Nations Space Council modeled after the World Health Organization.

I ask unanimous consent that the amendment lie at the desk and be printed.

The PRESIDING OFFICER. Without objection, the amendment will be received and printed; and will lie at the desk, as requested.

INTERNATIONAL COOPERATION WOULD LEAD TO UNTOLD COST SAVINGS

Mr. PROXMIRE. Mr. President, adoption of this amendment should lead to

untold cost savings. It is impossible to predict at this point just how much could be saved, but it is likely that initially the savings would be relatively modest due to the fact that as of now only one other country has a space capability that even approaches ours. However, with the passage of time, savings resulting from the decision to internationalize space exploration should be very considerable, as more and more nations contribute money, technical know-how, human resources, and equipment to this undertaking.

It has been estimated that the flight to Mars may cost \$200 billion and may be even greater than that before we explore the solar system and start off somewhere else.

In addition, my amendment would make it clear to the international community that we explore space not just for national gain, but to add to the knowledge of all mankind and, hopefully, for the betterment of human conditions around the globe.

Unfortunately, there are those who probably will disagree with these idealistic purposes. Officials at the National Aeronautics and Space Administration have on a number of occasions expressed the view that the principal reason for the U.S. space program is competition. Dr. Werner von Braun, in appearing before the Manned Space Flight Subcommittee of the House Science and Astronautics Committee in March of this year, alluded to the policy of the United States on international cooperation, and then observed:

We cannot ignore that historically and still perhaps the most significant reason to progress in space both now and for the long range is competition with its many forms of stimulating challenge, intrigue, and threat. (House hearings, Vol. 2, pg. 489).

Earlier in those same hearings last March a very similar statement was made by Dr. George E. Mueller, NASA's Associate Administrator for Manned Space Flight:

Historically, the first and still perhaps the most significant reason for this nation's need to progress in space is competition—competition on a worldwide basis and on several different fronts. . . . The visible results of the space program are taken by others as a basis for judgments of the technological and management strength of the nations engaging in the competition. Thus the competition contributes to shaping the world of the future and our country's role in that world. (House hearings, Vol. 2, pg. 14).

Mr. President, I could not disagree more with these statements. Aside from the arms race, I can think of nothing that is more wasteful, or more duplicative, than to have two countries—and possibly more—pursuing the same goal whose dividends will benefit all mankind.

WHAT ARE THE GOALS OF THE MOON PROGRAM?

As stated by NASA, the Apollo program is designed to provide clues to the origin and development of the moon, the earth, and the entire solar system. If this is the primary mission of the Apollo series, I can think of nothing which is less of a national character, or which has more of an international purpose, than such a goal. Surely the Russian man on the street would feel the same

thrill of discovery as the American man in the street at new information concerning the origin of our planet and the beginnings of the human race.

Achievements in space are wholly unlike expansion of the gross national product, say. Efforts to expand the gross national product can arouse healthy competition between nations which involves no duplication and which will improve the world economic situation.

Not so the space race. Competition in space has compelled the United States and the Soviet Union to spend untold millions on development of booster rockets—rockets with sufficient thrust to launch a payload weighing a couple of hundred tons, propellants capable of delivering 7½ million pounds of thrust to the booster rocket, spacecraft which can maneuver in space and survive its perils, instruments for communicating with the space vehicle and for tracking its progress, and recovery facilities to guarantee a successful conclusion to any space mission. If the two countries had cooperated from the very beginning, the cost to each country could have been cut by more than half. I say more than half, because undoubtedly mistakes have been made along the line by each country that could have been avoided had the two countries cooperated fully from the start.

EISENHOWER CAUTIONED AGAINST SPACE RACE

Mr. President, in November of 1960, in the closing days of his administration, President Eisenhower received a report from the Eisenhower-appointed Commission on National Goals. The Commission made some very perceptive and far-sighted observations with respect to the then budding U.S. space program:

The United States should be highly selective in our space objectives and unexcelled in their pursuit. Prestige arises from sound accomplishment, not from the purely spectacular, and we must not be driven by nationalistic competition into programs so extravagant as to divert funds and talents from programs of equal or greater importance.

Those words of caution make a great deal of sense. The man to whom they were addressed thought so, too. President Eisenhower was never a man to rush headlong into things, and he was acutely aware of the numerous demands on the nation's resources. On receiving the report of his Commission, Eisenhower said:

The moon has been up there a — of a long time. If we don't get there tomorrow, it won't go away.

If Ike's comment made good sense in 1960, it makes even more sense today. We have been to the moon. We can afford to bide our time before going back for that second, third, and fourth visit, and so on.

INTERNATIONAL CONSORTIUM FOR SPACE

I have just a few comments on the specifics of my amendment to internationalize space exploration. The amendment calls upon NASA to consider the example of the Intelsat consortium as one avenue toward international cooperation and sharing of costs. The Communications Satellite Corporation—

Comsat—was set up in 1962 pursuant to the Communications Satellite Act. Since 1962 Comsat has acted as manager for the Intelsat international consortium in arranging for satellite launches, and Comsat has also served as the American representative in the consortium. Member nations own and operate earth stations that are located in their country—stations are strategically situated around the globe for the purpose of tracking the satellites and communicating with them. Since all of the launch capability and most of the technological capability is presently concentrated in the United States, Comsat, the American representative, is charged with management responsibility for the entire system. Nevertheless, the goal of global communications is one in which all nations share a common interest. This has been borne out by the resounding success enjoyed by Intelsat in the 7 years of its existence. More than 60 nations now belong to the consortium and share its costs.

The possibility of establishing a similar international consortium for space missions is certainly worth exploring. Space exploration, like global communications, is a goal in which all nations have a common interest. Success of the Comsat experiment augurs well for the approach outlined in my amendment. Of course, should NASA and the State Department recommend the establishment of such an organization, an Act of Congress would be required to set the necessary wheels in motion.

A UNITED NATIONS SPACE COUNCIL

My amendment would also direct NASA and the State Department to consider the possibility of bringing space exploration under the jurisdiction and control of the United Nations. Such a step, if recommended, would emphasize the peaceful nature of space exploration, and could even provide a mechanism for insuring against the use of space for military advantage.

Utilizing the United Nations would permit each of the 120-odd member nations to contribute whatever they could—in terms of manpower, money, equipment, technology—to the common pursuit of knowledge. The mechanism could be structured along the lines of the World Health Organization, a U.N. subsidiary whose aim of advancing the cause of science and medicine is not too far different from the U.N. Space Council which I am proposing. A corollary benefit of this approach could be to bolster and revitalize the parent United Nations, which today is little better than a world debating society.

Finally, a word of explanation regarding the sum of \$300 million which would be frozen pending these studies. I have directed my amendment at the manned space program, since at present it offers more opportunities for international cooperation than the unmanned projects. The unmanned programs, such as the Mariner flights to Mars, depend almost entirely upon advanced technological knowhow—knowhow which would be difficult or impossible for other nations to contribute at the present time. The Apollo program, though, offers a unique opportunity for cooperation. I believe, for

example, that a Russian cosmonaut should be invited along as one of the three-man Apollo crew at the earliest opportunity.

I am informed by NASA that since the hardware—that is, rocketry and spacecraft—for the remaining Apollo missions is well along into production, no reduction or freezing of these funds would be feasible. It is in the area of operations that cooperation and cost-sharing is particularly appropriate. According to NASA:

The \$450.6 million that is earmarked for operations is to be used for a pre-launch checkout, test, and launch effort required for the Apollo system at Kennedy Space Center and the crew flight and recovery operations managed by the Houston Manned Spacecraft Center. The maintenance of operations of launch complexes and associated Kennedy facilities as well as the computer complex at Mission Control Center, Houston, are included in this category.

I see no reason why, with reasonable training and experience, men of all nationalities could not participate in the prelaunch checkout, the launch effort, communications, tracking, and the recovery effort. In addition, sharing the costs of maintaining and operating the space centers at Cape Kennedy and Houston should be feasible, on a pro rata basis.

TWO-THIRDS OF OPERATIONS FUNDS WOULD BE FROZEN

Accordingly, my amendment pertains to two-thirds of the requested sum for Apollo operations for fiscal 1970—that portion which is to be used in the second and third Apollo launches of the fiscal year. One-third of the operations funds—those for Apollo 12 which is scheduled for a November 1969 launch—would not be affected, since preparations for that flight are already too far advanced for any feasibility studies on cost-sharing to be completed in time.

Mr. President, I shall be much briefer in discussing my other amendments.

POSTPONE MANNED LUNAR LANDINGS

My second amendment to the NASA authorization bill would delete \$800 million from the Apollo program. Mr. President, amendment No. 2 to H.R. 11271, which I hereby submit, reads as follows:

On page 10, line 14, strike "\$1,691,100,000" and insert in lieu thereof "\$891,100,000".

I ask that my amendment be received and printed and lie at the desk.

The PRESIDING OFFICER. The amendment will be received and printed and will lie at the desk.

Mr. PROXMIRE. Mr. President, the purpose of my amendment is a simple one: It would close down the Apollo program.

The alternative is either to internationalize it or close it down.

Mr. President, I have combed the House and Senate hearings on this bill for an understanding of what NASA expects to accomplish with the remaining nine flights. The Apollo 11 flight has already achieved the primary mission of returning lunar samples for analysis.

I think that was a very valuable flight in terms of international prestige. I would say, in retrospect, it is one of which we can be extraordinarily proud.

It achieved the emplacement of three simple devices on the moon: A solar-powered seismometer to detect moonquakes, a reflector that will return a laser beam for more exact measurement of the earth-moon distance, and an aluminum foil detector for solar wind particles.

Later flights in the Apollo program will simply employ somewhat more sophisticated devices in an effort to retrieve more data of a similar nature. The second Apollo landing mission is designed to implant devices that can employ a nuclear isotope power supply that would permit operation of 1 to 2 years. This and other flights would use the Apollo lunar experiment package at different points on the moon to investigate the internal structure of the moon, measure its energy budget, and detect charged particles and magnetic fields at various locations. Still later flights would go to more difficult anomalous sites, in order to sample each of the major classes of anomalies. These would focus on volcanic types, sinuous riverlike channels, fracture zones, and impact craters.

WHAT NASA HOPES APOLLO WILL ACCOMPLISH

Mr. President, I have just received a letter from NASA dated September 18, 1969, which sets out its most recent position on what it hopes the Apollo program will accomplish.

In reading from this letter, I should like to point out that I directed a letter to NASA in response to an earlier letter that I received from them, in which I asked them to be specific and tell me just exactly what we can expect to achieve by way of benefit from these moon flights, in terms of the broad benefits which the space program serves with respect to communications, with respect to meteorology, with respect to earth resources, and with respect to advancing science and technology, education, and human fulfillment.

Their response, in their letter to me, was as follows—and I think it is very interesting in indicating the paucity of value from these enormously expensive flights. As I say, we could save \$800 million.

They answered:

Manned lunar exploration in the near term will contribute primarily to the fulfillment of the human goal of exploration and to advancing our scientific knowledge and understanding of the moon and thereby of the earth and the other elements of the solar system.

In other words, all the moon flight is going to do is make us feel better. Human fulfillment. It gives somewhat better knowledge of the way the earth developed, the moon developed, and the solar system developed, but knowledge which they cannot show would be of any benefit in solving any of our domestic problems in terms of health, in terms of a better life, or in terms of improving the lot of a single human being here on earth.

They added:

In the long run, manned exploration of the moon—like other exploration into the unknown—will undoubtedly have many other significant direct benefits which are not now foreseen.

In other words, we do not know what we are going to get. I want to make it clear that I am not saying we should end our exploration forever. What I am saying is that in this period of serious inflation, when we are faced with a taxpayers' revolt, and when we have these very urgent domestic needs, we can postpone manned lunar flights, since there is no real purpose served, and NASA cannot come up with any purpose.

NASA goes on to say:

Our continuing program of exploration of the moon will also contribute to the other goals of a balanced total space program. For example, the laser reflectors planned for the later Apollo experiment packages will stimulate the use and development of laser technology, not only as measuring systems but as communications devices. Laser technology may hold the answer to the growing problem of radio frequency spectrum saturation which today concerns all nations as the demands for data, voice, and television communications between people and places continue to expand. Another Apollo experiment will detect and measure the solar wind from the lunar surface; the solar wind has a significant role in affecting the earth's environment, especially radio propagation and perhaps weather. Our earth orbital programs can benefit from the experience we will obtain in using manned techniques for investigating the moon from lunar orbit. Further, the precise measurements of earth-moon distances and motions made possible with laser reflectors hold promise for aiding in the understanding and prediction of terrestrial phenomena such as sea and earth tides, earthquakes, and continental drift.

Mr. President, I submit that all this can be achieved with unmanned instrumented exploration, as the President's Scientific Advisory Council 2 years ago suggested it could, especially in view of the enormous cost of this manned flight.

NO REASON TO HURRY TO THE MOON

Mr. President, there is not one iota of data in what NASA expects to obtain that we must have in a hurry. In fact, I am not sure I see the relevance of this data at all. But in any event, I do not see how the availability of this information is going to improve the quality of life here on earth, and how postponing the acquisition of this knowledge from 1972 to 1975 or 1980, or later would impede the solution to any of our earthly problems.

Moreover, it is quite possible that as a result of postponing any further lunar landings for a decade or more, NASA may, through increasing technology, be able to achieve more per mission than it could otherwise. NASA may even find at some point in the 1970's that we have learned as much as we need to know about the moon, and the remaining unused Saturn V's could be put to use on other missions.

THE "LEIF ERICSON" JUSTIFICATION

When this suggestion was put to NASA during the Senate hearings, the space agency countered with its "Leif Ericson" argument. The argument runs as follows:

Dr. MUELLER. The exploration of these norms provides only a fraction of what we require to determine whether the moon is worth exploring. It is as if we explored North America by one-day visits to the East and West Coasts, the Gulf Coast and the Great Plains. The next step required is the sam-

pling of each of the major classes of anomalies. If we do not take this next step, we face the hazard of repeating the error of Leif Ericson, who discovered America three centuries before Columbus but failed either to return or to stimulate others to return because he found nothing of interest.

Our studies have led us to the conclusion that the way to avoid the error of Leif Ericson is to examine the major classes of anomalies that we know exist on the moon. . . . (House Hearings, Vol. 2, pg. 18).

I am amazed, Mr. President, that NASA would even offer such an argument to justify the Apollo program's continued existence. The analogy is so farfetched, so inept, that the argument, in fact, cuts the other way. North America, as discovered by Leif Ericson, abounded with life, natural resources, and physical beauty. Had Ericson ventured further, he would have discovered endless examples of nature's beneficence: streams, mountains, fields, valleys, canyons, forests, multiple species of plant and animal life, and, of course, human beings.

WHAT DOES THE MOON HAVE TO OFFER?

What does the moon have to offer? By and large, we already know the answer to this question. The moon is a lifeless barren piece of rock, floating in the cold vacuum of space some 240,000 miles from earth. This is precisely why the Leif Ericson argument cuts the other way. Ericson had no idea of America's riches, and failed to explore for them, with the result that the meaningful discovery of this continent did not come until centuries later. But where the moon is concerned, we already know from our unmanned missions, plus the Apollo 11 voyage, that there is no possibility whatsoever of life, no possibility of water—indeed, no possibility of anything that would make the moon worth colonizing. Mr. President, what is our rush to get to such a barren environment?

Mr. President, I ask unanimous consent to have printed in the RECORD the letter from Dr. Paine from which I have just read.

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

NATIONAL AERONAUTICS AND SPACE

ADMINISTRATION,

Washington, D.C., September 18, 1969.

HON. WILLIAM E. PROXMIER,
U.S. Senate,
Washington, D.C.

DEAR SENATOR PROXMIER: This is in reply to your letter of September 13 asking some further questions with respect to my reply of September 12 to the questions in your letter of September 8.

1. Your first question concerns the relationship of future manned Apollo lunar missions to advances in science, applications, technology, and human fulfillment. The statement you referred to on page 4 of my September 12 letter related to the expected advances and benefits of a *balanced total space program*, i.e., a program balanced with respect to near and long-term benefits and with respect to the several goals of the space program, including space exploration, space application, scientific research, and advancement of technology. A continuing program of manned lunar exploration is one essential feature of such a balanced total program. Other essential segments of a balanced total program focus directly on fields such as communications, meteorology, earth resources, and space science. Manned lunar ex-

ploration in the near term will contribute primarily to the fulfillment of the human goal of exploration and to advancing our scientific knowledge and understanding of the moon and thereby of the earth and the other elements of the solar system. In the long run, manned exploration of the moon—like other exploration into the unknown—will undoubtedly have many other significant direct benefits which are not now foreseen.

Our continuing program of exploration of the moon will also contribute to the other goals of a balanced total space program. For example, the laser reflectors planned for the later Apollo experiment packages will stimulate the use and development of laser technology, not only as measuring systems but as communications devices. Laser technology may hold the answer to the growing problem of radio frequency spectrum saturation which today concerns all nations as the demands for data, voice, and television communications between people and places continue to expand. Another Apollo experiment will detect and measure the solar wind from the lunar surface; the solar wind has a significant role in affecting the earth's environment, especially radio propagation and perhaps weather. Our earth orbital programs can benefit from the experience we will obtain in using manned techniques for investigating the moon from lunar orbit. Further, the precise measurements of earth-moon distances and motions made possible with laser reflectors hold promise for aiding in the understanding and prediction of terrestrial phenomena such as sea and earth tides, earthquakes, and continental drift.

I feel these examples show some of the ties which link virtually all aspects of the space program and make the advances and discoveries in one field applicable to many others. Taken together, a balanced total space program can lead to a wholly new human understanding of the total human environment—on earth and in space.

2. In response to your question concerning the impact of an immediate decision to terminate all manned space flight activity including contract terminations and shutdown of centers, our best quick estimate is that approximately \$800 million from the total NASA budget request would be saved in FY 1970. This estimate is based on the assumption that actions to terminate would be initiated after the flight of the Apollo 12 in November. I am sure you understand that this is necessarily an extremely gross order of magnitude estimate. A more accurate estimate would require a detailed analysis involving many assumptions and examination of literally thousands of individual items.

Our preliminary estimates indicate that when known liabilities are accounted for, virtually no savings would accrue in FY 1970 from closing down the Kennedy, Marshall, and Manned Spacecraft Centers. Indeed, when proper account is taken of the need to protect the government's investments in facilities and equipment, some net additional costs would probably be incurred.

In the case of terminating existing contracts for Apollo hardware, NASA obviously has not experienced a comparable program termination and, consequently, we do not have a sound basis to estimate accurately in a very short time the total consequences of such an action. Therefore, we can only base our estimates on information available concerning the termination of major programs in other agencies. Our estimate of \$800 million is based, in part, on the assumption that NASA's experience would be similar to these limited cases, although we have not established that a reliable relationship exists between them.

3. From a strictly legal standpoint, the answer to your question regarding authorization for the Apollo program is that the basic activities of NASA are authorized in the National Aeronautics and Space Act of 1958,

as amended. This Act, as amended, also requires the Congress to authorize appropriations for the activities of NASA and establishes the authority for NASA to enter into such contracts as may be necessary in the conduct of its work.

NASA presents all of its programs to the House and Senate Space Committees each year and the scope and content of the programs are reflected in the Committee Hearings and reports. Congress then first authorizes and then appropriates the annual increments of funds required to carry forward the programs each fiscal year.

The extensive record built up over the years by the Committees of both Houses of Congress shows clearly that fifteen Saturn V/Apollo flights have been contemplated by NASA and the Congress. This point has been discussed in published hearings and reported to Congress in Committee reports each year since the inception of the Apollo program. In addition, since FY 1965 NASA has provided, and the Senate hearing transcript has published, the estimated total cost of the Apollo program covering all years. A list of typical references are attached (Enclosure 1).

The Senate is not being requested to authorize the hardware for the fifteen flights; the Senate is being requested to authorize the appropriations necessary to fund the FY 1970 increment of the program. The \$1.691 billion requested for FY 1970 will support flight and mission operations requirements for three missions in this fiscal year (Apollo 11, 12 and 13) and the incremental contract cost of the remaining seven Saturn V launch vehicles and associated spacecraft which are in various stages of completion. The detailed production and delivery status of these major hardware items was provided in my previous letter.

I trust this information meets your requirements.

Sincerely,

T. O. PAINE,
Administrator.

CITATIONS TO SOME OF THE AUTHORIZATION HEARINGS AND REPORTS DEALING WITH THE APOLLO PROGRAM SCOPE

1. Hearings before the Committee on Aeronautical and Space Sciences, U.S. Senate.

(a) NASA Authorization Hearings for FY 1965, p. 480.

(b) NASA Authorization Hearings for FY 1966, pp. 19; 646; 847; and 869.

It should be noted that the House Authorization Hearings each year extensively cover similar material.

2. Reports of the Committee of Aeronautical and Space Sciences, U.S. Senate.

(a) NASA Authorization for FY 1965—Report No. 1054, June 2, 1964, p. 6 and following.

(b) NASA Authorization for FY 1966—Report No. 188, May 13, 1965, p. 5 and following.

(c) NASA Authorization for FY 1967—Report No. 1184, May 23, 1966, p. 7 and following, pp. 12, 13 and following.

(d) NASA Authorization for FY 1968—Report No. 353, June 23, 1967, p. 4 and following, pp. 11–16.

(e) NASA Authorization for FY 1969—Report No. 1136, May 21, 1968, p. 4 and following, pp. 10, 66, 14–18.

3. Reports of the Committee on Science and Astronautics, House of Representatives.

(a) NASA Authorization for 1965—Report No. 1240, March 8, 1964, p. 7 and following.

(b) NASA Authorization for 1966—Report No. 273, May 3, 1965, p. 6 and following.

(c) NASA Authorization for 1967—Report No. 1441, April 20, 1966, p. 6 and following.

(d) NASA Authorization for 1968—Report No. 338, June 6, 1967, p. 5 and following. Note p. 20, and following, also p. 35.

(e) NASA Authorization for 1969—Report No. 1181, March 19, 1968, p. 5 and following. Note p. 13 and following.

Mr. PROXMIRE. My view of the letter, or the way I interpret it, certainly, is that it supports the \$800 million deletion.

Finally, Mr. President, I wish to announce to my colleagues that I do not intend to call up these amendments, for these reasons: I intended to until a few hours ago, but I have determined that the Senate is very weary of discussing this kind of action, which is very similar to the actions we took on the military procurement bill. We had a fine, constructive debate on that measure, but I am afraid that if I pressed for these amendments, in the disposition of the Senate at the present time, it is very unlikely they would receive substantial support, and I do not think it would be just to our cause.

I think if this measure had been scheduled a month later—and I am not criticizing anyone; I realize it is necessary that it be taken up now—we could have had a very useful and substantial debate, and might possibly have made substantial deletions from the bill. But under the circumstances, in view of the fact that I do not have the votes, I think it useful to discuss these amendments, but I see no point in calling them up for a vote. Consequently, I shall not do so, though I intend in the future to take a hard look at the NASA program, and do all that I can to delete unnecessary expenditures, and all that I possibly can to persuade our Government to internationalize the program and get other nations to share the cost of a program which is aimed at serving all human beings regardless of their nationality.

Mr. President, I yield the floor.

Mrs. SMITH of Maine. Mr. President, I commend the Senator of his amendment, but I would call attention to pages 636 through 638 of the hearings which list the lack of cooperation from the Soviet Union on space activities.

Mr. President, I would warn NASA to avoid temptation of overconfidence or arrogance with respect to Congress on the matter of funding simply because of the brilliant success on the Apollo 11 mission.

I, for one, am going to very carefully scrutinize NASA spending even more closely than I have in the past.

I am particularly disturbed with the consultant situation at NASA, with the amount of money spent for consultants, and with the shocking paucity of records on just what they do to earn the \$100 a day that they get, especially with the deluge 50-cent luncheons at the NASA executive mess.

Mr. CANNON. Mr. President, the distinguished Senator from Maine calls our attention to the fact that on May 1, 1969, in the hearings at page 636 to 638, the Senator from Maine inserted a very impressive list of attempts that the United States had made to try to work out a cooperative agreement with the Russians.

Since that time there have been a number of additional attempts made, commencing April 30, 1969, and continuing up to August 21, 1969.

Mr. President, I ask unanimous consent that this list may be printed at this point in the RECORD.

There being no objection, the list was

ordered to be printed in the RECORD, as follows:

The following references supplement the list of American efforts to obtain Soviet cooperation in space activities which Senator Smith inserted in the record during the hearings before the Senate Committee on Aeronautical and Space Sciences on the NASA Authorization for fiscal year 1970 on May 1, 1969 (Hearings, pp. 636-38):

April 30, 1969. Administrator Paine forwarded Academician Blagonravov a copy of the NASA publication, *Opportunities for Participation in Space Flight Investigations*, and assured him that proposals by Soviet scientists of experiments to fly on NASA spacecraft would be welcomed. Supplements to the *Opportunities* document are to be sent routinely to the Soviet Academy.

May 29, 1969. Dr. Paine invited Academician Blagonravov to attend the Apollo 11 launching and to discuss informally mutual interests in cooperative space projects. Blagonravov wired that he could not be present.

August 21, 1969. Dr. Paine invited Academician Keldysh to send Soviet scientists to a September 11-21 briefing at NASA Headquarters for investigators who may wish to propose experiments for the 1973 Viking missions to Mars. Dr. Paine suggested that this meeting serve as an opportunity for a discussion of planetary-exploration plans which could contribute to coordinated efforts beneficial to both countries. Keldysh replied on September 5 that the short advance notice precluded attendance by Soviet scientists. At the same time, he asked for copies of materials to be distributed at the meeting in order that Soviet scientists might develop proposals and suggested the possibility of discussions at a later meeting.

Mr. CANNON. Mr. President, in other words, this is one of the situations in which, if I may use the phrase, it takes two to tango. The United States of America cannot work out an agreement with the Russians and have cooperation, if they will not agree to it.

This is something we have been trying to do over the years. With respect to other countries, we have agreements with approximately 70 countries today—cooperative agreements, with other countries, in connection with various space programs that are being undertaken. We are anxious to work out additional cooperative agreements, particularly with the Russians.

I recall having served as an adviser to the U.N. Committee on the Peaceful Uses of Outer Space. I recall working with the distinguished senior Senator from Maine and others in trying to get some sort of an agreement with the Russians, which we were not able to do at that time. Since then, some small progress has been made.

The Senator from Wisconsin has also suggested that a group or a committee be formed to help work up our space goals or to decide where we are going. This is exactly what the President did. The President appointed a space task group, directing that they report to him by September 1 of this year.

They have now filed the report. The report has been made public as of September 15, and they posed various alternatives that might be followed, and three specifically, from which the President might choose to direct the Nation's effort on the space program.

All I can say is that the Senator has a very good suggestion. However, I simply say, it has already been done. And

it is now up to the President to determine which of these alternatives, if any, he elects to follow.

I commend the Senator for his very fine suggestions. Certainly I would be most pleased if we could work out cooperative agreements with the Russians and if we could reduce the cost of these tremendous programs now being borne by us that will benefit all mankind.

I think I am for his suggestions. However, if he has any specific suggestion as to how we can work out an agreement with the Russians, I would be very happy to receive it.

Mr. PROXMIRE. Mr. President, I am sure that the Senator from Maine has made a special effort in this area. Many people have told me of the work she has done on the committee, trying to explore the possibility of internationalizing the program.

The point I made is that we should not concentrate our efforts strictly on Russia. While other nations have cooperated with us in some other areas, especially in the communications satellite area, they do not have the capability that Russia has with respect to manned flights. However, they have some very skilled scientists and resources of many kinds in those other countries.

It is possible, especially in view of the achievements of the last few months, that the lunar landing has changed things greatly.

The Senator is correct. We have not gotten much cooperation from the Russians in the past. I think that since the lunar landing the situation has changed rather dramatically. The Russians recognize that we have won the big race. I hope that now we will make a very more profound effort than we have made in the past to get the Russians involved in the program, especially in view of the timing and our great advantage in having achieved our goal of getting to the moon.

With respect to the principal argument I made on why we should have 10 more landings on the moon, NASA has not been able to give me any real answer at all.

They say, "We will satisfy ourselves about the origin of the moon and the earth." But they do not give any reason why we should do it in 3 or 4 years and why we cannot wait until 1975 or 1980 to do it.

Mr. CANNON. The equipment is already built or in production. We have a substantial amount of equipment now that is bought and paid for. And it would be a very silly thing to say, "We are going to throw all of that equipment away." NASA has already stated and advised the committee that in the future they would want to give every consideration to flight opportunities for foreign nationals, including Soviet cosmonauts, in the context of substantive cooperation. They assume that the flight opportunities will increase if plans for a manned space station materialize.

They say that early negotiation would be desirable if problems of training and language are to be resolved, but that they would probably have to wait until there is an approved post-Apollo program as a basis for discussion.

Mr. President, in that connection we, of course, have indicated all along that we are very concerned about these cooperative agreements. However, in the Armed Services Committee, in the consideration of the bill that has just been acted upon today, we went into the problem of securing cooperation. This is where the big problems arose on the so-called main battle tank. This is being developed on a cooperative agreement with Germany, a country that we get along with rather well as distinguished from Russia, where we have more of a language problem and more other problems than we have with the Germans.

One of the problems that ran up the cost of the tank is that we are trying to do it under a cooperative agreement. We have had language barriers in connection with it and the problem of translating technical documents from one language into the other and the problem of a double decisionmaking process.

As a result, the experiment on this cooperative agreement ended up costing the Government of the United States very substantially more money than it probably would have cost had we gone on our own to do the project. And the Germans made quite a sizable contribution themselves in connection with the main battle tank.

I simply say that the fact that we work out a cooperative agreement to do something in and of itself does not necessarily prove that we will reduce the costs or get along on the program better.

Mr. PROXMIRE. Mr. President, the amendment I have offered would provide, first, that we would not stop the funds on the November flight, the flight coming up next; Apollo 12. It would provide that we would, however, freeze further funds until we get a formal report from the State Department and NASA to Congress on the feasibility—which we have never had before—of internationalizing the space program.

It is true that the reports indicate that we have not received much cooperation thus far. However, what do we have to lose?

We want to hold NASA's feet to the fire and hold the State Department's feet to the fire so that if they try hard and make an effort they might get cooperation from the other side.

It seems to me that if the Russians refuse to cooperate, we will have made it clear to the rest of the nations throughout the world how sincere we are in attempting to internationalize the effort we have made.

We are very anxious to do this and to cooperate with the Soviet Union and with the other superpowers. I cannot think of anything that would be more encouraging and constructive to people throughout the world than that these two nations are cooperating.

I think the Senator is being unduly pessimistic in thinking that they will say "No." Why should we not try it?

Mr. CANNON. Mr. President, the list I submitted for the RECORD indicates that the last contact came during the early part of September of this year. That does not indicate that we are throwing our hands in the air and trying not to cooperate, because it is still September.

The list which I submitted as a supplement to the list furnished by the distinguished Senator from Maine in our hearings shows that the effort to get cooperation has continued, a series of attempts, up to the present time, up to September.

On the other point, as to cutting off after Apollo 12, we have nine Saturn V's now that are either built or in the process of construction. This is a pretty expensive piece of hardware to stop everything and say, "Hold the boat. We're not going to go any further. We have invested this money, but let us not spend any more money because we can't get cooperation from the Russians or someone else."

Mr. PROXMIRE. I cannot resist one Parthian shot. The Senator from Nevada seems to be saying that we have spent the money and have the equipment. Therefore, why not use it, even if there is no real purpose to be gained in doing so? Why not go ahead with it? Well, we can save \$800 million by not using it, according to the letter from Dr. Paine. That is his own estimate. I think he is being conservative. We can save \$800 million. I think that is a very strong argument in this day of enormous burdens on our taxpayer and inflation in favor of postponing manned flights.

Mr. CANNON. I would agree with the Senator completely, if there were no real purpose to it.

Mr. PROXMIRE. What is the purpose? Mr. CANNON. The Senator from Wisconsin just read the purpose. He read that into the RECORD a few moments ago.

Mr. PROXMIRE. I am very interested to hear that, because the Senator from Nevada is an extraordinarily able Senator and has studied this program; and if anybody can give us an answer on this, I am sure he can. It is said that the purpose is to give us a better scientific knowledge of the earth and the moon and there is a human fulfillment in being able to look at television and seeing additional landings on the moon. It seems to me that this says there is not a significant purpose in benefiting human life and the quality of life in this country or in other countries.

MESSAGE FROM THE HOUSE

A message from the House of Representatives by Mr. Bartlett, one of its reading clerks, announced that the House had agreed to the report of the committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill

(H.R. 6508) to provide additional assistance for the reconstruction of areas damaged by major disasters.

ADJOURNMENT UNTIL 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 adjournment until 10 o'clock tomorrow morning.

The motion was agreed to; and (at 8 o'clock and 2 minutes p.m.) the Senate adjourned until tomorrow, Friday, September 19, 1969, at 10 a.m.

CONFIRMATIONS

Executive nominations confirmed by the Senate September 18, 1969:

AGENCY FOR INTERNATIONAL DEVELOPMENT

Joel Bernstein, of Illinois, to be an Assistant Administrator of the Agency for International Development.

Ernest Stern, of the District of Columbia, to be an Assistant Administrator of the Agency for International Development.

COMMODITY CREDIT CORPORATION

Thomas K. Cowden, of Michigan, to be a member of the Board of Directors of the Commodity Credit Corporation.

EXTENSIONS OF REMARKS

HUD'S SECRETARY GEORGE ROMNEY OUTLINES AID FOR HURRICANE VICTIMS UNDER FLOOD INSURANCE ACT

HON. JOE L. EVINS

OF TENNESSEE

IN THE HOUSE OF REPRESENTATIVES

Thursday, September 18, 1969

Mr. EVINS of Tennessee. Mr. Speaker, in 1968 the Congress enacted the National Flood Insurance Act to assist those homeowners living in areas subjected to flooding. The recent Hurricane Camille and the devastation it caused underlined the importance of the program.

In this connection, Secretary George Romney of the Department of Housing and Urban Development has recently outlined proposals to increase the efficiency and effectiveness of this insurance plan.

Because of the interest of my colleagues and the American people in this most important program, I place in the RECORD herewith a copy of a letter from Secretary Romney discussing the matter and outlining proposals to improve its administration.

The letter follows:

THE SECRETARY OF HOUSING
AND URBAN DEVELOPMENT,
Washington, D.C., Sept. 15, 1969.

DEAR CONGRESSMAN: The recent disasters caused by Hurricane Camille have emphasized the potential significance of the National Flood Insurance Program. The Program, authorized by the National Flood Insurance Act of 1968, is administered by the Federal Insurance Administration of this Department, utilizing the services of the private insurance industry. In light of the increasing number of inquiries we are receiving about the program, it may be useful

if I summarize briefly its purposes and limitations, and indicate the actions we propose to take in response to such disasters.

Based upon a recognition by the Congress of the vast number of persons currently residing in flood-prone areas and the impracticality of their relocation, the Flood Insurance Act contemplates both a comprehensive program of land management for flood-prone areas and a nationwide program of Federal flood insurance in response to the fact that such coverage is generally unavailable from private sources. Thus, as a condition of Federal insurance, and in order to minimize future losses of life and property, a community must adopt appropriate land use and control regulations restricting unwise future utilization of its flood plain.

Because of the concentration of hazards in these flood-prone areas and the consequent inability of any insurer, private or governmental, to spread the risk and the cost of insurance, the actuarial rate for flood insurance would prove prohibitive to most affected persons. Therefore, the statute provides for Federal Subsidization of the first \$17,500 of flood insurance on single family structures, the first \$30,000 on two-to-four family structures, and the first \$5,000 on the contents of any dwelling unit. Similar coverage will also be made available for small businesses in the near future. At the present time, three communities in the United States have such Federal flood insurance available—Metairie, Louisiana; Fairbanks, Alaska; and Alexandria, Virginia.

Many more communities are now seeking this coverage, but as an outgrowth of the early history of the statute, detailed rate-making studies were initially deemed necessary for each community seeking the coverage. Such studies are extremely time-consuming and would unquestionably take many years to carry out. At present, only 40 such studies are underway or under contract by the Federal Insurance Administration with such agencies as the U.S. Army Corps of Engineers and the Tennessee Valley Authority. Yet recent events have made abundantly clear the urgent need for flood insurance in

many other flood-prone areas and communities throughout the United States.

In response to the obvious insurance needs of these other areas and to the increasing social and economic costs of unrestrained flood plain development, the Federal Insurance Administrator, Mr. George K. Bernstein, has been seeking new ways of accelerating the flood insurance program and expediting the provision of Federal flood insurance throughout the United States as rapidly as statutory limitations and our existing funds permit. Thus, in August he instructed the Corps of Engineers and other agencies that all pending and future studies should be made on a zone rather than a structure basis, which would significantly shorten the time required for the study. Economies of scale and any other time and money-saving methods will be sought wherever possible.

While we cannot promise results overnight, we hope to make significant new progress in this vital program during the next few months.

Sincerely,

GEORGE ROMNEY.

TREATMENT OF AMERICAN PRISONERS BY THE NORTH VIETNAMESE AND THE NATIONAL LIBERATION FRONT

HON. DELBERT L. LATTA

OF OHIO

IN THE HOUSE OF REPRESENTATIVES

Wednesday, September 17, 1969

Mr. LATTA. Mr. Speaker, I have joined with many other Members of this House in cosponsoring a resolution, stating it to be the sense of Congress that the President, the Department of State, the Department of Defense, the United Nations, and the people of the world appeal to North Vietnam and the National Liberation Front of South