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Congressional Record

PROCEEDINGS AND DEBATES OF THE 92^d CONGRESS, FIRST SESSION

SENATE—Saturday, July 31, 1971

The Senate met at 10 a.m. and was called to order by the President pro tempore (Mr. ELLENDER).

PRAYER

The Reverend Dr. Karl B. Justus, executive director, the Military Chaplains Association of the United States, Washington, D.C., offered the following prayer:

Almighty and most merciful God, Sovereign of the nations and Saviour of men, make Thy presence felt and known in this august Chamber, hallowed by great men living and dead.

For these Senators, we pray, "Grant them wisdom, grant them courage, for the facing of these days."

We pray that Thou wilt keep safely our astronauts exploring the mysteries of the moon this day.

Bless our President, Richard Nixon, and the leaders and Members of the Senate and Congress. May America's interests and the finding of solutions to the problems confronting us within and without our borders, be uppermost in their minds—superseding all political loyalties.

Hasten the day of peace—ending a conflict in Vietnam that has been so costly in life, money, materiel, and division, but let it be peace with justice, dignity, honor, and freedom.

Hear this, our prayer today, and grant a wisdom and a vision to our Senators, that they may do something significant on the issues and problems with which they are now coping.

In Thy holy name, we pray. Amen.

THE JOURNAL

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the reading of the Journal of the proceedings of Friday, July 30, 1971, be dispensed with.

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

THE CALENDAR

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of Calendar Nos. 308, 309, and 311.

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

AMENDMENT OF THE SMALL RECLAMATION PROJECTS ACT

The Senate proceeded to consider the bill (S. 1026) to amend the Small Rec-

lamation Projects Act of 1956, as amended, which had been reported from the Committee on Interior and Insular Affairs with amendments, on page 1, line 7, after "(d)," strike out "The term 'project' shall mean (i) any complete water development or features thereof, as could be authorized for construction under Federal reclamation laws and" and insert "The term 'project' shall mean (i) any complete water development having irrigation as a purpose, including features thereof, authorized to be constructed pursuant to the Federal reclamation laws and"; on page 2, line 9, after the word "cost," strike out "indices." and insert "indices determined by the Secretary to be applicable on January 1 for the year in which the application is filed."; in line 14, after the word "project," strike "cost." and insert "cost as set forth above."; on page 3, line 2, after the word "the", strike out "project cost" and insert "maximum allowable estimated project cost as set forth in section 2 (d)"; after line 3, insert:

(4) Paragraph (3) of section 5(c) of such Act is amended to read as follows: "(3) in the case of any project involving an allocation to domestic, industrial, or municipal water supply, commercial power, fish and wildlife enhancement, or outdoor recreation, interest on the unamortized balance of an appropriate portion of the loan at a rate as determined in (2) above:".

And, at the beginning of line 11, strike out "(4)" and insert "(5)"; so as to make the bill read:

S. 1026

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Small Reclamation Projects Act of 1956 (70 Stat. 1044), as amended, is amended as follows:

(1) Subsection (d) of section 2 of such Act is amended to read as follows:

"(d) The term 'project' shall mean (i) any complete water development having irrigation as a purpose, including features thereof, authorized to be constructed pursuant to the Federal reclamation laws and (ii) any similar undertaking proposed to be constructed by an organization. The term 'project' shall not include any such undertaking, unit, or program the estimated cost of which exceeds \$10,000,000 (January 1956 prices) plus or minus such amounts, if any, as may be required by reason of changes in the cost of construction work of the type involved as shown by engineering cost indices determined by the Secretary to be applicable on January 1 for the year in which the application is filed. No loan, grant, or combination thereof for any project shall be in excess of 65 per centum of the maximum allowable estimated project cost as set forth above. Nothing contained in this Act shall preclude the making of more than one loan

or grant, or combined loan and grant, to an organization so long as no two such loans or grants, or combinations thereof, are for the same project, as herein defined."

(2) The first sentence of section 4(e) of such Act is amended by deleting ", whether the proposal involves furnishing supplemental irrigation water for an existing irrigation project, whether the proposal involves rehabilitation of existing irrigation project works, and whether the proposed project is primarily for irrigation".

(3) Paragraph (a) of section 5 of such Act is amended by deleting "\$6,500,000 or" and inserting in lieu thereof "65 per centum of the maximum allowable estimated project cost as set forth in section 2(d) or".

(4) Paragraph (3) of section 5(c) of such Act is amended to read as follows: "(3) in the case of any project involving an allocation to domestic, industrial, or municipal water supply, commercial power, fish and wildlife enhancement, or outdoor recreation, interest on the unamortized balance of an appropriate portion of the loan at a rate as determined in (2) above;".

(5) Section 10 of such Act is amended by deleting "\$200,000,000" and inserting in lieu thereof "\$300,000,000".

The amendments were agreed to.

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

INVESTIGATIONS BY THE BUREAU OF RECLAMATION

The Senate proceeded to consider the bill (S. 24) to provide that the cost of certain investigations by the Bureau of Reclamation shall be nonreimbursable, which had been reported from the Committee on Interior and Insular Affairs with an amendment, to strike out all after the enacting clause and insert:

That all costs heretofore or hereafter incurred from funds appropriated to the Bureau of Reclamation and costs transferred to it for (1) investigations and surveys of potential projects or divisions or units of projects which have not been authorized for construction prior to the date of this Act, (2) investigations and surveys of potential units or divisions of the Pick-Sloan Missouri River Basin program requiring amendatory authorization, under terms of Public Law 88-442 (78 Stat. 466), after the effective date of this Act, (3) studies of rehabilitation and betterment and water conservation requirements of existing projects relating to work for which repayment contracts have not been executed prior to the date of this Act, (4) studies relating to the comprehensive plan of development of the Missouri River Basin, and (5) general engineering and research studies shall be nonreimbursable.

The amendment was agreed to.

The bill was ordered to be engrossed

for a third reading, read a third time, and passed.

FISHERY CONSERVATION OPERATION AT THE KORTES UNIT, MISSOURI RIVER BASIN PROJECT

The bill (S. 123) to authorize the Secretary of the Interior to modify the operation at the Kortès unit, Missouri River Basin project, Wyoming, for fishery conservation, was considered, ordered to be engrossed for a third reading, read the third time, and passed, as follows:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior is hereby authorized and directed to modify the operation of the Kortès unit, Missouri River Basin project, Wyoming, authorized by the Act of December 22, 1944 (58 Stat. 887), to provide for the conservation of fishery resources.

SEC. 2. The Secretary shall operate the Kortès unit so as to maintain a minimum streamflow of five hundred cubic feet per second in the reach of the North Platte River between Kortès Dam and the normal headwaters of Pathfinder Reservoir: *Provided,* That sufficient water is available to maintain such minimum flow, without a resultant adverse effect on other water users who have valid rights to the use of this water: *Provided further,* That when sufficient water is not available to operate in this manner, water will be reserved for hydroelectric peaking power operations on a four-hour daily, five-day-week basis and any remaining water will be released for conservation of the fishery resources.

Mr. MANSFIELD. Mr. President, that concludes the call of the calendar.

APOLLO 15 ASTRONAUTS' FIRST DAY ON THE MOON

Mr. SCOTT. Mr. President, the Motor Vehicle Bureau of Planet Moon is in business today. The vehicle with operating license No. 1 is, I imagine, by this time, beginning its journey opening a new highway on the moon. I do not imagine it will be necessary for Congress to appropriate funds for a highway program up there, but I am very glad that we have opened up traffic in a new area less crowded than we are familiar with.

At the moment, there is no possibility of a collision with other vehicles. Therefore, today the American people are observing a unique situation; namely, traffic where it is not necessary to secure insurance against collision, and traffic where the view is undisturbed and there is no pollution.

This ideal situation on the moon suggests to us that there still remains so much more to be done on earth. I believe that from the fallouts of our scientific progress in moon exploration will come many benefits for earth people, and I hope that all of it can be done without any mark or notable damage to our neighbor planet.

ORDER OF BUSINESS

The PRESIDENT pro tempore. Under the previous order, the distinguished

Senator from Virginia (Mr. BYRD) is now recognized for 15 minutes.

THE RAILROAD TRANSPORTATION STRIKE

Mr. BYRD of Virginia. Mr. President, I should like to express some concern as to whether Congress should go out on a 4-week recess if the transportation strikes have not been settled.

The shutdown of the entire railroad system of the Nation will have a devastating effect on the economy, affecting every area of the Nation. It has already affected many areas.

In Virginia, a strike against the Norfolk & Western Railroad has adverse effects on the coal fields of southwest Virginia which, in turn, has a major impact on the great Hampton Roads port on the Atlantic coast. So that the ramifications are many.

The distinguished Senator from New York has presented a resolution giving certain powers to the President during the time that Congress is in recess. It has only been in the last few moments that I have had the opportunity to read the resolution, so that I have not reached a conclusion as to whether it will be adequate.

It may be adequate, but I would hope that between now and next Wednesday or Thursday the joint leadership would give a great deal of consideration as to whether Congress should be in recess at this critical time.

FEDERAL DEFICIT

Mr. BYRD of Virginia. Mr. President, the Federal Government on Wednesday announced that the official Federal funds deficit for the fiscal year 1971, which ended in June, was \$30.2 billion.

This is greater than any deficit since World War II.

The figures emphasized by the administration are lower than the figures I give, because the administration utilizes the surpluses of \$7 billion in social security and other trust funds, to make the deficit appear less, but the trust fund money cannot be used for the general operations of the Government. The so-called unified budget was a gimmick instituted by President Johnson and carried over by President Nixon to give the appearance of a lower deficit than the Government actually is running.

Mr. President, the accumulated Federal fund deficits of the last 3 years of the Johnson administration totaled \$49 billion. The accumulated Federal fund deficit of the first 3 years of the Nixon administration will be \$73 billion.

Thus, the 3-year Nixon deficit is 50 percent greater than the Johnson deficit.

For the 6-year period from 1967 to 1972, the accumulated deficit reaches the astonishing total of \$122 billion. This is a major reason for the severe inflation which is eating so heavily into the wage earner's paycheck and the housewife's grocery money.

During his campaign for the presidency, Mr. Nixon recognized the need for a balanced budget. He rightly blamed President Johnson for President Johnson's huge deficit as the major cause of inflation.

But the Nixon administration now has thrown fiscal restraint to the winds.

I say this sadly, Mr. President. I have given Mr. Nixon strong support, particularly in regard to his foreign policy. I want to see him succeed.

However, I say that it was tragic when he, last January, embraced the philosophy of deficit spending which he had previously eloquently opposed.

Mr. President, when the President submitted his budget this past January, a budget with a built-in deficit for this year, he created a mood in Washington that encourages unparalleled Federal spending.

In one program alone, Mr. President, the new welfare program, the Nixon administration seeks to double the number of individuals drawing public assistance payments. The first year's increase in cost is nearly \$6 billion.

The national debt is now \$400 billion. And the yearly interest on that debt is a staggering \$21 billion.

What does that mean to the individual citizen? It means this: That of all the personal and corporate income taxes paid into the Federal Government, 17 cents of every dollar goes to pay the interest on the national debt.

Dr. Arthur Burns, Chairman of the Board of Governors of the Federal Reserve system, last week told the Joint Economic Committee of Congress:

There is little evidence as yet of any material strengthening in the consumer or business confidence.

That is a fundamental point.

How can there be confidence on the part of the public when the Government is on such a wild spending spree? Indeed, the Government is like a drunk trying to sober up by increasing his alcoholic intake.

I think that the individual citizen of this country is a lot smarter than many of the politicians in Washington give him credit for being.

He realizes that the Government cannot spend itself into prosperity any more than a drunk can drink himself sober.

The lack of public confidence was emphasized in an interview with Mr. John J. Nevin, president of the Zenith Radio Corp., published in the New York Times on July 25.

Mr. Nevin made this observation:

The decision to buy a new car or a color television set depends on how secure a customer feels about the economy and his own job.

The economists now say that personal savings are at a ridiculous high in this country. This shows a clear lack of confidence, a fear on the part of the workingman. That's got to be overcome.

I agree with Mr. Nevin. And I think the way to overcome the very justified fear of the workingman is to put Government finances back on a sound ba-

sis. It is the workingman who must pay the bill for Government spending.

I have been deeply concerned by the reckless deficit spending policies of the Government—and am even more concerned today.

Government spending can be paid for in only two ways; either by more taxation or by more inflation.

In my judgment, our country is in deep financial trouble.

The longer the Government—namely, the Congress and the President—puts off facing this problem, the more difficult it is going to be for everybody.

Our Nation has developed the highest standard of living of any nation in the history of the world. But we can lose it.

Other nations have had a high standard of living and have lost it, because they showed no restraint or fiscal responsibility.

At the end of World War II our Nation had total reserve assets, mainly gold, totaling \$20 billion and our liquid liabilities to foreigners were \$7 billion.

Last month the U.S. total reserve assets, including gold and convertible foreign currency, fell to the lowest level since August 1938. Our reserve assets total \$13.5 billion, of which \$10 billion is gold, but our liquid liabilities to foreigners approach \$50 billion.

The dollar is devaluing itself, and as a result the American people in June faced the highest increase in the cost of living of any month in several years.

If we are going to save the dollar for the American people, if we are going to save the purchasing power of the housewife and the wage earner, then Congress and the President must work together to get spending under control.

Mr. CURTIS. Mr. President, will the distinguished Senator yield?

Mr. BYRD of Virginia. I am glad to yield to the distinguished Senator from Nebraska.

Mr. CURTIS. Mr. President, I commend the distinguished Senator from Virginia for his remarks this morning. He has said what should be said. I am pleased that he has called attention in particular to the threat to our economy and to the budget and to the value of our dollar.

If the pending welfare reform bill is passed as it is now presented to the Senate, in view of all of the other tremendous burdens falling upon the Federal Government, we cannot at this time take on a welfare bill that admittedly in the first year will increase the Federal cost by \$5.5 billion.

I commend the Senator for his statement and for his leadership.

Mr. BYRD of Virginia. I am grateful to the Senator from Nebraska. I cherish my association with him both in the Senate and on the Finance Committee.

I feel that the Senator from Nebraska has rendered his country outstanding service. He is an outstanding Senator and a Senator of whom the people of Nebraska are rightly very proud. I hope that they will keep the Senator from Nebraska in the Senate for many years

to come. He stands solid and does not shift with the political winds.

Mr. CURTIS. I thank the Senator.

Mr. BYRD of Virginia. Mr. President, I want to make just one additional comment in regard to the budget. For years the budget deficit or surplus, as the case may be—but there have been very few surpluses—has been reported on a Federal funds basis. That is the way it should be.

Then during the last year of the administration of President Johnson, they concocted a gimmick and went to what they called a unified budget. By doing that, they threw in the surpluses of the trust fund—mainly social security—which cannot be used for any purpose except the purpose for which it is designated; it cannot be used for the general operation of Government—in order to give the appearance of a smaller deficit.

President Nixon has continued that policy. Now someone in the White House has concocted something new. They have got what they call a full employment budget. No one knows what that means. No one knows what the figures are.

What they say is that we would have had a balanced budget if certain things had happened. I submit that is like an individual saying, "I would not be broke if my uncle had left me \$10,000."

I have never heard such nonsense as this so-called full employment budget. No one knows what the figures are. They can make up any figures they want to make up.

This is misleading the people, and I think it is tragic.

Mr. President, I ask unanimous consent to insert at this point in the RECORD U.S. gold holdings, total reserve assets, and liquid liabilities to foreigners for four separate periods of time.

I ask unanimous consent to insert, also, a table I have prepared showing deficits in Federal funds and interest on the national debt for the 12 years 1961-72.

In addition, I ask unanimous consent to insert a table showing Federal finances in fiscal year 1971.

Finally, I ask unanimous consent to have printed in the RECORD certain editorials pertaining to this matter.

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

FISCAL TABLES

TABLE 1.—U.S. GOLD HOLDINGS, TOTAL RESERVE ASSETS, AND LIQUID LIABILITIES TO FOREIGNERS

[In billions of dollars]

	Gold holdings	Total assets	Liquid liabilities
End of World War II.....	20.1	20.1	6.9
1957.....	22.8	24.8	15.8
1965.....	13.7	15.5	29.1
1970.....	10.7	14.5	43.3
June 1971.....	10.5	13.5	48.0

1 Estimated figure.

Source: U.S. Treasury Department.

TABLE 2.—DEFICITS IN FEDERAL FUNDS AND INTEREST ON THE NATIONAL DEBT, 1961-72 INCLUSIVE

[In billions of dollars]

	Receipts	Outlays	Deficit (-)	Debt interest
1961.....	75.2	79.3	-4.1	9.0
1962.....	79.7	86.6	-6.9	9.2
1963.....	83.6	90.1	-6.5	10.0
1964.....	87.2	95.8	-8.6	10.7
1965.....	90.9	94.8	-3.9	11.4
1966.....	101.4	106.5	-5.1	12.1
1967.....	111.8	126.8	-15.0	13.5
1968.....	114.7	143.1	-28.4	14.6
1969.....	143.3	148.8	-5.5	16.6
1970.....	143.2	156.3	-13.1	19.3
1971.....	133.6	163.8	-30.2	20.8
1972 ¹	150.0	180.0	-30.0	21.2
12-year total....	1,314.6	1,471.9	157.3	168.4

¹ Estimated figures.

Source: Office of Management and Budget, except 1972 estimates.

TABLE 3.—FEDERAL FINANCES, FISCAL YEAR 1971

[In billions of dollars]

	Revenues	Outlays	Deficit (-) or surplus (+)
Federal funds.....	133.6	163.8	-30.2
Trust funds.....	54.7	47.8	+6.9
Unified budget.....	188.3	211.6	-23.3

Source U.S. Treasury Department.

[From the Chicago Tribune, July 30, 1971]

BAD DAYS ON THE ECONOMIC FRONT

Yesterday's papers and Wednesday's brought more than two days' share of bad economic news. The best news, in fact, was the discovery that the worst piece of bad news was not true, but we'll save this until later.

First came the warning from Secretary of Commerce Stans that the United States may have a negative trade balance this year for the first time since 1893. Of course many factors affect the volume of trade temporarily, but as the graph shows, the trend has been for imports to catch up with exports. American industry and labor are increasingly unable to meet foreign competition. The longer this goes on, the more jobs will be lost to American workers and the more profits will be lost to American investors.

Then came the dismal but predictable news that the government ended the fiscal year 1971 with a deficit of \$23.2 billion, the second biggest since World War II. This was the year for which Mr. Nixon originally predicted a surplus of \$1.3 billion. By last January, this had changed to a projected deficit of \$18.6 billion. But this would not be inflationary, we were told, because projected spending was still a hairsbreadth below what the revenue would be if the economy were running at full steam. The administration had adopted the Keynesian concept of the "full employment budget" in order to make an otherwise intolerable deficit more tolerable. Now we find that the actual deficit is higher by another \$4.6 billion, but still we're told not to worry, that it satisfies the "full employment" requirements and is therefore not inflationary.

By suggesting that actual revenue doesn't really matter, Mr. Nixon's advisers have taken away the only yardstick by which the average American can judge the government's fiscal performance. We have nothing to go on but hypotheses and guesses at which no one, even in government, can be infallible. Suppose revenue had dropped by another

\$20 billion—would the resulting deficit of \$43.2 billion still be sound? Obviously this reasoning can be carried to the point of absurdity. We are entitled to a more candid explanation.

On top of these developments, the economic indicators turned down after a three-month rise, confirming the fear of many that the much touted recovery is partly wishful thinking. The increase in food prices speeded up, auguring no good for the cost of living. Strikes and the threat of more strikes are hanging over the economy like a storm cloud, and U.S. Steel's encouraging profit statement was offset by a precautionary dividend cut. The country's gold supply meanwhile declined to a new postwar low, and the corresponding rise in European reserves should serve as a warning of what to expect with the expansion and consolidation of the Common Market.

All of this bad news hits the administration at an embarrassing time, what with many people already complaining about unemployment and calling for more government spending. Aside from restraining these demands, most of which are unrealistic and politically motivated anyway, Mr. Nixon is doing the wisest thing by disengaging from Viet Nam as quickly as is sensible.

The good news of the day is that there seems to be no truth to Tuesday's report that the White House was considering making the Federal Reserve Board an adjunct of the executive department. This would have been inconceivable for a Republican administration committed to the integrity of the money system, and would have been the worst possible thing for the economy. In effect, it would have put the administration in charge of the banking mechanism thru which to finance its own deficits [something which the government tried to do under President Truman], and would have been the surest possible road to inflation.

[From the Richmond News Leader, July 28, 1971]

IT WAS A VERY BAD YEAR

On February 2, 1970, President Nixon delivered his budget message for fiscal 1971 to Congress. In that message, he projected a budget surplus of \$1.3 billion: "I have pledged to the American people that I would submit a balanced budget for 1971 . . . The budget I send to you today—the first for which I bear full responsibility as President—fulfills that pledge. . . ."

Fiscal 1971 ended on June 30, and that flimsy \$1.3 billion surplus had vanished like a wisp of smoke. Instead, deficit spending for fiscal 1971 totaled \$25.5 billion—the most dismaying deficit since the Johnson Administration came up with a \$25.2 billion deficit in fiscal 1968. And fiscal 1972, only weeks old, may end with the highest budget deficit since World War II.

The President sent his fiscal 1972 budget to Congress with a projected \$11.5 billion deficit, which hardly was a tribute to fiscal responsibility. Even that deficit, however, could look good by the time the fiscal year ends. In early June, estimates for the 1972 deficit had reached \$23 billion, not including trust fund surpluses used to disguise the real deficits in the general spending budget. Those surpluses, projected at \$11.6 billion for the current fiscal year, would place the actual deficit at \$33.6 billion.

But now even \$33.6 billion seems an underestimate. George Schultz, who heads the Office of Management and Budget, reportedly has told the President that he could expect a possible deficit of \$35 billion. With borrowing from trust fund surpluses, the real deficit for this year may exceed \$46.5 billion—under a President who campaigned on a platform of fiscal restraint.

To be sure, President Nixon is not wholly responsible for the fiscal mess over which he presides. Much Federal spending remains beyond the control of the White House, having been authorized by previous Congresses. Interest on the Federal debt, now almost at \$400 billion, also fluctuates; it has been increasing at a rate of \$2 billion a year in recent years and will cost a total of \$21 billion in the current year. Congress also must bear some blame for inflating the Administration's budget requests to ever higher figures.

Nonetheless, the President cannot escape some responsibility for deficits that may exceed \$72 billion in two years' time. He has vetoed some bills, citing their inflationary effects on the economy; he could veto more. He also could withdraw his support from the proposed Family Assistance Plan that will cost the taxpayers many additional billions. He occupies a position through which he could exert much more influence for fiscal restraint.

But when Mr. Nixon proposed a budget with a built-in deficit for this year, he created a mood in Washington that permits unparalleled increases in Federal spending. The appalling deficit of 1971 should have suggested that it is time to retrench, and to start slashing away at budget items that can be controlled. A Republican Administration resides in Washington these days, but the sorry fiscal picture shows no improvement over the days when the motto under a Democratic Administration was spend, tax, and elect.

[From the Baltimore Sun, July 30, 1971]

ANOTHER RECORD

President Nixon's administration has chalked up another historic record. During the fiscal year ended June 30, it ran up the largest budgetary deficit recorded by a Republican administration, \$23.24 billion. In this feat, of course, the President had the help of a Democratic Congress which specializes in the spending side of federal finance, but since an administration takes its political label from the President, it is only proper to credit this enormous deficit to the Nixon administration. The deficit has been in the works for months, inexorably climbing past the estimates made earlier by the administration, but the final figures are none the less appalling.

What is even worse is the administration's transparent attempt to minimize the significance of the deficit, and the indications that the deficit for the current fiscal year may be as great if not greater.

Thus John B. Connally, Secretary of the Treasury, and George P. Schultz, director of the Office of Management and Budget, joined in a statement declaring that "for the third year in a row, a full-employment balance or surplus has been achieved . . . after three successive years of full-employment deficits totaling more than \$40 billion." A deficit of \$23 billion is really a surplus, they are asking the public to believe, because in conditions of full employment with larger tax revenues there would be no deficit. This is the kind of theorizing in which economists and politicians may take pleasure, but it is pretty close to nonsense when applied to today's conditions. (Mr. Connally advised us a few weeks back, it may be remembered, that full employment based on a 4 per cent unemployment rate was a myth, anyway, that could not be attained in peacetime without inflation.)

Further, according to the administration's theorizing, the Nixon deficits are not inflationary, unlike the comparable Johnson administration's deficits which set off the inflation from which the country still is suffer-

ing, because they are related to a full-employment budget. A conservative approach would be to grasp the fact that the heavy deficit spending during the Johnson administration severely hurt the national economy, and that it is foolhardy to try to cure our economic troubles by engaging in greater and greater deficit spending. One record of this kind ought to be enough.

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. 8432), an act to authorize emergency loan guarantees to major business enterprises, in which the concurrence of the Senate is requested.

The message also announced that the House had disagreed to the amendments of the Senate to the bill (H.R. 10061), entitled "An act making appropriations for the Departments of Labor, and Health, Education, and Welfare, and related agencies, for the fiscal year ending June 30, 1972, and for other purposes"; had agreed to the conference requested by the Senate on the disagreeing votes of the two Houses thereon; and that Mr. FLOOD, Mr. NATCHER, Mr. SMITH of Iowa, Mr. HULL, Mr. CASEY of Texas, Mr. PATTEN, Mr. MAHON, Mr. MICHEL, Mr. SHRIVER, Mrs. REID of Illinois, Mr. CONTE, and Mr. Bow were appointed managers of the conference on the part of the House.

HOUSE BILL PLACED ON CALENDAR

The bill (H.R. 8432) an act to authorize emergency loan guarantees to major business enterprises, was read twice by its title and placed on the calendar.

PUBLIC WORKS APPROPRIATIONS, 1972

The PRESIDENT pro tempore. Under the previous order, the Chair lays before the Senate H.R. 10090, the public works appropriation bill, which the clerk will state.

The second assistant legislative clerk read as follows:

A bill (H.R. 10090) making appropriations for public works for water and power development, including the Corps of Engineers—Civil, the Bureau of Reclamation, the Bonneville Power Administration, and other power agencies of the Department of the Interior, the Appalachian Regional Commission, the Federal Power Commission, the Tennessee Valley Authority, the Atomic Energy Commission, and related independent agencies and commissions for the fiscal year ending June 30, 1972, and for other purposes.

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

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

The PRESIDENT pro tempore. The Chair announces that the time for the consideration of this bill is under control, one hour on the bill, and 30 minutes on each amendment.

Who yields time?

ORDER OF BUSINESS

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the time limitation begin to run in not less than 15 minutes from now, and that the distinguished Senator from Rhode Island (Mr. PASTORE) may be recognized for the purpose of presenting a message from the House. This meets with the approval of the Senators involved.

The PRESIDENT pro tempore. Is there objection?

Mr. PASTORE. Mr. President, reserving the right to object, before the ruling is made, I have been trying to reach the Senators from Kansas (Mr. DOLE and Mr. PEARSON) who are interested in this matter. We have called their offices, but they have not yet arrived in the Chamber. So if we could take it up a little later, I would appreciate it.

Mr. MANSFIELD. Mr. President, I suggest the absence of a quorum and I ask unanimous consent that the time not be taken out of either side.

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

The clerk will call the roll.

The second assistant legislative clerk proceeded to call the roll.

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

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

Mr. PASTORE. Mr. President, will the manager of the bill yield to me 2 minutes from the bill in order that I may call up a message from the House?

Mr. STENNIS. Yes. Mr. President, what is the business pending before the Senate?

The PRESIDENT pro tempore. The pending business is H.R. 10090, the public works appropriation bill.

Mr. STENNIS. Mr. President, I yield 3 minutes to the Senator from Rhode Island.

The PRESIDENT pro tempore. The Senator from Rhode Island is recognized.

AUTHORIZATION OF APPROPRIATIONS TO THE ATOMIC ENERGY COMMISSION

Mr. PASTORE. Mr. President, I ask the Chair to lay before the Senate a message from the House of Representatives on H.R. 9388.

The PRESIDENT pro tempore laid before the Senate the message of the House of Representatives to concur in the amendment of the Senate numbered 1 to the bill (H.R. 9388) to authorize appropriations to the Atomic Energy Commission in accordance with section 261 of the Atomic Energy Act of 1954, as amended, and for other purposes, and concur in the amendment of the Senate numbered 2 to the aforesaid bill, with the following amendment:

In lieu of the matter proposed by Senate amendment numbered 2, insert the following: *Provided, That—*

(A) Except as provided in subparagraph (E), no funds shall be obligated or expanded

(1) for the acquisition of a fee simple interest in land or for the acquisition of any other interest in land which exceeds three years from the date of enactment of this Act, or (11) for or in connection with the burial of radioactive materials at the proposed site other than for experimental purposes, including demonstrations, and then only when and if such materials are fully retrievable throughout such three year period.

(B) The President of the United States shall appoint an advisory council which shall be composed of nine members at least three of whom shall be from Kansas. The advisory council may report to the Congress from time to time.

(C) The Atomic Energy Commission (acting directly or by contract) shall conduct laboratory and other tests and research (whether onsite or elsewhere) relating to the safety of the project, the protection of public health, and the preservation of the quality of the environment before any high level radioactive waste material is placed in salt mines at the proposed site except as provided in subparagraph (A).

(D) No high level radioactive materials shall be buried or used, other than as provided by clause (ii) of subparagraph (A), at the proposed site until the advisory council reports to the Congress that construction and operation of such project and the transportation of waste materials to the project can be carried out in a manner which assures the safety of the project, the protection of public health, and the preservation of the quality of the environment of the region.

(E) The limitations provided by subparagraph (A) shall not apply after the expiration of sixty calendar days of continuous session of the Congress after the date on which the advisory council submits its report under subparagraph (D). For purposes of the preceding sentence, continuity of session is broken only by an adjournment of Congress sine die, and the days on which either House is not in session because of an adjournment of more than three days to a day certain are excluded in the computation of the sixty-day period.

Mr. PASTORE. Mr. President, before I move that the Senate concur with the amendment of the House, I wish to state that the amendment of the House to the Senate amendment accepted by the Senate during its July 20 consideration of the AEC authorization bill for fiscal year 1972 relates to the Dole-Pearson amendment pertaining to the radioactive waste repository at Lyons, Kans. The House amendment is essentially a clarification of the language adopted by the Senate and is the result of careful and intensive negotiations between the Joint Committee and members of the Kansas congressional delegation. The new language accomplishes essentially the same effects but it does so in a more precise and clear manner.

I want to say at this point that, at the time we had before us the authorization for the Atomic Energy Commission, a discussion arose on this matter, and I accept an amendment suggested by my two distinguished colleagues from Kansas. I understand this House modification is acceptable to them.

Mr. DOLE. Mr. President, will the Senator yield?

Mr. PASTORE. I yield.

Mr. DOLE. The amendment is accept-

able. It is indeed a clarification of the amendment offered by the distinguished gentleman in the other body, Representative PRICE.

Mr. President, I would like to address myself to the substitute for Senate amendment No. 2 accepted by the other body last Tuesday.

Since the announcement by the AEC of the tentative decision to locate a nuclear waste repository near Lyons, Kans., members of the Kansas congressional delegation have been working to resolve the problems presented by that proposal. The senior Senator from Kansas (Mr. PEARSON) and I offered an amendment to H.R. 9388 last week, precluding land acquisition until an advisory council appointed by the President of the United States reports that the construction and operation of the project and the transportation of waste materials to the site can be carried out in a manner which assures the safety of the project, the protection of public health, and the preservation of the quality of the environment of the region.

The substitute amendment, offered by Congressman PRICE, is in the nature of clarifying language worked out between members of the Kansas delegation and the Joint Atomic Energy Committee staff last weekend. This language maintains the intent of the original amendment to insure the safety of the project and the environment in Kansas. I commend my colleagues from the other body for their handling of this difficult and important problem and urge the Senate to accept the House amendment.

Mr. PEARSON. Mr. President, will the Senator yield?

Mr. PASTORE. I yield.

Mr. PEARSON. Mr. President, I concur in the statement just made. I thank the Senator from Rhode Island for his patience, tolerance, and cooperation in working this matter out.

Mr. President, I am pleased to concur in the amendment adopted by the House. This amendment serves to clarify and to make explicit what was implicitly provided for in the amendment offered by Senator DOLE and myself and accepted by the Senate at the time the AEC authorizations were being considered here in this body.

The AEC will be able to lease property at the Lyons site and will be able to carry on onsite experimentation and demonstration programs. However, until the Council appointed by the President reports to the Congress that the storage of solid waste is entirely safe, the AEC will not be able to purchase the land or be able to initiate the permanent storage program.

Within the next 2 or 3 years we should have the answers to many questions that now remain unresolved.

Mr. PASTORE. Mr. President, I thank both Senators for their cooperation on a vital matter.

Mr. President, I move that the Senate concur in the amendment of the House.

The motion was agreed to.

Mr. PASTORE. I thank my colleagues.

PUBLIC WORKS APPROPRIATIONS,
1972

The Senate resumed the consideration of the bill (H.R. 10090) making appropriations for public works for water and power development, including the Corps of Engineers—Civil, the Bureau of Reclamation, the Bonneville Power Administration, and other power agencies of the Department of the Interior, the Appalachian Regional Commission, the Federal Power Commission, the Tennessee Valley Authority, the Atomic Energy Commission, and related independent agencies and commissions for the fiscal year ending June 30, 1972, and for other purposes.

Mr. STENNIS. Mr. President, I yield myself 5 minutes on the bill.

The PRESIDENT pro tempore. The Senator from Mississippi is recognized.

Mr. STENNIS. Members of the Senate, this is the public works appropriation bill, unanimously approved by the full committee, but, before presenting this measure as chairman of the subcommittee, I want to refer to the fact that for 16 consecutive years prior to this year this bill has been handled and presented to the Senate by the senior Senator from Louisiana (Mr. ELLENDER). During that time, as well as before, he has shown extraordinary knowledge of the public works program and superb dedication to the subject matter on a nationwide basis. He handled it with evenness, fairness, and on a nonsectional basis which was extraordinary, and the Nation, as well as the membership of this body, owe him a great debt for his splendid work.

Here is another bright fact. He continues his very keen interest and activity in this field. He is very diligent, as always, in attending sessions of the hearings and presiding when necessary. His advice and counsel have been invaluable to me as well as other Members during this time as well as in years past, and I want to especially commend him and thank him. I think I voice the sentiments of all Members of this body.

I am moved to make an additional remark, too, and that is with respect to the way the Senator from Louisiana, with his usual alertness, completeness, and attention, has contributed to moving forward all of the appropriation bills this year in such a fine way. All the subcommittee chairmen have felt not only his help but his constant urging, and the entire Nation has benefited because in all these fields he has a very fine knowledge. The Appropriation Committee is establishing a new record this year in the way they have moved the bills that have been sent over from the other body.

I want to mention, also, the Senator from North Dakota (Mr. YOUNG), who is the ranking minority member of the subcommittee as well as the full committee. His attention, service, counsel, and advice have been highly valuable, and ever available, as I have known ever since I have been in the Senate. He has been a tower of strength on the Appropriations Committee, and on this committee particularly no one exceeds his on-the-ground understanding of the work and merit of these many projects.

Mr. YOUNG. Mr. President, I thank the Senator.

Mr. STENNIS. Mr. President, other members of the committee have also served well.

It is a distinct satisfaction to me, frankly, to have been on this committee almost every year since I have been in the Senate, and I look upon this bill as one of the finest and most constructive programs in the Nation. It costs some money, but it produces revenue for the Treasury not only from the sale of power but also in the form of increased taxes resulting from the strengthening of our economy.

Mr. President, we have under consideration H.R. 10090, a bill making appropriations for public works for water and power development, including the Corps of Engineers—Civil, the Bureau of Reclamation, the Bonneville Power Administration, and other power agencies of the Department of the Interior, the Appalachian Regional Development Commission, the Federal Power Commission, the Tennessee Valley Authority, the Atomic Energy Commission, and related independent agencies and commissions for the fiscal year ending June 30, 1972, and for other purposes.

Mr. President, the hearings on the bill started on March 9 and continued through July 16. The subcommittee held 38 sessions for the purpose of taking testimony, and two executive sessions for the purpose of marking up the bill. The subcommittee considered the testimony and statements of 1,147 witnesses, which included representatives of various organizations and local communities.

The hearings comprise seven volumes. The volumes are so voluminous we could not put them on each Senator's desk so we have stacked them under each Senator's desk and they are there for reference. The hearings contain 7,287 pages of testimony.

I want to express my appreciation to the members of the subcommittee for their assistance in the lengthy hearings on this bill, and I especially commend the senior Senator from Louisiana, the chairman of the full committee, who handled this bill for the past 16 years. He has been a tower of strength.

In recent years, there has developed a greater public awareness of the deteriorating quality of our environment. Although not identified by the term "environmental considerations", the water resources program has made, and is continuing to make, important contributions to the quality of our environment.

Following the enactment of the National Environmental Policy Act of 1969, the construction agencies have formalized and strengthened their planning staffs to insure greater emphasis on the impact of their projects on the ecology and the environment. For instance, the Corps of Engineers established a new Institute of Water Resources which developed environmental guidelines and evaluation criteria for use by their field planners. The Bureau of Reclamation named an ecologist as an assistant to the Commissioner with primary responsibility as an adviser on environmental and

ecological affairs. The Tennessee Valley Authority has created an Office of Health and Environmental Science to better supervise its expanded environmental quality program.

The cost of pollution control measures is staggering, not only in dollars but in the changes we are going to have to make in our daily routine. I doubt if the American people realize the price of the measures being advocated, not just in dollars but in foregoing conveniences that they have become accustomed to accept as necessities. Practically every product we purchase contributes in some manner to air and water pollution or to the growing problem of solid waste disposal. The costs of antipollution measures will, of necessity, be reflected in the products we purchase. If we then ask for increased wages to meet these increased costs, obviously, we are not willing to pay the costs for improving our environment.

One of the pressing problems affecting the quality of our lakes and rivers is the phosphate and nitrate content of household detergents. Pending development of new formulas which are acceptable to the housewives and the Federal Water Quality Administration, the ladies can make their contribution by using the detergents which contain the least amounts of these nutrients. The clothes may not be quite as white or bright—but that may be the price we must pay for improving the quality of our environment. If manufacturers of the detergents which have the highest concentrations of nutrients find that their sales are dropping off, undoubtedly they will redouble their research efforts toward the development of an acceptable product.

Are we willing to purchase our soft drinks in returnable bottles? I note that even in the Senate restaurant on Saturdays use is made of plastic dishes and plastic utensils which contribute to our solid waste disposal problems. There are undoubtedly hundreds of similar conveniences and labor-saving practices which we accept today that must be changed if we are willing to pay the price of improving our environment.

POWER CRISIS

The demands of our society for increased power are continuing to grow. Either we must forgo some of the comforts we now enjoy, such as air conditioning, elevator service, improvement of street lighting to reduce crime in the streets, or permit the construction of additional powerplants. In many sections of the country which are now facing brownouts or blackouts, efforts of the public utilities to provide new facilities are being thwarted by citizen groups opposing the projects—first, fossil fuel plants are opposed from the standpoint of air and thermal pollution; second, nuclear plants are opposed from the standpoint of radiation and thermal pollution; and, third, hydro projects are opposed from the standpoint of their effect on the environment and ecology. Fortunately, many political subdivisions are now giving more consideration than ever before to the siting of powerplants so as to re-

duce to the minimum their impact on the surrounding environment and ecology.

Mr. Ellis L. Armstrong, Commissioner of the Bureau of Reclamation, in an address before the National Society of Professional Engineers in Salt Lake City, on August 13, 1970, stated the problem this way:

Concerned conservationists come out of a smoke-filled room to warn of air pollution. Concerned citizens who look upon the marvel of plentiful light and power as a God-given right, object to a thermal plant which may pollute air and water or a dam to supply power and water which will alter the natural regime of a river or create a lake in a canyon. But they still expect their lights to go on when they turn a switch and they expect pure clean water to flow from their taps.

BILL AS REPORTED

The bill as reported provides new obligational authority of \$4,714,877,000, which is \$98,932,000 above the budget and \$138,704,000 above the amount approved by the House.

TITLE I—ATOMIC ENERGY COMMISSION

For operating expenses the committee has approved a program of \$1,962,520,000, which is \$36,520,000 above the amount allowed by the House. The principal increase is \$27,800,000 for the NERVA program. Congress increased the level of funding for the NASA portion of the program and the increase recommended by the committee will permit the AEC portion of the program to proceed concurrently with the NASA portion of the program. The bill as reported provides full funding of \$1,000,000 for the cardiac pacemaker.

The committee recommendation fully profits the authorization for nuclear safety. The committee restored \$1,750,000 of the House cut of \$3,500,000 for nuclear materials, and \$4 million of the \$8 million cut in the weapons program.

PHYSICAL RESEARCH PROGRAM

The bill recommends \$29,800,000 for controlled thermonuclear research, the amount allowed by the House and \$1,400,000 above the fiscal year 1971 level.

CIVILIAN APPLICATIONS OF NUCLEAR EXPLOSIVES
The committee recommends \$7,400,000 for this program, the amount allowed by the House and \$2,400,000 above the budget. This provides the same level of funding as last year. The increase over the budget is to be used to continue research aimed at gas stimulation, \$1,900,000, and initiation of a geothermal research program.

TITLE II—DEPARTMENT OF THE ARMY

RIVERS AND HARBORS AND FLOOD CONTROL GENERAL INVESTIGATIONS

The committee recommends \$51,874,000, an increase of \$1,705,000 over the budget and \$2,510,000 over the House.

As in the past, the committee prefers not to make specific allocations of its increases to individual investigations. It desires, however, to call to the attention of the Corps of Engineers the testimony concerning the need for initiating un-budgeted surveys and increases in budgeted studies.

CONSTRUCTION, GENERAL

The bill as reported to the Senate provides \$936,493,000, which is \$77,314,000

above the budget and \$47,405,000 above the House.

The recommended increase provides \$1,743,000 for planning—including eight new planning starts for which \$474,000 is allotted, and restoration of a House cut of \$40,000 for planning, and increases in planning on 24 projects including continuation of planning on the Dickey-Lincoln project in Maine.

The recommended increase includes \$45,097,000 for construction. The major increases are \$3,040,000 for six new construction starts; \$45,709,000 for increased amounts on 35 projects under construction where the committee felt additional amounts were required; and reductions of \$4,500,000 on two construction projects.

FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES

The committee has recommended \$91,501,000, an increase of \$10,535,000 over the budget estimate and the amount allowed by the House. The importance of this project can be realized when one considers that the drainage from 41 percent of the area of the United States funnels through the Mississippi River and its tributaries.

OPERATIONS AND MAINTENANCE, GENERAL

The committee has recommended \$390 million which is \$14 million above the amount allowed by the House and \$3,966,000 below the budget estimate.

FLOOD CONTROL AND COASTAL EMERGENCIES

The bill provides \$5,000,000, the amount allowed by the House and \$2,000,000 below the budget estimate. The Corps had an unobligated balance of \$6,667,537 on June 30, 1971. With the appropriation of \$5 million, a total of over \$11.6 million will be available for this purpose, which should be adequate.

GENERAL EXPENSES

The committee recommends \$29,138,000 which is \$67,000 below the budget estimate and \$238,000 above the amount allowed by the House.

CEMETERIAL EXPENSES

The bill provides \$22,588,000, the amount of the budget estimate and the amount allowed by the House.

TITLE III—DEPARTMENT OF THE INTERIOR

BUREAU OF RECLAMATION GENERAL INVESTIGATIONS

The committee recommends \$22,650,000 which is \$625,000 above the budget estimate and \$675,000 above the House allowance. The committee has approved the adjustments made by the House in the general investigations programs except for atmospheric research where the committee added \$575,000. The committee also added \$100,000 to initiate a salinity study of the Colorado River, Colorado, Utah, Arizona, Nevada, and California.

CONSTRUCTION AND REHABILITATION

The committee recommends \$206,956,000, which is \$16,456,000 over the budget and \$1,889,000 below the House allowance.

The principal changes recommended by the committee include \$250,000 for one new planning item; \$48,000 for one new construction item; \$2,450,000 for

four construction increases; and a decrease of \$4,637,000.

UPPER COLORADO RIVER STORAGE PROJECT

The bill provides \$21,219,000, which is \$1,463,000 above the budget and \$630,000 above the House.

COLORADO RIVER BASIN PROJECT

The committee recommends \$33,275,000, the amount allowed by the House and \$200,000 above the budget estimate. The increase allowed by the House includes \$200,000 for continuation of planning on the Dixie project in Utah.

OPERATION AND MAINTENANCE

The bill as reported to the Senate provides \$72,000,000, which is \$884,000 below the budget estimate and \$2,000,000 above the amount allowed by the House.

LOAN PROGRAM

The bill provides \$10,795,000, the amount allowed by the House and \$820,000 above the budget estimate. The amount allowed provides \$600,000 for two new loans; and \$400,000 for increased amounts on two loans; and a reduction of \$180,000 in the budget estimate for one loan where the repayment was not approved by the irrigation district.

GENERAL ADMINISTRATIVE EXPENSES

The committee has recommended \$15,525,000 which is the budget estimate and the amount allowed by the House.

ALASKA POWER ADMINISTRATION GENERAL INVESTIGATIONS

The bill provides \$500,000, the amount allowed by the House and \$118,000 below the budget estimate.

OPERATION AND MAINTENANCE

The committee approved the House allowance of \$457,000, which is the same as the budget estimate.

BONNEVILLE POWER ADMINISTRATION CONSTRUCTION

The committee recommendation is \$91,630,000 which is \$2,370,000 below the budget and \$1,630,000 above the House allowance.

OPERATION AND MAINTENANCE

The bill provides the full budget estimate of \$27,825,000, the amount allowed by the House.

SOUTHEASTERN POWER ADMINISTRATION OPERATION AND MAINTENANCE

The committee concurred in the House allowance of \$870,000, which is \$38,000 below the budget estimate.

SOUTHWESTERN POWER ADMINISTRATION CONSTRUCTION

The bill provides \$1,050,000, the amount allowed by the House and \$841,000 below the budget estimate of \$1,891,000.

OPERATION AND MAINTENANCE

The committee recommends \$5,000,000, which is \$500,000 over the amount allowed by the House and \$513,000 below the budget estimate.

OFFICE OF THE SECRETARY

UNDERGROUND ELECTRIC POWER TRANSMISSION RESEARCH

The committee recommends the full budget estimate of \$1,000,000 which is \$250,000 above the amount allowed by the House.

TITLE IV—INDEPENDENT OFFICES
APPALACHIAN REGIONAL COMMISSION
SALARIES AND EXPENSES

The committee recommends \$1,113,000, the budget estimate and the amount allowed by the House.

APPALACHIAN REGIONAL DEVELOPMENT PROGRAMS

The committee recommends \$302,000, 000 which is \$20,000,000 above the budget estimate and the amount allowed by the House.

The Senate increase includes \$10,000, 000 for the health demonstration program; \$5,000,000 for vocational educational facilities; and \$5,000,000 for the supplemental grant program.

DELAWARE RIVER BASIN COMMISSION
SALARIES AND EXPENSES

The bill provides the budget estimate of \$64,000.

CONTRIBUTION TO THE DELAWARE RIVER BASIN
COMMISSION

The committee approved the budget estimate of \$179,000.

FEDERAL POWER COMMISSION
SALARIES AND EXPENSES

The committee recommends \$22,200, 000 for salaries and expense. This is the amount allowed by the House and is \$382,000 below the budget estimate.

INTERSTATE COMMISSION ON THE POTOMAC
RIVER

The bill provides the budget estimate of \$20,000.

NATIONAL WATER COMMISSION

The committee recommends \$1,200,000, which is the budget estimate and the amount allowed by the House.

TENNESSEE VALLEY AUTHORITY

The committee recommends \$67,650, 000, which is \$11,050,000 above the budget and \$2,700,000 above the House. The committee recommended an additional \$1,000,000 of direct appropriations for the fertilizer introduction program, and \$1,700,000 for the Mills River Reservoir Unit of the Upper French Broad project.

WATER RESOURCES COUNCIL

The committee recommends \$5,960,000, which is the same as the House allowance and \$500,000 above the budget. The net increase of \$500,000 provides an additional \$500,000 for title III grants to States for strengthening the States' water resources staffs. This maintains the same level of funding available for fiscal year 1971. These funds are allocated to States on a 50-percent matching basis. The committee recommendation includes a decrease of \$100,000 for the Upper Mississippi River Basin Commission due to unobligated balance available from fiscal year 1971 resulting from a delay in organizing the Commission.

SUSQUEHANNA RIVER BASIN COMMISSION
SALARIES AND EXPENSES

On the House floor an amendment was adopted which provided \$50,000 for the salaries and expenses of the U.S. member of the Susquehanna River Basin Commission, and \$75,000 for payment of the U.S. share of the current expenses of the Susquehanna River Basin Commission. The Senate committee recommends the amount allowed by the House.

The PRESIDENT pro tempore. The Senator's time has expired.

Mr. STENNIS. Mr. President, I yield myself 2 additional minutes.

Mr. President, we shall be glad to answer questions, to the extent of our ability, on any item in the bill that any Senator wishes to inquire about.

Mr. President, I wish to make the usual request before proceeding further. I make the usual unanimous consent request that the committee amendments be considered and agreed to en bloc, and that the bill as thus amended be regarded as original text for the purpose of amendment, provided that no point of order shall have been considered to have been waived by agreement thereto.

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

The amendments agreed to en bloc are as follows:

On page 2, at the beginning of line 19, strike out "\$1,926,000,000" and insert "\$1,962,500,000".

On page 4, line 4, after the word "aircraft", strike out "\$344,000,000" and insert "\$345, 000,000".

On page 5, line 23, after the word "construction", strike out "\$49,364,000" and insert "\$51,874,000".

On page 6, line 15, after the word "construction", strike out "\$889,088,000" and insert "\$936,493,000".

On page 7, line 15, after "(33 U.S.C. 702a, 702g-1)", strike out "\$80,966,000" and insert "\$91,501,000".

On page 8, line 12, after the word "navigation", strike out "\$376,000,000" and insert "\$390,000,000".

On page 8, line 26, after the word "investigations", strike out "\$28,900,000" and insert "\$29,138,000".

On page 10, line 20, after the word "expended", strike out "\$21,975,000" and insert "\$22,650,000".

On page 11, line 12, after the word "expended", strike out "\$208,845,000" and insert "\$206,956,000"; and, on page 12, line 14, after the word "contract", insert a colon and "Provided further, That not to exceed \$48,000 of the amount herein appropriated shall be available for repairs on Mann Dam on the Heart River in North Dakota, which shall be repaid in full under conditions satisfactory to the Secretary of the Interior."

On page 12, line 22, after the word "expended", strike out "\$20,589,000" and insert "\$21,219,000"; and, in line 23, after the word "which", strike out "\$19,984,000" and insert "\$20,817,000".

On page 13, line 23, after the word "law", strike out "\$70,000,000" and insert "\$72,000, 000".

On page 19, at the beginning of line 11, strike out "\$90,000,000" and insert "\$91,630, 000".

On page 21, line 3, after the word "only", strike out "\$4,500,000" and insert "\$5,000, 000".

On page 21, line 8, after the word "transmission", strike out "\$750,000" and insert "\$1,000,000".

On page 23, line 10, after the word "expended", strike out "\$282,000,000" and insert "\$302,000,000".

On page 25, at the beginning of line 7, strike out "\$64,950,000" and insert "\$67,650, 000".

Mr. STENNIS. Mr. President, I offer the following amendment in order to correct a technical error in the printing of the bill.

On page 2, line 9, strike the amount "\$1,962,500,000" and insert in lieu thereof the amount "\$1,962,520,000". There is a \$20,000 correction.

The PRESIDENT pro tempore. The clerk will state the amendment.

The assistant legislative clerk read the amendment, as follows: It is proposed on page 2, line 19, to strike the amount "\$1,962,500,000" and insert in lieu thereof the amount "\$1,962,520,000".

The PRESIDENT pro tempore. Does the Senator yield back his time?

Mr. STENNIS. Mr. President, I yield back my time.

The PRESIDENT pro tempore. The time on the amendment having been yielded back, the question is on agreeing to the amendment.

The amendment was agreed to.

Mr. YOUNG. Mr. President, I yield myself 5 minutes.

The PRESIDENT pro tempore. The Senator from North Dakota is recognized for 5 minutes.

Mr. YOUNG. Mr. President, the public works appropriations bill we are considering today has been the subject of longer, more detailed hearings, and more thoughtful and deliberate consideration, than most of the many appropriations bills I have ever dealt with.

This bill represents an increase of \$98,932,000 over the Bureau of the Budget request, and \$138,704,000 over the House bill. This is a very small increase in a bill of more than \$4.6 billion.

There is every justification for this small increase. In fact, with the serious unemployment situation we have, much larger appropriations for public works projects, of these kinds, could be justified. The Congress has been considering two different versions of legislation, which would provide \$1 billion or more a year for jobs, to help relieve the unemployment situation. There is need to provide jobs for the unemployed, and some legislation of this kind is justified.

This job problem can be dealt with far better, however, by increasing funds for much needed public works projects of all kinds—particularly flood control and irrigation and navigation—than spending \$1 billion or more for jobs, most of which would not be wealth producing.

Flood control projects will go a long way toward preventing disastrous floods in the future, and the destruction of homes, businesses, employment, and opportunity.

The money appropriated to improve navigation on our rivers and harbors throughout the United States is wealth creating. This makes for more economic transportation, and a more viable economy.

The money spent for necessary and good irrigation projects, not only provides many good jobs, but adds to the wealth, and future growth of the Nation.

Certainly funds are necessary to carry on our atomic energy program. The peaceful uses of nuclear power are almost limitless. Our severe unemployment problem has had even scientists of great ability, as well as our recent college graduates, looking for work. They could hardly be better employed than, in building for the future, by finding new uses in the application of nuclear power. In many areas of the United States, nuclear power may be the only—and probably the best—solution to the already severe electrical energy shortage.

I cannot help but feel strongly, that good judgment and sound fiscal policy dictates that these kinds of programs, can wisely be expanded in this period of unemployment.

Mr. President, I want to commend the chairman of the Senate Subcommittee on Public Works, the distinguished Senator from Mississippi, Mr. STENNIS, for the careful and prudent consideration he has given this bill. He has carried a very heavy load in this session. I also want to commend the chairman of the full Committee on Appropriations, my friend from Louisiana, who for many years has done an outstanding job, in the handling of the Public Works Appropriations bill, and who had a major part, in formulating this bill.

Mr. President, I also have only the highest commendation for Kenneth Bousquet, the able staff member handling this bill. No staff member in my time has worked harder and used better judgment than he.

Too, I want to commend Guy McConnell and Ed King for the very helpful role they had in putting this bill together.

APPALACHIAN PROGRAMS PROVIDED WITH NEEDED FUNDING—IMPORTANT PROJECTS INCLUDED FOR WEST VIRGINIA

Mr. RANDOLPH. Mr. President, I commend the subcommittee chairman and the Senate Appropriations Committee Chairman (Mr. ELLENDER) for bringing this vital appropriations measure to the Senate for consideration. I particularly congratulate the Senator from Mississippi (Mr. STENNIS) for his diligent and thorough efforts in formulating a fair and equitable measure. As chairman of the Senate Committee on Public Works, it is my privilege to serve as an ex-officio member of the subcommittee during consideration of public works items. So I know personally of the extensive work which has been done on this measure. The Senator from Mississippi has had the complete cooperation and assistance of the members of his subcommittee in finalizing this bill.

Mr. President, I comment briefly on some of the provisions of this measure which are of particular interest to me. It is gratifying that the bill contains \$302 million for the Appalachian Regional Development program, \$175 million of which is dedicated to the continuation of the developmental highway program. And \$127 million will be utilized for the nonhighway programs administered by the Appalachian Regional Commission. This latter figure represents a \$20 million increase over the budget estimate and the House approved bill. These additional funds will bring the Appalachian appropriations to the level allocated in fiscal year 1971. The budget request for Appalachia was based on authorization legislation proposed by the administration which would have permitted the program to continue until such time as the Congress acted on revenue sharing. The underlying assumption of the administration was that the proposed decrease in Appalachian moneys would be compensated by an injection of rural revenue sharing.

As Senators know, that assumption is not valid today, with no action having

been taken on revenue sharing and with a 4-year extension of the Appalachian Regional Development Act on the way to the President for signature—and there is every indication that the President will sign this vital measure. In view of these circumstances, the Appropriations Committee, at the urging of my colleague from West Virginia (Mr. BYRD) and the Senator from Kentucky (Mr. COOPER) and me, approved the additional \$20 million. We are hopeful that in conference the House conferees will accept this full amount.

Mr. President, I am encouraged also that the pending measure contains substantial funding for construction, planning, and study of a number of critical water resources projects in West Virginia. Our State with its mountainous terrain and large number of streams and rivers has critical flooding problems in many areas. While some persons may wrongly use the term "pork barrel," I know how very important flood control and water resources can be for protection of life and property, and stimulation of economic development.

In this regard, the appropriations bill provides \$1.295 million for continued construction funds in the amount of \$1.295 million for Beach Fork Lake in Wayne and Cabell Counties; \$3.515 million for East Lynn Lake in Wayne County; and \$17.85 million for R. D. Bailey Lake in Wyoming County. Also included in the measure is construction money for Stonewall Jackson Lake in Lewis County, \$3.35 million; Burnsville Lake in Braxton County, \$880,000; and preconstruction planning funds for West Fork Lake in Calhoun and Wirt Counties \$135,000; Coal River in Boone, Raleigh, Logan, and Kanawha Counties, \$75,000; and land acquisition funds for Rowlesburg Lake in Preston County, \$650,000. Additionally, there is funding of preliminary studies of several vital water resources projects included in the general investigations provisions.

The PRESIDENT pro tempore. Who yields time?

Mr. STENNIS. Mr. President, I yield 2 minutes to the Senator from Connecticut.

Mr. RIBICOFF. Mr. President, I would like to express my appreciation to the members of the Senate Appropriations Committee and its Public Works Subcommittee for increasing the appropriation for the Long Island Sound study now being conducted by the New England River Basins Commission under the guidance of the Federal Water Resources Council. The \$1,000,000 approved by the Committee is a small amount compared to the many vast projects included in this bill, but this money will allow us to take a major step toward preserving one of America's greatest natural resources, Long Island Sound. The committee's decision, if enacted into law, will mean that the River Basins Commission can complete its preliminary studies and begin to formulate a comprehensive development plan for the sound.

Long Island Sound occupies a unique place in American life. Its protected waters provide a harbor for sailors and a harvest for fishermen. It is the home of innumerable species of fin and shell fish

and a way station for migrating birds. Above all, the sound plays a central role in the lives of the 11 million citizens of three States—Rhode Island, Connecticut, and New York—who live within 15 miles of the shore.

Ironically, the very uniqueness of the sound has contributed to its deterioration. Because of the sound's proximity to urban centers, real estate and commercial developers have hacked away at the land. Because the sound contains many important harbors, it is crisscrossed with tankers and freighters which have carelessly dumped their wastes into the once clean waters. As with so many of our great natural resources, the sound has been the victim of man's avarice and carelessness. More importantly, the sound has been the victim of bureaucratic inaction.

The three States which border the sound have never gotten together to even discuss the area's future, let alone take any action. In Washington, no less than 18 agencies and departments have authority over activities on the sound and adjacent shoreline. Even now the people recognize the threats to the sound, intergovernmental rivalry has stymied serious attempts to prevent its becoming another Lake Erie.

Last year my Government Operations Subcommittee on Executive Reorganization and Government Research held 3 days of hearings on the future of Long Island Sound. The people the subcommittee heard, from marine biologists to housewives, expressed with great emotion their deep concern for the sound's future. They told about how the shell fish are dying off or are too riddled with oil and sewage to be edible, about the marshlands and the commercial encroachments upon them, about the industrial and human waste that pollutes the waters of the sound so that swimming and boating can be a hazard to health, about the tankers that dump oil by the ton, and about the Long Island Sound they remember as children and the shoreline they do not even want their children to go near.

More than anything else, however, they conveyed a real cynicism about their Government's willingness or capacity to deal with the problem.

On the pollution front, the Federal Government needs to get itself together. Federal agencies must coordinate their programs. A commitment must be made to preserve and protect and properly develop Long Island Sound—and then all Federal agencies involved must live up to that commitment.

Judging by the conflicting actions and programs of the various Federal agencies, the U.S. Government seems confused, at loose ends, and incapable of helping to solve the pollution and development problems of the sound.

Three recent events have dramatically illustrated the dangers facing the sound and demonstrated the need for coordinated and rational protection and development.

On June 4, I learned that the Federal Aviation Administration was awarding a \$390,000 contract to determine the feasibility of building an offshore airport in the sound or the Atlantic Ocean. It is

almost impossible to comprehend what the effect would be of such a project on the sound's fragile environment. Not only would millions of tons of landfill and concrete be poured into the water, but bridges and road systems would have to be built to serve the airport.

I objected to the study as it affected the waters of Long Island Sound and urged the FAA to alter the project to examine only the feasibility of a jetport in the Atlantic Ocean. It took the FAA nearly 1 month to review its reasons for sponsoring the study and to then advise me that it would not change the ground rules to exclude the sound.

I ask unanimous consent to have printed in the RECORD at this point the exchange of correspondence in this matter between the FAA and myself.

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

JUNE 4, 1971.

HON. JOHN H. SHAFFER,
Administrator, Federal Aviation Administration, Washington, D.C.

DEAR MR. SHAFFER: I understand that consideration is being given to providing approximately \$500,000 for a study of an airport to be built in the Long Island Sound. As you may know, I have been concerned for some time about development of the Sound and the New England River Basins Commission is presently undertaking a three-year study of the future of the Sound.

In light of the activities of the New England River Basin Commission, I would appreciate a full report of the status of any proposed study or development of an airport in the Long Island Sound.

Sincerely,

ABE RIBICOFF.

DEPARTMENT OF TRANSPORTATION,
FEDERAL AVIATION ADMINISTRATION,
Washington, D.C., June 24, 1971.

HON. ABRAHAM A. RIBICOFF,
U.S. Senate,
Washington, D.C.

DEAR SENATOR RIBICOFF: This responds to your request for information on the status of the offshore airport study proposed for the New York area.

The New York Offshore Jetport Study project is being undertaken to determine the technical, social and economic feasibility of an offshore airport to serve the metropolitan New York area. The objective is to alleviate air traffic congestion in that area and at the same time explore ways and means of improving the quality of the local environment.

Site considerations are not confined to Long Island Sound. All potentially feasible locations will be considered both in Long Island Sound and the Atlantic Ocean south of Long Island, leading to recommendations for a preferred site based on conclusions derived from the study.

We are just now completing negotiations with the architect/engineer firm of Saphier, Lerner, Schindler Environetics Division of Litton Industries, New York for a \$390,000 contract to perform the work of potential site evaluation and airport conceptual design. No actual airport development is authorized. If results of the study should eventually lead to development of an airport, we are certain the authorities in charge would coordinate the project with all interested parties.

Every measure will be taken during this study to assure utmost compatibility in airport/urban environment relations and preservation of the natural environment. We will be glad to keep you advised of our progress.

Sincerely,

K. M. SMITH,
Acting Administrator.

JUNE 29, 1971.

Mr. K. M. SMITH,
Acting Administrator, Federal Aviation Administration, Department of Transportation, Washington, D.C.

DEAR MR. SMITH: Thank you for your letter dated June 24 regarding negotiations you were completing for a study of an offshore airport for the New York Metropolitan Area. My office was informed before your letter arrived that the contract for \$390,000 had been awarded. I noted with particular interest the fact that the study will examine the feasibility of an airport in Long Island Sound as well as in the Atlantic off the New York-New Jersey shore.

I appreciate your thoughtfulness in keeping me advised of your actions in this matter. However, I want to urge that the contract with Saphier, Lerner, Schindler Environetics be revised and that this firm be instructed to study the feasibility of an offshore airport in the Atlantic Ocean only—and not in Long Island Sound.

I see absolutely no reason why valuable federal dollars should be spent to investigate the feasibility of a project which is, on the face of it, unfeasible, undesirable and disastrous for the already suffering ecology of Long Island Sound.

To examine the feasibility of a jetport on the Sound is comparable to sponsoring a study into the feasibility of creating new ways to pollute our environment. It makes no sense to plan for a contingency that we know is unacceptable.

I am sending to you Volumes I, II, and III of hearings I conducted last year in New London and Norwalk, Connecticut and Kings Point, New York. The people who live along the Sound came forward and testified before my Senate Subcommittee on Executive Reorganization and Government Research. They spoke, frequently with deep emotion, about the pollution problems that threaten Long Island Sound. These hearings reflect the intensity with which the people who live along the Sound care about the growing pollution of this great natural resource.

We don't want a new pollutant in the Sound. No purpose is to be served by planning for it.

Sincerely,

ABE RIBICOFF.

DEPARTMENT OF TRANSPORTATION,
FEDERAL AVIATION ADMINISTRATION,
Washington, D.C., July 22, 1971.

HON. ABRAHAM A. RIBICOFF,
U.S. Senate,
Washington, D.C.

DEAR SENATOR RIBICOFF: This response to your letter of 29 June requesting alteration of our contract with Saphier, Lerner, Schindler Environetics to exclude from the offshore airport study any consideration of Long Island Sound.

The New York Offshore Jetport Study project covered by that contract is a research and engineering study effort to explore the feasibility of using offshore locations to serve future aviation requirements of large metropolitan areas, based on technical, social, ecological and economic considerations. The requirement for this study was generated as a result of our concern that the scarcity of available land coupled with environmental and ecological pressures from within such areas are seriously constraining the establishment of needed new airports.

The New York metropolitan area was selected as a locale for the study as it represents a very striking example of such a situation. Please bear in mind, however, that the data resulting from this study would be applicable to other localities. To exclude from the study any consideration of Long Island Sound would short-change the value of the findings, since the data accumulated would be less than totally comprehensive.

A recent news article reported that this study is being made to locate an airport in

Long Island Sound. This is definitely not the case. No actual airport development is authorized under this study project. Any future decision leading to an actual site selection will be made independent of this study. To achieve our objective of collecting and analyzing data from the viewpoint of airport feasibility, therefore, we feel at this time that the provisions of the contract should not be altered.

If you have any further questions we will be glad to discuss them with you.

Sincerely,

K. M. SMITH,
Deputy Administrator.

JULY 26, 1971.

Mr. K. M. SMITH,
Deputy Administrator, Federal Aviation Administration, Department of Transportation, Washington, D.C.

DEAR MR. SMITH: I have your July 22 letter. I am disappointed that the FAA is going ahead with the study to determine the feasibility of building an offshore airport in Long Island Sound.

I would urge that all future actions taken by the FAA regarding the possibility of an airport in the Sound be preceded by public hearings at which time interested citizens would have the opportunity to make their feelings known on this project. The manner in which the current study contract was awarded has foreclosed full public disclosure and discussion. When this feasibility study is completed, I trust that it will be made public.

In addition, I do not understand your logic when you say the on-going study of the Sound as a possible future site for an airport is not related, and will not be related, to any proposal to actually build an airport there. The study is of the feasibility for building an airport. One would assume that if an airport is feasible, the next move would be to build it.

Your letter maintains that the results of the present study would be applicable to other localities. If that is the case, why not conduct the study elsewhere? Ecological considerations in Long Island Sound are unique to the Sound. If the FAA wants to examine the feasibility of a new airport in San Francisco Bay, for example, the logical place for the feasibility study is San Francisco Bay.

Finally, I would very much appreciate your sending me a copy of the actual contract agreement entered into by the FAA and Saphier, Lerner Schindler Environetics. I would also like from you a brief history of this organization and any information you may have indicating that the firm's parent corporation, Litton Industries, has already endorsed the concept of an offshore jetport in Long Island Sound.

Sincerely,

ABE RIBICOFF.

Mr. RIBICOFF, Mr. President, then on July 2, I learned of a mysterious drilling operation in Long Island Sound off the Guilford, Conn., shore.

I asked the Army Corps of Engineers to review the project and to call a halt to it until it was certain that the drilling would not cause ecological damage to the sound. The day has long since passed when any commercial venture can simply go out into these waters and start drilling without first explaining what the purpose of the project is—and without first having the approval of a duly-authorized public body. Anyway, I still have not heard back from the Engineers as to just what the project is about, although I have been assured the agency is working on it. Meanwhile, the drilling goes on. By the time we find out what the drilling is for—and what impact it is having on the environment—the work may be com-

pleted and the impact may have been made.

In addition, throughout the past several weeks while the drilling continued and was the subject of considerable interest to persons in the Guilford area, various stories circulated as to what the project was about.

The firm doing the drilling, the Raymond International Construction Co., first announced the purpose was to determine if sand dredged from the ocean bottom could be used in a road-building project. Later the Raymond International Construction Co. issued a second statement, saying it was not sand that interested them but the possibility of building a natural gas terminal off the Guilford shoreline.

One newspaper account said the U.S. Coast Guard, New London Station, had given the company a permit to conduct the drilling. But the Coast Guard here in Washington advised my office that the Coast Guard did not have the authority to issue a permit giving approval to a project of such magnitude.

Somehow the Department of Transportation got into the act as certain officials of that agency gave statements about the drilling.

Meanwhile, from the Waltham, Mass., office of the Army Corps of Engineers came word, according to a newspaper account, that they did not have the authority to involve themselves in this issue—that, in effect, my going to the Army corps for help in this matter was a futile effort.

In short, nobody knew—and nobody knows—for sure just what the drilling is all about, except the Raymond International Construction Co., and they have not been obliged to present to any Federal authority their reasons for the drilling project.

I ask unanimous consent to have printed in the RECORD at this time my correspondence with the Army Corps of Engineers and various newspaper articles about the drilling project.

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

JULY 2, 1971.

Lt. Gen. FREDERICK J. CLARKE,
Chief of Engineers,
Department of the Army,
Washington, D.C.

DEAR GENERAL CLARKE: The Raymond Construction Company is conducting exploratory drilling operations in Long Island Sound off the Guilford shoreline near Faulkner's Island. I have been advised by the Waltham, Massachusetts Army Corps of Engineers that no permit is required to conduct drilling operations in the Sound—and that prior approval from the Corps is required only when a firm plans to begin actual construction.

I think prior approval should be required by the law and I would like your recommendation as to how the present statute should be amended. Drilling operations most assuredly do affect the ecology of Long Island Sound and before any company initiates such activity prior approval should be received from the Corps.

In the meantime, I recommend that you direct the Raymond Construction Company to stop drilling operations until Corps personnel have had the opportunity to examine these operations and determine their impact on the Sound.

The time has long since passed when we can allow private groups to drill into the floor of Long Island Sound without first explaining to a duly-authorized public body—in this instance, the Army engineers—the exact nature of their proposed project and what they hope to achieve. Then the Corps should decide whether or not the drilling is acceptable.

In addition, I would also appreciate your providing me a list of other drilling operations being conducted in the Sound. These likewise should be halted until they are reviewed by the Army engineers.

I am pleased that since my Senate subcommittee hearings last summer on the pollution problems of the Sound the Army Corps of Engineers and other public agencies have joined with renewed enthusiasm in the pursuit of the goal we all share, preserving and protecting Long Island Sound.

Sincerely,

ABE RIBICOFF.

DEPARTMENT OF THE ARMY,
Washington, D.C., July 14, 1971.

HON. ABE RIBICOFF,
U.S. Senate, Washington, D.C.

DEAR SENATOR RIBICOFF: This is in reply to your recent letter regarding exploratory drilling being conducted in Long Island Sound off the Guilford shoreline near Faulkner's Island.

I have asked the New England Division Engineer for a report on this matter. Upon receipt of his report, I will communicate with you further.

Sincerely yours,

FRANCIS J. WALTER, JR.,
Lieutenant Colonel, Corps of Engineers,
Assistant Director of Civil Works for Central Divisions.

[From the Norwich (Conn.) Bulletin, July 3, 1971]

DRILLING IN SOUND SETS OFF STATE
SPECULATION

GUILFORD.—A "mysterious" drilling operation, currently underway offshore from this coastal community, eventually may turn into the latest battlefield for conservationists trying to maintain the ecological balance of Long Island Sound.

Local residents have viewed the operations, being conducted by Raymond International of New York, for several days and there is much speculation as to the reasons for it.

A spokesman for the Department of Transportation, which has jurisdiction over the U.S. Coast Guard, said the engineering survey is a feasibility study "relative to a proposal to build a liquid natural gas port for compression of gas to liquid."

U.S. Rep. Robert Gialmo (D-Conn.) said Friday there are indications that a natural gas terminal and tanker loading port may be the goal of the drilling.

A spokesman for the Congressman indicated there was no firm information to back up this reasoning.

Joseph Perlano, president of the Raymond Corporation, said the drilling is an attempt to locate a source of sand to be used to offset erosion of the Connecticut shoreline.

Meanwhile, Associated Press is claiming an unidentified spokesman for the company said the project involves boring test holes for a shoreline filling project. This project is in conjunction, reportedly, with a gas terminal and loading port for tankers in the Sound.

Connecticut Public Utilities Commission spokesmen said they heard rumors about the drilling, but also were without definite information.

The Connecticut Development Commission apparently has talked with the New York firm but the conferences were held in "confidence" according to CDC Assistant Commission Director Charles Hills.

There also appears to be some speculation the drillings may have to do with a recently announced \$390,000 study grant for the Federal Aeronautics Administration (FAA) to investigate the feasibility of a jetport in the Sound.

Approximately \$200,000 of the funds have been awarded to a private firm to study the feasibility problem while the remaining \$190,000 will be awarded if the preliminary study comes up with some positive results.

Reportedly, the preliminary contract was awarded last week.

U.S. Sen. Abraham A. Ribicoff has become involved in the controversy by questioning the rights of the Raymond corporation to disrupt the land under the Sound.

Fred Asselin, an aide to Ribicoff said Friday a letter has been sent to Lt. Gen. Frederick Clark, Chief of the U.S. Army Corps of Engineers asking the Army to temporarily stop the operations.

"What right does anyone have for drilling in the Sound," said Asselin.

The aide said, under present law, anyone may probe the ocean's depths and only receive a permit when they are ready to construct a facility.

Ribicoff's letter also requested a list of other drilling operations along the nation's coastline.

A spokesman for the Army Corps of Engineers in Waltham, Mass., said the corps has no knowledge of the engineering operation.

Conversely, a spokesman for the U.S. Coast Guard in New London said the New York City firm was issued a permit to conduct the drilling operation in the vicinity of Faulkner's Island. The permit allows the operation to continue through August but gives no reasons for it.

The area of the drilling is one of the few places on the Sound relatively free of pollution and conservationists have been fighting a constant war for the past few years against a proposed bridge, that would span the Sound from Long Island to the Connecticut shoreline, as well as the proposed jetport.

[From the New Haven (Conn.) Register,
July 7, 1971]

HARDLY THE WAY TO "SAVE OUR SOUND"

The lag between mounting public interest in conservation and action to protect the environment shows up in the way that a drilling operation being conducted in Long Island Sound came to pass. Minimal consideration is accorded the movement to "save our Sound" in the procedure that allowed the mystery-shrouded project four miles off Guilford near Goose Island.

Apparently, all it required, despite possible serious ecological consequences, to undertake this enterprise, was authorization from the Third District Coast Guard. And the Coast Guard reported it had granted permission because the drilling company had complied with navigation regulations. But it is all too obvious that the eventual impact involves much more than navigational matters.

Just what is at stake here is not at all clear—certainly not to the public, which hardly has been briefed. Fortunately, some public officials have scrounged around for precious facts that forcefully indicate an explanation and action is in order.

According to information received by the office of Congressman Robert Gialmo, the drilling operation is being carried out to determine whether a natural gas terminal could be constructed. But a spokesman for the drilling company, Raymond International, claimed the operation involved test borings for studying the quality of the sand for a shoreline filling project.

One would expect the State Public Utilities Commission to be aware of what is being contemplated—especially if it is a natural gas terminal plan—but a PUC spokesman

reported he had no detailed information about it and had only heard rumors.

The Army Corps of Engineers is supposed to be vitally concerned with the ecology of the Sound yet it seems to have no part in the decision to allow the drilling in the 50-acre area. Thus, Senator Ribicoff, who has been pressing for full protection of the Sound, has asked the Corps to halt the operations until the impact on the Sound can be determined.

The situation strongly suggests that either new laws are urgently needed to disclose the existence of activity that might affect the public's natural resources or that existing laws be strictly enforced.

[From the New Haven (Conn.) Journal-Courier, July 7, 1971]

SELECTMEN ASK TO BE KEPT UP TO DATE ON GOOSE ISLAND DRILLING

(By Mary E. O'Leary)

GUILFORD.—The Board of Selectmen will write to U.S. Sen. Abraham Ribicoff and U.S. Rep. Robert Giaino and ask that it be kept informed of the preliminary drilling operations off Goose Island now taking place to determine whether a natural gas terminal could be constructed there.

The board was concerned that it had not been informed of the drillings undertaken by a subsidiary of Raymond International, with the permission of the Coast Guard and to the knowledge of Rep. Giaino's office.

The board will also look into the question of jurisdiction over any construction if the plans proceed to that point. While Goose Island is the property of the federal government and the waters are public domain, the ocean floor is under the jurisdiction of the town and thereby the Planning and Zoning Commission may have some influence.

Because the drilling and test borings are of an exploratory nature, any firm wishing to undertake these preliminary steps need only to receive permission from the Coast Guard. Permission is granted when a firm shows it is not obstructing navigation while the testing is in operation.

Ribicoff has already asked that the Army Corps of Engineers order the drilling operations stopped until it can examine them and determine their impact on the Long Island Sound.

He has also written to Lt. Gen. Frederick J. Clarke, chief of engineers for the corps asking his recommendation amending the present state statute to include prior approval from the corps before preliminary drillings can take place.

Ribicoff noted that: "Drilling operations most assuredly do affect the ecology of the Sound, and before any company initiates such activity, prior approval should be received from the corps."

According to Giaino's office, there are no concrete plans before any federal agency at this time for construction of a natural gas terminal.

Any construction or dredging in the Sound would be under the jurisdiction of the Army Corps of Engineers.

Raymond International, which is based in New Jersey, claims that the test borings are studying the quality of the sand for a shoreline filling project, and has denied any knowledge of testing for a possible gas terminal.

In other news, Rep. Giaino has written to the selectmen outlining his continuing support of Guilford's request for a study of the harbor for possible construction of a breakwater to help ease erosion problems.

Rep. Giaino told the board that the town's request does not need congressional legislation to authorize the Army Corps of Engineers to undertake the study. What is needed is approval from the Committee on Public Works. Giaino said he has forwarded the re-

quest to the chairman of the committee, John Blatnik.

If the committee authorizes the study by the corps, the federal government will pay up to a \$1 million in matching funds for a plan approved by the corps.

The study of the harbor was initiated originally through the Community Development Action Plan Agency.

First Selectman H. Milton Bullard also announced that the Council of Elected Officials of the South Central Connecticut Region will meet today in the offices of East Haven Mayor Frank Messina with representatives of Northville Industries Corporation to discuss its plan for construction of a pier at Riverhead, L. I. The pier would extend approximately 7,000 feet into the Sound and would accommodate the docking and unloading of oil tankers.

The council has already opposed the plan as dangerous to the Sound and has informed the Army Corps of Engineers in New York of its objections.

According to Bullard the plans have already been approved by the town of Riverhead but are opposed by a group of citizens. He also added that there is a pipeline in the area which already takes oil from tankers. He felt the construction of the pier would accommodate larger vessels and thereby increase the possibility of spillage.

[From the Norwalk (Conn.) Hour, July 8, 1971]

WHY THE ACTION OFF LONG ISLAND SOUND? RIBICOFF ASKS

GUILFORD, CONN.—Sen. Abraham A. Ribicoff has asked the Army Corps of Engineers for an explanation of an engineering project now underway in Long Island Sound off Faulkner's Island.

The Raymond Technical Facilities Corp. of New York City has been conducting a series of test borings in the area and several state officials said they feel the work is part of the \$390,000 feasibility study recently announced by the Federal Aeronautics Administration for an offshore jetport.

Attempts to fix the purpose of the survey Thursday met with a variety of explanations.

Joseph Periano, president of Raymond, said it was an attempt to locate a source of sand to be used to offset erosion of the Connecticut shore.

Coast Guard and Army spokesmen said a permit had been issued for the summer study but added they had no knowledge of its aim. And Charles Hills, assistant director of the Connecticut Development Commission, declined comment, saying conferences with Raymond on the project were held in "confidence."

Fred Morrison, assistant director of progress coordination for the Department of Transportation, said the work was a feasibility study "relative to a proposal to build a liquid natural gas port for compression of gas to liquid."

Morrison said the gas would then be hauled by tankers to eastern ports "because of the demand for fuel in the east." Long Island Sound currently has two major fuel off-loading points for tankers.

When asked about the possibility of a chlorine storage area, Periano said "I don't know nothing about it."

[From the Danbury (Conn.) News-Times, July 12, 1971]

DRILLING FIRM STUDIES SOUND GAS TERMINAL

GUILFORD.—The mysterious drilling noted recently in Long Island Sound near here could be the beginning of a manmade island to be used as a natural gas terminal.

A spokesman for the company doing the drilling, Raymond International of New York, said an engineering study is being done for the Texas Eastern Gas Pipeline Co.

The spokesman said the drilling is being done to determine the feasibility of building a manmade island and added study should be completed by the fall.

He said "if feasible, the offshore concept would be coupled with the exceptionally clean and pollution-free liquid natural gas and would meet the most stringent tests regarding ecological and environmental aspects."

U.S. Sen. Abraham Ribicoff, D-Conn., has asked the U.S. Army Corps of Engineers to investigate the drilling. He recommended that it be halted until corps personnel could learn the effect of the operations on the ecology of the sound.

[From the Willimantic (Conn.) Chronicle, July 8, 1971]

MYSTERY IN THE SOUND

Senator Ribicoff has centered attention on a drilling rig that has been stationed off Faulkner's Island in Long Island Sound. The Senator wants the drilling halted until it can be determined what impact it may create in the ecology of the Sound.

A certain amount of mystery has accompanied the setting up of the rig off Guilford, with few inclined to accept the simple explanation given: That borings are being made for samples to determine whether dredging sand of the proper quality exists there for possible commercial exploitation.

If we were to disbelieve the explanation, and prefer mystery, we should guess that the borings might be preliminary to exploration for oil.

It is a fact that oil companies have been interested in exploring the coastal shelf into our latitudes. Off Long Island, it is reported, there has been some exploration activity. So why not within Long Island Sound?

Let the demonstrable facts take on from there.

[From the Hartford (Conn.) Courant, July 10, 1971]

SOUND TEST DRILLING FOR ISLAND TERMINAL

(By Charles Marland)

GUILFORD.—That mysterious drilling operation in Long Island Sound off this town could be the beginning of a 100-acre manmade island.

A spokesman for Raymond International of New York City admitted the reasons for the study of subsurface conditions Friday. He said the island would be a liquified natural gas terminal.

The company had earlier denied that this was the ultimate aim of the operation.

John Cuddihy, the company's public relations manager, said Friday that the study is being conducted for the Texas Eastern Transmission Corp. and the Tennessee Gas Pipeline Co.

The island, Cuddihy said, would amount to a liquified natural gas terminal. His company's study is expected to be completed this fall.

"If feasible," he said, "the offshore concept would be coupled with the exceptionally clean and pollution free liquid natural gas and would meet the most stringent tests regarding ecological and environmental aspects."

When the Courant first learned of the study early last week, a spokesman for Raymond International denied that the survey had any connection with a natural gas terminal and would only say that it was a study to determine the feasibility of dredging for sand to be used to counteract erosion along the Connecticut shoreline.

Fred Morrison of the Department of Transportation in Washington, D.C., said the engineering survey actually amounted to a study into the feasibility "relative to a proposal to build a liquid natural gas port for compression of gas to liquid."

In the meantime, U.S. Sen. Abraham A. Ribicoff, D-Conn., has called on the U.S. Army Corps of Engineers for an explanation of the project and recommended it to be halted until corps personnel had a chance to examine "these operations to determine their impact on the Sound."

In a letter to Lt. Gen. Frederick J. Clarke, chief of the Army Corps of Engineers in Washington, Sen. Ribicoff said he felt prior approval should be "required by law" for such surveys.

He went on to say that "drilling operations most assuredly do affect the ecology of Long Island Sound and, before any company initiates such activities, prior approval should be received from the corps."

[From the New Haven (Conn.) Register,
July 13, 1971]

AIM OF PROJECT IN SOUND ADMITTED

The evasive tactics of a company drilling in Long Island Sound off Guilford, an operation that could result in a 100-acre man-made island, should jolt the federal government and the affected states into a more aggressive stance for the protection of a body of water that means so much to millions.

After first denying it, the company, Raymond International of New York City, has admitted, through a spokesman, the true purpose of the project that is being carried out so stealthily. It now is disclosed by the company, after considerable prodding, that exploration of subsurface conditions is being made with the idea of creating the island for a liquified natural gas terminal.

This is a slightly different picture that was painted in response to first inquiries about the nature of the enterprise. The company then reported the aim was to determine the feasibility of dredging for sand to be used for counteracting erosion along the Connecticut shoreline.

Because of all the double-talk, suspicion now must cloud the claim that the offshore concept would be coupled with clean and pollution free liquid natural gas and would meet standards to avoid environmental and ecological damage. If this is so, why all the hocus focus?

It may be that the contemplated use would be desirable from the public's point of view. But proving this will be all the harder because of the lack of candor.

In any case, a full explanation is in order since the operation might have great impact on the ecology of the Sound. Much more is involved than the navigational considerations that served as guidelines when the Coast Guard permitted the drilling.

Sen. Ribicoff has called upon the Army Corps of Engineers to halt the project until the corps has had an opportunity to examine it for potential harm to the Sound. And the Senator raises the urgent question of whether the law should not require such surveys to be approved by the Corps to begin with.

What has happened in this instance underscores the need to accelerate the study of the Sound that has been started to determine how it can be best used in the public interest. A three-year timetable has been set for completion of the study but federal funds should be provided to step up the pace. The drilling off Guilford is one more argument for fast and thorough completion of that overdue study.

[From the Hartford (Conn.) Courant,
July 17, 1971]

GAS REASON FOR DRILLING IN SOUND (By Tom Condon)

GUILFORD.—Drilling operations off the Connecticut coast here are part of a worldwide search for new methods of bringing natural gas into the United States, the Texas Eastern Transmission Corp. said Friday.

R. J. Fitzgerald, a spokesman for the Houston-based firm which is co-sponsoring the project with the Tennessee Gas Pipeline Co., said the study is being held to determine whether or not a 100-acre man-made island for the unloading of natural gas from ocean-going tankers could be built near Faulkner's Island in the sound.

Fitzgerald said the fuel is "completely clean," and presents no ecological hazard to the sound.

The drilling project itself, which amounts to a series of soundings and test borings on the bottom of the sound, was cloaked in secrecy for more than a month until an official from the U.S. Department of Transportation admitted two weeks ago that the study involved the possibility of a natural gas port.

The Raymond Technical Facilities Corp., a New York engineering firm which is doing the drilling, claimed it was merely to locate areas from which sand could be dredged. State officials also said they knew little or nothing of the project, as did the Army Corps of Engineers.

The project has caused U.S. Senator Abraham A. Ribicoff to question whether anyone has a right to disturb the ecology of the sound without prior approval by the corps of engineers.

In a letter to the corps, Ribicoff said, "drilling operations most assuredly affect the ecology of the sound, and before any company starts such activities, prior approval should be received from the corps."

A spokesman for Ribicoff said this week that no reply has as yet been received from the corps.

Fitzgerald said the Faulkner's Island study is one of several being conducted in many parts of the world to find new sources and means for increasing this country's supply of natural gas.

He said his firm has allocated \$75 million to study the possibility of a pipeline to stores of natural gas in the Arctic region. Also, he said, the firm is experimenting with the possibility of producing natural gas from coal.

An operation similar to the one being considered for the sound is already in operation on Staten Island, N.Y., Fitzgerald said.

Asked if any other fuels besides natural gas would be considered for the project, Fitzgerald said he "did not know of any." He said his company does deliver propane gas to customers in the northeast, but said that is done by pipeline.

He said no decision has been made on the Faulkner's Island project, and said if a decision were reached to go ahead with the project, it would be "four or five years" before any attempt would be made to begin construction.

MR. RIBICOFF. Finally, a number of concerned citizens and municipal leaders in Southern Connecticut have written me recently about a proposed tanker port they had learned was to be constructed in Riverhead, Long Island. I was able to determine that an application had been filed with the New York District of the Corps of Engineers by a terminal operator to enlarge his facilities. The corps duly notified the towns neighboring Riverhead of the application and asked for their comments. Because Connecticut is across the sound and in the corps' New England District, no officials there were notified. Connecticut residents learned about the proposal only by chance.

What all this means, it seems to me, is that nobody is minding the store—while the store, Long Island Sound, is going bankrupt. When I was a boy you could swim in the sound everywhere—

this is no longer possible in a growing number of beach areas. The reason is pollution—oil, sewage, garbage—makes bathing a health hazard and a nuisance. Shellfish were a great eating delight in Long Island Sound. There still are shellfish, to be sure. But the famed shellfish harvesting areas—around New Haven and Norwalk, to name only two—are no longer rich in shellfish and those oysters, clams, and lobsters that remain are frequently too bathed in oil and scum that nobody dares eat them. The once majestic scenery of Long Island Sound is systematically being desecrated by development projects. Amid all these encroachments on this priceless natural resource, the Federal Government is going merrily ahead with a feasibility study to build an airport in the sound—and private industry is allowed to set up a drilling project off the Guilford shoreline without even telling anybody what it is they hope to achieve. It seems to me the people of Guilford, as well as Connecticut, have a right to know if somebody is planning to build a natural gas terminal off their coast.

Because of the lack of coordination in development of the sound, there is no telling what other projects are planned or underway. My hearings last year did find that proposals exist for everything from nuclear power plants and bridges from Connecticut to New York to parks and beaches.

Any number of these projects may be needed. But presently there is no way to determine consistently how these projects relate to the future of the Sound or each other.

Because of the absence of any organization capable of making a comprehensive study of the sound, I had introduced in the 91st Congress legislation calling for a special intergovernmental study.

In April 1970, however, President Nixon, by Executive order, enlarged the jurisdiction of the New England Basins Commission to include all of Long Island Sound and the lands on the north shore of Long Island, N.Y., draining into the sound. The previous jurisdiction included only the lands of Connecticut, and extended only to the middle of the waters of the sound.

The expanded New England River Basins Commission, if provided with sufficient funds, could carry out the comprehensive study envisioned by my bill—and then follow through with recommendations for action.

In January of 1971, at my request and without objection from the Office of Management and Budget, an appropriation of \$100,000 was made available to the Water Resources Council for use by the New England River Basins Commission in designing a detailed plan of work for the full study, to organize and assemble staff, and to initiate other first year activities.

It is ironic that the effort to save the sound was begun with only \$100,000 while the FAA is spending \$390,000 to determine ways of destroying it.

The New England River Basins Commission has estimated that it will require approximately \$2.7 million over the next 3 years to complete their assignment.

Their estimated costs of \$1,430,000 in fiscal year 1972, \$915,000 in fiscal year 1973, and \$355,000 in fiscal year 1974, were based on the knowledge that unless ample funds are provided early, the study will take more time than originally expected and will ultimately cost more.

In response to my inquiries, the River Basins Commission has informed me that a plan for action has been devised for this fiscal year and that the \$1,000,000 the committee has approved can be used immediately.

The plan, which was prepared with the cooperation and extensive participation of scientists and citizens in the area, will be submitted to the Water Resources Council in Washington next week. The Commission's plan will seek to assure that the entire range of alternative measures for the preservation and proper development of the sound will be taken into account during the course of a full study. Priority will be given to studying ways to protect wetlands, enhance water quality, improve navigation, protect beaches and shorelines, develop new institutional mechanisms to prevent unwise construction, and determine appropriate sites for residential, commercial, and industrial development.

We are in a race against time. The pollution of the sound has not come at a slow, but steady pace, but has accelerated dramatically in the last decade.

The River Basins Commission is off to a good start. It would be unfortunate to falter now. The effect on the sound and on the people along it would be disastrous.

People are looking to this study and to the agencies represented on it to produce an innovative, aggressive program for the sound, a program which uses our existing agencies of government in creative, new ways. I am sure that the people's faith in the ability of our Federal and State water and land agencies will be strengthened if this study gets the solid political and financial support it deserves.

Mr. STENNIS. Mr. President, having promised to yield to the Senator from Kentucky I yield him 2 minutes; then I shall yield to the Senator from Utah.

Mr. COOPER. Mr. President, I thank the distinguished manager of the bill, the Senator from Mississippi (Mr. STENNIS), the ranking minority member (Mr. YOUNG), and the chairman of our full committee, Senator ELLENDER, for their consideration of projects in Kentucky, and for the funding of the projects.

I wish to direct two questions to the manager of the bill, both of which I raised yesterday in the Committee on Appropriations, of which I have the privilege of being an ex officio member.

One question concerns a joint project of the city of Pikeville, the Corps of Engineers, the State of Kentucky, the Appalachian Regional Commission, and the Department of Housing and Urban Development, to relocate the channel of the Levisa Fork of the Big Sandy River, in eastern Kentucky, relocate the Chesapeake & Ohio Railway, to relocate U.S. Route 23 and construct Appalachian Development Highways U.S. 23 and U.S. 119, at an estimated preliminary cost of \$26,-

275,000. The actual cost will not be better known until they complete plans and specifications.

The Corps of Engineers testified, as shown at pages 134 and 135 of part V of the record of hearings, to a capability in fiscal 1972 of \$150,000 for initiating plans and specifications.

I do not ask that any funds for advance engineering and design be added to this bill. The Appalachian Regional Commission has indicated that it can provide from its appropriated funds the \$150,000 for the Corps of Engineers. The Corps of Engineers has indicated, orally, to my office, that if the committee and the Senate indicate their willingness, that there are no objections to the corps' use of this fund, it is ready to go ahead.

So I simply ask if the chairman and the manager will say they have no objection to the corps proceeding. If that be the case, the corps may secure the \$150,000 from the Appalachian Regional Commission, with no prejudice to any future action of any committee of Congress.

Mr. STENNIS. Mr. President, I can say to the Senator from Kentucky that the committee has looked into this matter, and there is no objection to the Corps of Engineers initiating plans and specifications for the Pikeville, Ky., project to the extent of its capability which is \$150,000, as stated by General Groves, on pages 134 and 135, part 5 of the hearings—using funds that may be provided by the Appalachian Regional Commission, without any precedent or commitment for the future.

Mr. COOPER. I thank the Senator. I have one other matter which I raised both before the subcommittee and the full committee. It is very important. \$6 million has been approved in the President's budget and by the House and by the Senate committee, for construction of a cofferdam and locks at Smithland Dam on the Ohio River—one of the most important and necessary dams in the full reconstruction of the locks and dams on the Ohio River.

As I told the committee, I have talked with Mr. Shultz, director of the Office of Management and Budget, in company with the Senator from Ohio (Mr. TAFT), and supported also by my colleague from Kentucky (Mr. COOK), and all Senators who live in States along the Ohio River, asking that to this amount \$10 million be added to meet the revised capability of the Corps of Engineers. I have been informed that this matter is presently under consideration by the Office of Management and Budget, that it is possible it will be approved. But it is too late now, I assume, for this bill, unless the Senator is willing for the Senate to add the \$10 million. However, if it is not provided now, and it comes before the committee and the Senate at the time the supplemental appropriations bill for fiscal 1972 is before the Senate, I would like to know, if I may, what the manager thinks about the proposal.

I know that the Senator from Louisiana (Mr. ELLENDER) is very familiar with it, as is the Senator from North Dakota, and the full committee.

Mr. STENNIS. Mr. President, we re-

gret that the Office of Management and Budget has not completed its consideration of this matter. We appreciate the sentiments of the Senator from Kentucky. We feel that the project has merit, and on the facts we know now, we would strongly lean toward supporting him in a supplemental request, if it comes before the committee.

Mr. COOPER. Mr. President, I wish to take this occasion to thank the committee, the manager of the bill (Mr. STENNIS), and the chairman of the full committee (Mr. ELLENDER), for their courtesy in considering my presentations to the committee—for restoring construction funds for the Martins Fork reservoir, which I believe through a misunderstanding were omitted from the House bill.

The chairman of the Senate Committee on Public Works (Mr. RANDOLPH), on which I serve as the ranking minority member, and I also appeared before the Appropriations Committee to request an additional \$20 million for the Appalachian programs. The committee approved the increase—\$10 million for health programs, \$5 million for vocational education and \$5 million for supplemental grants. We appreciate very much this support and expression of confidence for the Appalachian regional development programs, and hope that the additional amount may be maintained in conference with the House of Representatives.

Mr. COOK. Mr. President, I speak today in support of the Senate Appropriations Committee's recommendations for the 1972 fiscal year in regard to Kentucky water resources projects.

I am especially pleased that the committee restored the \$400,000 which the President requested for the initiation of construction of the Martin's Fork project in eastern Kentucky. The city of Harlan has been plagued with very serious flooding problems for a number of years and it is of the utmost importance that this project be given the highest priority. Originally it was envisioned that this project would be completed by 1974 but because of various delays the progress has been much slower than anticipated. Therefore, I join my distinguished colleague from the State of Kentucky, Senator COOPER, in urging the House conferees to give their most serious consideration to endorsing the Senate's recommendation of \$400,000 for this project.

I also commend the Appropriations Committees of both the House and Senate for their recommendation of planning funds in the amount of \$120,000 for Eagle Creek Lake, \$100,000 for Falmouth Lake, and \$280,000 for the southwestern Jefferson County floodwall.

In addition, I strongly urge the Office of Management and Budget to release all the appropriated funds for Kentucky water resources projects which were approved for the 1971 fiscal year and placed in the budgetary reserve, especially the \$240,000 of carryover funds for the Martin's Fork project.

Also, I urge the Office of Management and Budget to come forward with a much needed supplemental request of

an additional \$10 million for the Smithland locks and dam project to supplement the \$6 million which was originally requested and which has been approved by the House and Senate Appropriations Committee. The Smithland project on the Ohio River between Kentucky and Illinois has national significance. That part of the river is the link between the entire Ohio Basin, the Mississippi-Missouri River Basin, the South Central States, and the Gulf coast. It is imperative that this project be completed as quickly as possible since at the present time boats using the old facility are delayed by as much as 18 hours. This means that industries such as agriculture, chemicals, iron and steel, petroleum, coal, and electric energy in this multistate area are severely hampered by the acute congestion on this part of the Ohio River.

I believe that upon closer study the Office of Management and Budget will find that providing funds for the Smithland project at the full capability of the Corps of Engineers for 1972 is vital to the economy of this region and that such funding will in the final analysis constitute sound financial management without adding to the total ultimate cost of the project.

Mr. MOSS. I thank the Senator from Mississippi. I, too, commend the Senator for his diligent and detailed work on this bill, which is very complex, and covers a great many facets of our resources development.

I also express my concurrence with the sentiments expressed by the Senator from North Dakota that we would be doing far better to support projects of this sort, and build our country and make wealth as well as provide jobs, rather than putting our money elsewhere and leaving some of these projects to starve.

I did want to say just a word about the appropriation proposal here or the Central Utah project, Bonneville unit, and the other Utah project.

It is with the greatest disappointment that I note that the Senate Appropriations Committee has followed along in the traces of the House and has presented a bill for only \$10 million on the Bonneville unit. This means that at this rate of appropriation, we will be 50 years building this project. This is the project by which Utah's water from the river, which we are entitled to by interstate compact, will be made available to the State. This is something we have been trying to get for almost 50 years, and now it seems that it will be 100 years before we can realize the return we need. In our country, we need water.

The same is true with respect to the Jensen unit, following along with \$200,000 in construction, and then nothing at all for Upalco, Provo project, and nothing at all for the Dixie project, on which we have been working for almost 40 years, for which we once had funding, but now there is nothing at all.

I express my disappointment because I think that the development of water projects in the West is the single most important thing we need. It is disappointing to find them so underfunded or not funded at all.

I will support the bill. I think it is too late now to offer an amendment, and I will not offer an amendment. I want to express my great disappointment that the funding has been cut so low and is so damaging to us.

The PRESIDENT pro tempore. Who yields time?

Mr. STENNIS. I yield to the Senator from Maine 2 minutes, or as much time as she requires.

Mrs. SMITH. Mr. President, I want to commend the chairman (Mr. ELLENDER) and the ranking minority member (Mr. YOUNG) of the Committee on Appropriations for the remarkable achievement of having 10 appropriations bills completed by the U.S. Senate before August 1. Compared to past performance, this is almost unbelievable.

I think there was considerable skepticism when the senior Senator from Louisiana stated that he intended to have 10 appropriations bills completed by the Senate prior to August 1 or all that the Senate could complete by that time. The Senate could not act on the remaining four appropriations bills because they have not been acted upon by the House and the Senate is now waiting for the House to act on them and send them over.

This is real achievement and I think the Senate should take special note of it with a salute to the chairman of the Appropriations Committee. He has confounded the skeptics. He has done the impossible as compared to the many past years.

This is truly proof not only of the effectiveness of ALLEN J. ELLENDER and his remarkable record of getting things done but as well of his sharp intellect and his remarkably superior physical condition which well compares with even the youngest Members of this body, if not even exceeding them. Certainly no Member of this body regardless of age exceeds his mental and physical capability as a U.S. Senator.

I wish to highly commend the chairman of the subcommittee (Mr. STENNIS) for his excellent work, also to express deep appreciation for the invaluable services of the staff members, Mr. Kenneth Bousquet, Mr. Edmund King, and Mr. Guy McConnell.

The PRESIDENT pro tempore. I thank the Senator for those kind remarks.

Mr. STENNIS. Mr. President, I yield to the Senator from Virginia.

Mr. SPONG. Mr. President, there is an item in this bill of \$245,000 for the Four-Mile Run project for flood control at Arlandria. I am pleased to note that the Senator from Louisiana (Mr. ELLENDER) is presiding, because I should like the Senate to know that for more than 2 years he has recognized the gravity and the need insofar as this project is concerned. He was most sympathetic to my request for additional funds at the Senate hearing this year.

Last year, \$170,000 was appropriated to begin the planning, for flood control but, unfortunately, this money was frozen. With the addition of this \$245,000 to the reserve money, the Arlandria project can now go forward.

On behalf of the people of northern

Virginia in the area, I thank the chairman and the Senator from North Dakota, and again I commend the Senator from Louisiana for his long interest in the Four-Mile Run project.

Mr. STENNIS. I thank the Senator from Virginia. I am glad to see that the project is moving along.

The PRESIDENT pro tempore. Who yields time?

Mr. STENNIS. I yield 1 minute to the Senator from Alaska.

Mr. STEVENS. Mr. President, we are deeply indebted to the members of the committee, particularly the chairman of the subcommittee and the ranking minority member, for recognizing the problem of the Snettisham project in our State of Alaska. Through their efforts, the amount of money for the Snettisham project has been raised by \$4.2 million, so that the contract will go forward. We will meet the schedule of power on the line for December 1972. It is a very necessary project for our State, and we are extremely grateful to the chairman for his awareness of this matter and for his haste in funding it so that it can be completed on schedule.

Mr. STENNIS. I appreciate the Senator's remarks.

The PRESIDENT pro tempore. Who yields time?

Mr. YOUNG. Mr. President, I yield 2 minutes to the Senator from New York.

The PRESIDENT pro tempore. The Senator from New York is recognized for 2 minutes.

Mr. BUCKLEY. Mr. President, I should like to express my concern about the inclusion of an item on page 24 of the committee report.

It appears that the sum of \$50,000 will be made available to the Army Corps of Engineers for a restudy of the Port Jefferson Harbor dredging and channel widening proposal. I see nowhere in the report any elaboration of the specific purposes for which this money will be spent, and I would welcome the assurances of the Senator from Mississippi that the intention of Congress is to direct the Army Corps of Engineers to use these funds solely for a review of alternatives to providing petroleum supply for Long Island.

This clarification is important to me and to my constituents living on Long Island's North Shore.

I also hope the State will fully explore the ecological aspects of all these alternatives.

Mr. STENNIS. I am happy to say to the Senator that we approved the language in the House report. We do not disagree with it in any way. We did not think it was necessary to express our approval.

Mr. BUCKLEY. I thank the Senator.

Mr. JAVITS. Mr. President, will the Senator yield on that point? I do not think the time has been used.

Mr. YOUNG. I yield.

Mr. JAVITS. Mr. President, I have heard what my colleague from New York has brought out. This is a matter of long-standing importance and interest to me and the Long Island community. There is a very widely and strongly divided view in the area, and I agree that

the study should not be loaded or prejudiced in either direction.

I hope very much that the colloquy will not be taken to be any approval or disapproval of any course. Whatever course is best for the development of the natural resources concerned, in which the community has a profound interest, and in which it must have the freedom to express itself, will be most desirable, provided we have the basic facts authoritatively. I gather that that is what my colleague is driving at, and I thoroughly agree.

The PRESIDENT pro tempore. Who yields time?

Mr. STENNIS. I yield 2 minutes to the Senator from Missouri.

Mr. SYMINGTON. Mr. President, I would like to express my deep appreciation to the chairman, the Senator from Mississippi (Mr. STENNIS), the ranking minority member (Mr. YOUNG) and the other members of the committee not only for including in this bill those projects which were approved in the House, but also for adding money for the Pattonsburg Lake-Highway Crossing item; for approving an appropriation for planning the relocation of the new town required because, under the dam development in the area the old town of Pattonsburg will be flooded out.

This is a real step forward for the State of Missouri. It is typical of the care and solicitation of the distinguished chairman for the people of this country when it comes to water development. I again express to him and the committee the gratitude of the people of Missouri for including the money for this overall project.

Mr. STENNIS. I thank the Senator very much for his remarks. I am delighted that these projects are moving along. They are worthy.

Mr. President, I yield 1 minute to the junior Senator from Missouri.

Mr. EAGLETON. Mr. President, I join my senior colleague from Missouri in expressing my thanks to the Senator from Mississippi for the attention he has paid to the Pattonsburg Dam project.

As my colleague, Mr. SYMINGTON, pointed out, this was an item that was left out in the House version of the bill. The problems at Pattonsburg are severe. The town is destined for ultimate obliteration and the citizens are extremely anxious about their future. I am very grateful to the Senator from Mississippi (Mr. STENNIS), the ranking Republican member (Mr. YOUNG), and all the members of the committee, for the attention they gave to include the \$500,000 for construction grants for the Pattonsburg Lake Highway I-35 crossing, as well as \$50,000 for the Pattonsburg Lake to be applied for town relocation planning.

Mr. STENNIS. I thank the Senator from Missouri very much. I am delighted that these items are in the bill and I hope that they move forward.

Mr. YOUNG. Mr. President, I yield 2 minutes to the Senator from New York.

The ACTING PRESIDENT pro tempore (Mr. METCALF). The Senator from New York is recognized for 2 minutes.

Mr. JAVITS. Mr. President, I join my other colleagues in great appreciation to

the committee which facilitates many of the projects in my State which are critically important and will be helpful.

I wish to call special attention to the \$80,000 recommended to close the New York Harbor for the collection and removal of drift. It was originally authorized in the 1970 Omnibus Rivers and Harbors bill. This project is the end result of 8 years of effort and support by the States of New York and New Jersey, and the city of New York and the New York Port Authority. It is as prominent an example as exists in the country of what needs to be done to deal with an ecological situation so long neglected.

We have 2,000 abandoned hulks and piers on the mud flats around the harbor of New York. As this is the leading port of entry to our country, it is an eyesore as well as a great danger to navigation, and a great danger to the city. We hope very much to remedy the situation.

Obviously, this cleanup, standing alone, especially if more structures are abandoned all the time, will not do the job. So we express the hope very much that the Justice Department, in conjunction with the Army Corps of Engineers, will enforce the 1899 Refuse Act which empowers the Federal Government to prosecute owners of deteriorating piers and other rotting shoreline structures that do not keep their property in good repair.

This should help us to control the situation in the future. With the grants now authorized and the beginning of the financing, we are extremely hopeful that this will have great results.

We hope very much that the Office of Management and Budget, appreciating the broad congressional support for this particular program, will allow us to go ahead, first, on the ground of urgent necessity in the port and, second, to improve in so critical a place a measure of the environment and the quality of its water resources and the need to revitalize the waterfront.

I also express my great appreciation to the Senator from Mississippi (Mr. STENNIS) and the Senator from North Dakota (Mr. YOUNG) and the members of the committee and their staffs for the inclusion of \$1,000,000 for a study of Long Island Sound. This is something which I have been interested in for some time and we certainly need to take affirmative steps to alleviate pollution in the sound. The committee's action is a welcome step in that direction.

Mr. YOUNG. Mr. President, I yield 2 minutes to the Senator from Oklahoma.

The ACTING PRESIDENT pro tempore (Mr. METCALF). The Senator from Oklahoma is recognized for 2 minutes.

Mr. BELLMON. Mr. President, I rise to express my appreciation and thanks to Chairman STENNIS and the ranking minority member, the Senator from North Dakota (Mr. YOUNG), for the consideration they have given to the State of Oklahoma in providing funds for the badly needed projects in our State.

I also wish to express the appreciation of all the citizens of Oklahoma for the long consideration this group has given to our needs.

Over the years, the Corps of Engineers and the Bureau of Reclamation projects have ended floods, stored water for drought, straightened channels, and generally tamed, modified, and improved what once was a hostile environment.

On June 6, the Arkansas Navigational Channel was opened by President Nixon, which marked the conclusion of a \$1.2 billion project, the largest ever undertaken by the Corps of Engineers. It is a great tribute to the Corps of Engineers that the project was opened on time, and completed inside the budget estimates which had been made many years earlier. They did this in spite of the fact that we had general inflation. By being able to use improved methods, they were able to make the money reach. This project is a modern engineering miracle, made possible through the long consideration the committee gave to the needs of Oklahoma over the years.

I would particularly like to thank the senior Senator from Louisiana (Mr. ELLENDER) for his long and effective work on the project, which affects his State as well as ours. The completion of the project will open the Arkansas Basin to accelerated development. It will make the tremendous resources that are presently there available for transportation where needed. It will do a great deal to improve the income on farms whose products and supplies will move through this channel.

I also want to express the profound appreciation of Oklahoma citizens for the continued consideration to the needs of our State as shown in the bill.

I again thank the chairman and the ranking member for taking care of our needs so well.

Mr. YOUNG. Mr. President, I yield 2 minutes to the Senator from Tennessee.

The ACTING PRESIDENT pro tempore (Mr. METCALF). The Senator from Tennessee is recognized for 2 minutes.

Mr. BROCK. Mr. President, I should like to take this 2 minutes to express my gratitude to the committee, to the distinguished Senator from Louisiana (Mr. ELLENDER), to the distinguished Senator from Mississippi (Mr. STENNIS), and to the ranking minority member (Mr. YOUNG) as well for their support of the Tombigbee project in the bill. This project has finally come to fruition as a direct result of the support of President Nixon.

I cannot think of a project in this decade that will do more for the people of an entire region than this particular one.

The people who inhabit the basin of the Tombigbee River are some of the lowest income families in the United States. They desperately need job opportunities and educational opportunities. This bill will afford them a chance to earn their way and become truly productive members of our society. As a vigorous and long-time supporter of Tennessee Tombigbee, I am delighted to see such progress.

I am, therefore, deeply grateful to the committee, and to the President, for their vigorous support of a developmental program that will be of enormous value to an entire region of these United States.

Mr. STENNIS. Mr. President, I yield 1 minute to the Senator from Georgia.

The PRESIDING OFFICER (Mr. EAGLETON). The Senator from Georgia is recognized for 1 minute.

Mr. GAMBRELL. Mr. President, I should like to express by personal gratitude for the work done by the committee on this subject, particularly in reference to the project described as the Trotters Shoals Dam and Reservoir on the Savannah River, Ga., and S.C.

This week, the senior Senator from Georgia (Mr. TALMADGE) and the two Senators from South Carolina introduced a resolution to name this project after the Honorable Richard B. Russell, my predecessor in the Senate.

This project will be a fine memorial to former Senator Russell and a great credit to the interest that the chairman of the subcommittee has taken in the project. I wish to thank him at this time.

Mr. STENNIS. I thank the Senator from Georgia very much.

Mr. President, the distinguished Senator from Hawaii (Mr. INOUE) has an amendment that will relate to the items in here for the Atomic Energy Commission.

The distinguished Senator from Rhode Island (Mr. PASTORE) is the chairman of the Joint Committee on Atomic Energy. He is also a highly valuable member of the Appropriations Committee, and this subcommittee. I am going to ask him to take the lead in connection with this amendment. Of course, we are backing his position, but I shall ask him now to take the lead and the control of the time.

Mr. PASTORE. Mr. President, I shall be very happy to do so.

AMENDMENT NO. 352

Mr. INOUE. Mr. President, I call up my amendment No. 352 and ask that it be stated.

The PRESIDING OFFICER (Mr. EAGLETON). The amendment will be stated.

The legislative clerk read the amendment as follows:

On page 5, after line 9, insert the following new section 103:

SEC. 103. None of the funds appropriated by this Act shall be obligated or expended, directly or indirectly, to detonate any underground nuclear test scheduled to be conducted on Amchitka Island, Alaska, before May 31, 1972: *Provided, however,* That the President may schedule such a test on the grounds of compelling national security requirements: *Provided further,* That the President shall submit to the Congress no later than sixty days prior to the scheduled test a report on these requirements.

Mr. INOUE. Mr. President, how much time do I have?

The PRESIDING OFFICER (Mr. EAGLETON). There is 15 minutes on each side.

Mr. INOUE. Mr. President, I yield myself 7 minutes.

The PRESIDING OFFICER. The Senator from Hawaii is recognized for 7 minutes.

Mr. INOUE. Mr. President, the amendment just offered is very similar to the one offered during the authorization bill by the distinguished Senator from Alaska (Mr. GRAVEL).

Mr. President, because of the limitation on time, we will not be able to discuss in depth many of the objections

against the Cannikin test. However, I would like briefly to touch upon them.

First, it is the contention on our part that the Spartan warhead which is to be tested in the Cannikin test is obsolete. I believe it would be well to note that it has been reported that the President's Office on Science and Technology concurs with this statement.

Second, we contend that the Cannikin test should be postponed until the completion of the strategic arms limitation talks. And incidentally, here again, I am advised that the State Department agrees with this proposition.

Third, it is our strong contention, Mr. President, that this test makes the Senate hypocritical. We have been suggesting to the world that underwater nuclear testing should be banned. And we have proposed a treaty to the effect. Mr. President, the Cannikin test is extremely close to the shoreline and well below sea level. In my mind this can be construed as an underwater test.

Fourth, it is our contention, and our very strong contention, that this test should be held up until President Nixon completes his journey for peace to Peking. Mr. President, if we are sincere in our support of our President's journey, we should do everything possible to remove all obstacles that might hamper his trip.

The fifth argument is an argument that has been offered by many, many citizens of the United States; namely, that this test will contaminate the environment of the Aleutian area.

Mr. President, with the time that I have remaining, I wish to speak as a Senator from Hawaii and as a citizen of the State of Hawaii.

In 1946, as a result of an earthquake in the Aleutian chain, a tidal wave, or tsunami, was triggered, resulting in 159 men, women, and children dying, and the loss of \$25 million to the people of Hawaii.

In 1952, 1957, and 1960, we had several tidal waves, resulting in additional dead and a loss of about \$30 million.

I think it is well to acknowledge—and I have not heard anyone disagree with this—that the Aleutian area is one of the most seismically active areas in the world. This area is prone to earthquakes. In the past 71 years, eight earthquakes of the magnitude of 8 or more on the Richter scale have occurred. It is very important to note that in 1970, 68 earthquakes in Alaska were registered on the Richter scale. Six days ago, on July 25, a quake registering 6.5 on the Richter scale occurred near the test site.

Mr. President, the test we are discussing is not a minor test. It is one involving a 5 megaton explosive warhead.

Perhaps many Members of the Senate are not aware of the effect of a 5-megaton explosion. The Hiroshima bomb leveled the city of Hiroshima. This 5-megaton bomb is 250 times more powerful than the Hiroshima bomb.

Mr. President, it has been said that the experts appearing before the Atomic Energy Commission indicated that earthquakes resulting from Cannikin were unlikely. In a press release issued from the U.S. Department of Commerce

National Oceanic and Atmospheric Administration by Charles A. Whitten, Chief Geodesist, dated—for some reason—August 3, 1971, next Tuesday, he points out that this year we can expect to witness more major earthquakes than any year since 1964. It appears that the world is wobbling around its axis and that every 7 years we hit a peak in earthquakes; 1971 is expected to be the peak year.

In the first 6 months of this year, the Pacific basin area has already witnessed three major earthquakes, all of them of a magnitude of 8 on the Richter scale.

Mr. President, one must be at the scene and witness a tidal wave in order to appreciate the magnitude of this fearsome, natural phenomenon. To see a wave that is of a height of about 45 to 50 feet rush onto the shore and lift cars as though they were little pieces of dust and bend parking meters as though they were matchsticks is a very frightening thing. This fearsome possibility of an earthquake triggering a tsunami or tidal wave is very real to the people of Hawaii. Therefore, we are pleading to the Members of the U.S. Senate to consider us when the decision is made whether we should go ahead with this test.

I should like to point out that the President's science adviser has indicated that the Spartan warhead is obsolete and that, therefore, this test is unnecessary.

I should like also to remind the Members of the Senate that the Commerce Department is against it and that the State Department is against it.

So, I plead with the Senate to listen to our plea. It is a real one.

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

Mr. GRAVEL. Mr. President, will the Senator yield me 5 minutes?

Mr. INOUE. Mr. President, I yield 5 minutes to the Senator from Alaska.

The PRESIDING OFFICER. The Senator from Alaska is recognized for 5 minutes.

Mr. GRAVEL. Mr. President, I thank my friend, the Senator from Hawaii.

Mr. President, there is every reason to believe that no clear consensus or agreement exists within the administration on the need to test a 5-megaton thermonuclear weapon in Alaska.

During debate on the authorization measure many Members of the House and Senate raised the question of divided expert opinion.

Since that debate we have further evidence that the administration is not of one mind regarding either the need for this test or the risks involved for the people of the Pacific rim.

Secretary Packard tells us that the test is essential to development of a vital weapons system. But the Office of Science and Technology advised the President even before the authorization was debated that it considered the weapon to be obsolete.

During debate on the authorization we were assured by proponents of the test that the environmental risks were small.

Yet now we find that the environmental protection agency and the council on environmental quality have recom-

mended either cancellation or postponement of the test because of environmental hazards.

During debate on the authorization we were told that a 1-megaton nuclear test at Amchitka in October 1969 provided clear evidence that a 5-megaton test in October 1971 could be conducted in complete safety.

Yet the Battelle Memorial Institute, which the AEC has hired to review environmental data from the island, tells us that the ability to make predictions from the Milrow test is severely limited.

We have been told that the Cannikin test is a vital link in negotiations with the Russians for arms control.

Yet on July 22 an administration expert testified before a Senate subcommittee that Cannikin was not considered a "bargaining chip" for negotiation. Further we find that the State Department has recommended postponing the test until the completion of the SALT talks.

All of this evidence has accumulated since the debate on the authorization. It adds to the considerable weight of evidence brought forth during our earlier floor debate—evidence that clearly demonstrates that the test poses extreme environmental risks and is not essential to our national security.

I have no wish, Mr. President, to restate all of the arguments presented earlier. I believe that the arguments are well supported by the facts.

There is no risk in cancellation of the test.

There is risk in moving ahead with it. The people of Alaska do not want this test. Neither do the people of Hawaii or California or Oregon or Washington.

The people of Japan and Canada are opposed to this test.

The scientific community outside of those directly employed by the Department of Defense and the AEC consider the test a ridiculous bureaucratic mistake.

The explosion of a thermonuclear weapon in Alaska will not hasten the day when we reach an agreement with the Russians on arms control. It will not contribute to our ability to defend ourselves from enemy attack. It will not prevent an outbreak of hostilities.

Nearly \$200 million will be spent on this project—\$200 million in a day when we are searching desperately for funds with which to buy absolutely essential human services, and in a year when the fiscal budget deficit has grown to more than \$200 billion.

A decision to go ahead with this explosion is a decision of great folly which would never pass the most cursory cost benefit analysis imposed by the Corps of Engineers for any public project.

I urge passage of this amendment as a means for the Senate of the United States to demonstrate that it will not be a party to such an unsupportable executive decision.

Mr. President, I ask unanimous consent to have printed in the RECORD a statement which refutes the conference report, entitled "Statement by administration officials on SALT talks," as well as an excerpt from a report entitled

"Battelle Memorial Institute Report on Milrow," a telegram from the Canadian Coalition to Stop the Amchitka Nuclear Blast, and an article from the Evening Star of July 26, 1971, entitled, "Agencies' Views Differ on Amchitka Test Blast."

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

STATEMENT BY ADMINISTRATION OFFICIAL ON SALT TALKS

"Mr. Farley. We consider this to be a development exercise which is justified in terms of the program and security requirement for such a system as proves to be permitted under a SALT agreement or if we are successful in negotiating a SALT agreement. We consider it to be justified on those security program requirements, not as a bargaining chip for negotiation."

Mr. Farley before the Subcommittee on Arms Control, International Law and Organization of the Committee on Foreign Relations, Thursday, July 22, 1971. (Muskie hearing.)

Mr. Philip J. Farley is Deputy Director of the Arms Control and Disarmament Agency.

BATTELLE MEMORIAL INSTITUTE REPORT ON MILROW*

"However, the paucity of MILROW-related ecological changes, as indicated by test-time live-box and holding-pen experiments and by test-time observations, will limit our ability to predict ecological changes if larger nuclear tests are conducted at Amchitka. Further analyses now in progress, especially study of photographs, may provide limited additional information useful in making predictions. But, because the effects of MILROW were so small, it will be necessary to depend heavily on the general knowledge of the ecology of the various ecosystems at Amchitka when predicting the effects of the proposed 'somewhat' larger nuclear test."

Senator MIKE GRAVEL,
U.S. Senate,
Washington, D.C.

The Canadian Coalition to Stop the Amchitka Nuclear Blast calls upon the United States Senate to cancel Cannikin.

The Canadian Coalition consists of representatives from Vancouver and District Council of Churches, United Church of Canada, Roman Catholic, Lutheran, Anglican, Quaker, and Unitarian Churches, United Nations Association, Young Womens Christian Association, Sierra Club, Amchitka II, Don't Make A Wave Committee, British Columbia Environmental Council, SPEG, Canadian Association of Human Environment, Canadian Labor Congress, media and political leaders.

The Canadian Coalition has the support of many thousands of Canadian citizens, teachers, scientists, conservationists, university professors and others who are concerned with the international implications of the proposed Amchitka detonation.

Our appeal is for statesmanship that seeks other alternatives for national security that do not endanger the world and its people.

C. ROBERT PEARSON,
Chairman.

LOUISE BOYCE,
Coordinator, The Canadian Coalition
to Stop the Amchitka Nuclear Blast,
Vancouver, British Columbia, Canada.

Night Letter.

*Dr. James B. Kirkwood, "Summary of Ecological Effects of Milrow," *BioScience Magazine*, June 15, 1971, p. 711.

[From the Evening Star, Washington, D.C., July 26, 1971]

AGENCIES' VIEWS DIFFER ON AMCHITKA TEST BLAST

(By James Welsh)

The White House has received conflicting recommendations from various government agencies on whether to go ahead this fall with an underground nuclear test on remote Amchitka Island.

According to informed sources, two federal agencies, the Department of Defense and the Atomic Energy Commission, favor a go-ahead for the five-megaton test blast.

For a variety of reasons, five other agencies—the State Department, the Office of Science and Technology, the United States Information Agency, the Environmental Protection Agency and the Council of Environmental Quality have recommended either cancelling the test or postponing it until after the SALT arms-limitations talks.

Amchitka is at the southwestern tip of the Aleutian Islands off Alaska, about 700 miles from the Soviet Union.

In October, 1969, the AEC set off a one-megaton hydrogen bomb 4,000 feet deep within the islands without causing any of the earthquakes, tidal waves or environmental damage feared by critics of the testing.

The megatonnage of this fall's planned test, which is code-named Cannikin, is five times as large. The nuclear device is scheduled to explode 6,000 feet underground. Cannikin is a test of a large Spartan warhead designated for use as a component of an ABM system protecting Minuteman missile sites.

The latest recommendations on the proposed test are a product of a departmental undersecretary committee named to investigate the controversy. The recommendations went directly to Henry Kissinger, Nixon's chief foreign policy adviser, and John Ehrlichman, chief domestic adviser.

The Defense Department and AEC, sources said yesterday, continue to favor the testing as important to national security. They minimize the chances that the test will trigger earthquakes or cause other unwanted environmental side effects.

OST, which is the President's scientific advisory arm, reportedly opposes the experiment, not primarily for environmental reasons but because the warhead to be tested has been made obsolete by recent weapons development.

The State Department, sources said, took a middle ground. It did not recommend cancelling the test, but advised postponing it until the completion of the SALT talks. The Council of Environmental Quality took much the same position. The Environmental Protection Agency opposes the test, believing that even a slight possibility of earthquake is too much of a chance to take.

Mr. GRAVEL. Mr. President, the Department of Commerce plans to release on August 3 an important statement regarding earthquakes. The statement reaffirms my belief that the dangers that could result from the Atomic Energy Commission's test on Amchitka Island, Alaska, are greater than were stressed in the AEC's Environmental Impact Statement.

I ask unanimous consent to insert at this point in the RECORD a copy of the Commerce Department's release.

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

EVIDENCE RELEASED LINKING EARTH'S "WOBBLE" WITH EARTHQUAKES

The Commerce Department's National Oceanic and Atmospheric Administration

made public today further evidence linking the earth's "wobble" with earthquakes.

Charles A. Whitten, chief geodesist of NOAA's National Ocean Survey, cited data from NOAA's National Earthquake Information Center which he said made it clear that there is "a definite correlation" between the earth's wobble and earthquakes.

Whitten pointed out that the wobble is reaching a peak this year in its seven-year cycle and the earth can therefore be expected to witness more major earthquakes this year than any year since 1964. That was the last peak year, when an earthquake devastated Alaska.

According to NEIC seismologist Carl Von Hake, the amount of energy released by earthquakes this year from January 1 through July 26 already exceeds that released in any one year since 1964. Von Hake has been keeping tabs on earthquakes each year since 1954.

The earth wobbles slightly as it spins in space. As it does so, the north-south polar axis on which it rotates shifts. This shift has been measured daily by world astronomers since 1900. They have found that the axis zigs and zags around the geographical north pole in a generally circular motion, shifting as much as six inches per day for a maximum 72 feet over a 14-month period. The daily shift of the pole reaches its maximum every seven years.

Whitten pointed out that four massive earthquakes have already occurred this year. As recorded by the NEIC, these included three earthquakes of a magnitude of 8.1 on the Richter scale (a method used by seismologists to gage the strength of earthquakes), one in New Guinea in January, two others in the Solomon Islands and in the New Britain Island area in the southwest Pacific in July, and a 7.8 shock in Chile, also in July.

Von Hake noted that three 8.1 magnitude shocks—what seismologists term "great" earthquakes—have not occurred within a single year since 1950.

Earlier this year, Whitten prepared a graph portraying the correlation between the total energy released by earthquakes and the daily movement of the pole during the past 70 years. He said then that it showed what he considered to be a definite correlation between earthquakes and polar motion at various periods when the polar shift reached its peak. He pointed out that major earthquakes in 1950, 1957, and 1964 coincided with years of maximum polar motion. Whitten expressed the view then that if there is a correlation between the polar shift and earthquakes, there should be an increase in major earthquakes this year.

The geodesist added that he was not suggesting that the earth's wobble was the sole cause of earthquakes. "Many things undoubtedly enter into it," he said, "including the shifting of the earth as strain builds up beneath the surface and possibly even the pull exerted on the earth by the moon and sun. But when you add to this the earth's wobble as it reaches its maximum, you have another apparently tremendous force which may trigger earthquakes."

Von Hake said his computations on the amount of energy released between January 1 and July 26 were based on eight earthquakes of magnitude 7 and above, including the four already noted. The NOAA seismologist added that all other earthquakes with a magnitude less than 7 were estimated, but noted that, taken together, they were roughly comparable to the earthquake which struck Chile July 9.

Von Hake based his computations on a standard established by the late Dr. Beno Gutenberg, director of the Seismology Laboratory at the California Institute of Technology, and Dr. Charles F. Richter, also of the California Institute of Technology. In their authoritative book, "Seismicity of the

Earth," published in 1954, the two seismologists computed the energy released by earthquakes from 1904 through 1952.

The source of the polar wobble is a mystery. Whitten said the motion of the earth's molten core against the otherwise fairly rigid structure of the earth might be a contributing factor. Other geophysicists have speculated that it is due to the melting of the ice caps, the movement of the seas, or the unevenness of the earth's land masses.

A connection between earthquakes and the motion of the pole was first postulated by British scientist John Milne in 1893. The American geophysicist Helmut Landsberg suggested in 1933 and again in 1948 that the strain associated with the wobble might trigger earthquakes. In 1967, Lalantendu Mansinha and D. E. Wyle of the University of Western Ontario said their studies showed a definite correlation between the two. They said the wobble was increased by major earthquakes.

Mr. STEVENS. Mr. President, will the Senator from North Dakota yield?

Mr. YOUNG. Mr. President, I yield 3 minutes on the bill to the distinguished Senator from Alaska.

Mr. STEVENS. Mr. President, I, too, made my comments about the substance of the amendment at the time the authorization bill was passed. I would like to point out two things at this time.

First, I am still firmly convinced that if the SALT talks are successful the Spartan warhead will be unnecessary, and if the Spartan warhead is unnecessary certainly the Cannikin test is a folly. Second, after the last debate some of my colleagues asked me, if Alaska is so opposed to this test, why were we not opposed to the drilling of the hole and the work that went on at Amchitka. I told them I was in private practice at that time and that I represented one of the contractors that got a contract to drill a mystery hole. To Alaskans these were known as mystery holes. We did not know what was going on. If we had we certainly would have voiced objection at the time. But the real problem is that before we realized what was going on we had the Milrow test. The Milrow test disturbed some people, but it was a mild one and most people had no basic objection at that time and I was one of them.

Now, the 5 megaton test has us disturbed just as the Hawaiians and the west coast people are disturbed, because of where it is located in the Aleutian chain.

Mr. President, I would urge everyone to consider the fact that had it not been for the total secrecy involved in these plans we would have had this fight 4 or 5 years ago. Under the circumstances it was not until the debate on the authorization bill—and to the great credit of the Senator from Rhode Island (Mr. PASTORE) he did obtain the total declassification of the proposal—that the world knew the whole history.

Mr. President, I understand the Senator from Rhode Island is going to modify the amendment. I urge that it be adopted.

The PRESIDING OFFICER. Who yields time?

Mr. PASTORE. Mr. President, I yield myself 5 minutes.

The PRESIDING OFFICER. The Sen-

ator from Rhode Island is recognized for 5 minutes.

Mr. PASTORE. Mr. President, this is no new problem before us today, one might even say it is an old chestnut. We had it before us on July 20, 1971, and we debated it at length and from every angle. The Senate made its decision and expressed its will then and there. The vote was decisive—57 to 37.

I do not question the sincerity of my very distinguished colleagues from Alaska and Hawaii. They have every right to express their feelings and their fears. In all matters scientific there are always the pros and cons. It has been my responsibility, as chairman of the Joint Committee on Atomic Energy, to manage this measure on the floor of the Senate and to bring forth the position of the administration and also of the scientists we have consulted with in reference to this test.

I went out of my way to talk to Mr. Packard, the Deputy Secretary of Defense. I received from him a letter very, very brief but to the point. It declared that this test is absolutely necessary for the Safeguard System, that without it the Safeguard System would be imperiled. Mr. President, I ask unanimous consent that the letter from Mr. Packard may be printed in the RECORD at this point.

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

THE DEPUTY SECRETARY OF DEFENSE,
Washington, D.C., 19 July 1971.

HON. JOHN Q. PASTORE,
Chairman, Joint Committee on Atomic Energy, Congress of the United States, Washington, D.C.

DEAR SENATOR PASTORE: This is in response to your request for my views on the importance of the CANNIKIN nuclear test to the national defense.

The nuclear device to be tested in the CANNIKIN event is for the development of a warhead for the Spartan missile of the Safeguard ballistic missile defense program, a program that Congress approved. The measurements of device performance which will be obtained from the tests are essential in my view, to the optimum defensive deployments of Safeguard for protection of the Minuteman missile sites.

Sincerely,

DAVID PACKARD.

Mr. PASTORE. Mr. President, I likewise conferred with the Atomic Energy Commission. They not only substantiated what Mr. Packard said but they went extensively into the matter of the ecology, the environment, tidal waves, and earthquakes. My goodness gracious, no one wants a tidal wave. I would be the last person to propose anything that might cause a tidal wave. If I thought there were likelihood of that peril, I would be the first to oppose it. But that would not prove that I would be right and that my friend from Hawaii might not be wrong. We did seek and receive the best obtainable advice.

The suggestion that this weapon is obsolete is pure nonsense. The Defense Department certainly has never said so and neither has the Atomic Energy Commission. If there were any evidence that it is obsolete, I would certainly be against it.

I realize that there have been views

expressed by various departments of the administration views that are conflicting or at least confusing. They not only confuse the issue but they create a quandary on the floor of the Senate.

I notice that my very alert colleagues from Hawaii and Alaska have leaned very heavily on this confusion. I do not blame them. It does credit to their advocacy.

Mr. President, in order to resolve all these misgivings I have been discussing with my colleagues what I am willing to accept as a modification for the amendment. I will read it:

None of the funds appropriated by this act shall be obligated or expended to detonate any underground nuclear test scheduled to be conducted on Amchitka Island, Alaska, unless the President gives his direct approval for such test.

This pinpoints authority and responsibility.

Let all departments concerned, whether it be the State Department, the Office of Science and Technology, let them bring their causes to the Oval Room of the White House and then let the President of the United States, who is the first responsible citizen of this country, make the decision.

I see nothing questionable in that. I have checked this solution with the Secretary of Defense. He does not seem to object to it. I do not want to say that he would not prefer to have it the way we have reported it from the committee, but I think, all things considered, this would be the proper way to handle the matter, and I would be perfectly willing to take it to conference.

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

Mr. PASTORE. Mr. President, on my time I yield to the Senator from Hawaii (Mr. INOUE).

Mr. INOUE. Mr. President, I thank my distinguished colleague for his statesmanship. I believe this will resolve many of the problems and the quandaries that many of us have faced in the U.S. Senate. If I may, as the prime sponsor, I would indicate to the Senator that I would be very pleased to accept this modification, and accordingly I would wish to modify my amendment.

The PRESIDING OFFICER. The amendment will be so modified.

Mr. SYMINGTON. Mr. President, will the Senator yield?

Mr. PASTORE. Let me yield first to the Senator from Alaska.

The PRESIDING OFFICER. Will the Senator please send the modified version of the amendment to the desk?

The amendment, as modified, is as follows:

On page 5, line 11, insert the following new section 103:

Sec. 103. None of the funds appropriated by this Act shall be obligated or expended to detonate any underground nuclear test scheduled to be conducted on Amchitka Island, Alaska, unless the President gives his direct approval for such test.

Mr. GRAVEL. Mr. President, I would like to say—

The PRESIDING OFFICER. Who yields time?

Mr. PASTORE. Mr. President, I yield, on my time, to the Senator from Alaska.

Mr. GRAVEL. Mr. President, I think I also am prepared to accept the modification to the amendment. I do not say I do it with great relish. I do it only because I do not think we have the votes to put through a stronger amendment. But let me underscore the point that this is nothing new, because under the present law the President is the final person to make the decision on detonation and also on the environmental question, because the test would come under EPA or the Environmental Agency. So we are not doing anything other than pointing our finger at the President and saying we do not feel prepared to make the determination. I am prepared to accept that modification, because I do not think we could get the votes to cancel the detonation.

Mr. PASTORE. It is not a question of whether we have the votes or not; it is a matter of resolving a very thorny problem that involves the security of the country. There is not a Senator here who would not vote tomorrow for complete disarmament if we knew the world would be safe and peace would be guaranteed. But we are living in an anxious and tortured world, we have continuously worked for peace—but many, many times we have been disappointed by our adversaries reaction to our good faith.

They have met our sincerity with deceit—our peaceful efforts with violence. Berlin walls and Iron Curtains are the evidence of that. World anxiety is their stock in trade.

That being the state of the world today, we have to be realistic. I do not relish the responsibility of asking money for weapons and for atomic weapons. May I say it was a cursed day the day the atomic bomb was born. But it was and it is here to stay and spread. We are not the only country that has it. There are four other countries in the nuclear club—and other nations wait in the wings. Here we are, the envy and the hope of the world in the same breath. That is the realism we face.

I would be the first to vote against these weapons and against the defense budget if I felt the world was safe and sane. We learned that it is not. We learned it in Cuba in 1962. If we had not been strong at that time, Khrushchev would have come through with his atomic weapons. That is a fact.

And we keep learning there are breeding places of violence—the seeds of war in every corner of the globe.

Mr. STEVENS. Mr. President, will the Senator yield?

Mr. PASTORE. I yield to my colleague from Alaska.

Mr. STEVENS. Mr. President, I indicated previously that the Senator from Rhode Island discussed this matter with us. We appreciate the spirit in which he has offered the modification to the amendment.

For myself, it is disappointing to some degree, and I am sure the Senator from Rhode Island understands this. I would like the Congress of the United States to get involved in making some of this policy. I really do not think the amendment changes the realistic situation at all. The President, as President of the United States, certainly had the power

and the duty, I believe, without regard to this amendment, to personally see to it that the Amchitka test was necessary. As I indicated previously, I assumed this would be done. I have reason to believe it was being done, and that really the amendment, in total, does not change the plans with regard to the Amchitka test.

What is more, it does not have the Senate of the United States bite the bullet. The bullet really is whether we are going to be involved in making policy for these agencies that exercise secret power and whether we believe that something like this test should not occur.

What we do is, in effect, solidify the chain of command by this amendment and make it clear that the Senate desires the personal expression of the President on this matter. Whether that would have occurred under the previous situation, I do not know, but I am sure he and his office would be involved, anyway.

So I have no objection to the amendment, but I do want to express my feeling that I would have preferred the situation whereby the Senate expressed itself either that the test should not occur or that the test should be postponed until completion of the SALT talks. It seems to me that, while this amendment goes an inch, it should have gone the full mile.

I thank the Senator for yielding.

Mr. FONG. Mr. President, will the Senator yield?

Mr. President, I rise in opposition to the test at Amchitka.

I regret that within an 11-day period it is once again necessary to ask my colleagues to withhold funding for the 5-megaton nuclear test scheduled to be held on Amchitka Island, Alaska, in October, while the necessity for this enterprise can be reexamined.

The amendment which I am cosponsoring will amend the Public Works and Atomic Energy Commission appropriations bill to provide that none of the funds appropriated by the act shall be obligated or expended for a nuclear test on Amchitka Island unless the President gives his direct approval for the test.

Let me make it clear that I am utterly opposed to the holding of a multimegaton nuclear test on Amchitka at any time, unless the Atomic Energy Commission can assure us, which it so manifestly cannot now do, that such an experiment can be conducted without human or environmental risks. But I am asking now only for this amendment, because I am a realist as to what this body may now consent to, and because I believe that with time for reflection and analysis the president will come to the realization that this test is not worth the risks involved.

The Commerce Department has just released a report by Charles A. Whitten, chief geodesist of the National Oceanic and Atmospheric Administration's National Ocean Survey, citing a definite correlation between the wobble of the earth on its axis and the incidence of earthquakes. This year the wobble reaches a peak in its 7-year cycle, and we accordingly can expect to witness more major earthquakes in 1971 than in any year since 1964, the year of the disastrous quake in Alaska. Four major

earthquakes have already occurred this year in the Pacific basin, including three of a magnitude of 8.1 on the Richter scale and one, the earthquake in Chile, of 7.8.

During what is fulfilling its promise as a peak year of earthquake activity, therefore, the Cannikin test is scheduled to be held in the most seismically active area of the world.

Let me address myself again to a particular risk involved in the Cannikin test. This experiment could in fact cause multiple tsunamis, that is, seismic tidal waves, first, from the initial shock of the blast, which will have a body-wave magnitude on the Richter scale of about 7.0; second, from earthquake activity triggered by the blast; and third, from landslides in the ocean prompted by the shock or by earthquakes.

A major tsunami, rushing unpredictably at 400 to 600 miles per hour through the Pacific basin, would devastate the coast of the Pacific State of Hawaii and every other low-lying area within its reach. We can be sure, from tragic past experience, that such destruction would not be confined to property damage alone. Human lives could be lost—the lives of people of my State, the lives of other Americans, of Canadians, Japanese, Russians, and others.

The shores of my State of Hawaii have been struck by tsunamis four times in the last 25 years. During that time, we have experienced devastating property damage, and over 200 lives have been lost. We must not by a deliberate act increase this tragic toll.

Does the Atomic Energy Commission wish to take the responsibility for such a disaster? Does the U.S. Senate wish to run the risk of such a catastrophe?

I find it highly significant that the experts within the administration are in disarray on the question of whether we should go ahead with Cannikin now. Seven agencies were asked for comments on the question by the President. The State Department favors postponement until completion of the strategic arms limitation talks. The Office of Science and Technology—which is headed by the President's science adviser—opposes the test because it considers the Spartan warhead that is to be tested to be obsolete. The Environmental Protection Agency opposes Cannikin because of the possibility, which the AEC admits, of the blast triggering a severe earthquake. The Council on Environmental Quality advises postponement until after the SALT talks. The U.S. Information Agency is also in opposition. Only two of the seven agencies on the President's review committee, the Department of Defense and the Atomic Energy Commission, favor a test this fall.

I strongly urge my colleagues to support the amendment.

Mr. President, I wish to ask the manager of the bill a very brief question. Am I correct that this is a \$25,000 item for a comprehensive study of Kaneohe Bay, Oahu, Hawaii, under Army Engineers Rivers, Harbors, and Flood Control General Investigations?

Mr. STENNIS. The Senator is correct in this respect: We made a lump-sum

increase in the amount of money available for that purpose, and the increase recommended is sufficient to include the \$25,000 for the study the Senator has referred to in that appropriation.

Mr. FONG. I thank the Senator.

Mr. DOMINICK. Mr. President, will the Senator from Rhode Island yield me a couple of minutes?

Mr. PASTORE. I yield to the Senator from Colorado.

Mr. President, how much time do I have left?

The PRESIDING OFFICER. The Senator from Rhode Island has 4 minutes remaining.

Mr. DOMINICK. Mr. President, do we have in the RECORD a date when it is anticipated that the Cannikin test will take place?

Mr. PASTORE. I think it was set for some time in the fall.

Mr. DOMINICK. Is it not true that this period was selected in order to have the least possible environmental and ecological impact?

Mr. PASTORE. Yes. Under the modified amendment, that time is to be determined by the President.

Mr. DOMINICK. Is it not also true that if it were done after that date it would not only be highly expensive but would require almost a year before another window was available?

Mr. PASTORE. Yes; in the modified amendment there is no date set for the test.

Mr. DOMINICK. I thank the Senator.

Mr. GRAVEL. Mr. President, will the Senator yield?

Mr. PASTORE. I yield to the Senator from Alaska.

Mr. GRAVEL. In the amendment as modified there is no provision that the President shall submit to Congress, within a certain number of days, a report if he decides to go ahead with the test?

Mr. PASTORE. No; the President does not have to do that.

Mr. GRAVEL. That language was taken out?

Mr. PASTORE. Yes.

Mr. GRAVEL. The only requirement is that the President has to give his direct approval?

Mr. PASTORE. He has to give his direct approval.

Mr. GRAVEL. He has to give no logic beyond that direct approval?

Mr. PASTORE. Well, the President is the Commander in Chief. He is the President of the United States. I do not want to begin to question the President of the United States on the floor of the Senate today.

Mr. STENNIS. Mr. President, will the Senator yield me 1 minute?

Mr. PASTORE. I yield a minute to the Senator from Mississippi.

Mr. STENNIS. Mr. President, I commend the Senators for the way they have made a satisfactory solution, as I see it, of this difficult problem. It protects their interests and puts the power and discretion where it belongs.

Mr. SYMINGTON. Mr. President, will the Senator yield?

Mr. PASTORE. I yield to the Senator from Missouri.

Mr. SYMINGTON. Mr. President, as

a member of the Joint Atomic Energy Committee, I congratulate the able chairman for agreeing to this compromise and also respectfully commend the distinguished Senators from Alaska and Hawaii for their interest in this subject. In due course, the matter in which this test is involved will be discussed in considerable detail on the floor of the Senate, and I believe that the compromise agreed to by the able chairman will turn out to be quite logical, and I think it is in the interest of the country.

Mr. INOUE. Mr. President, in concluding, once again I want to commend my distinguished friend, the senior Senator from Rhode Island, for his reasoned compromise.

In behalf of the people of Hawaii, I thank him for his understanding of our problems. I shall pray that the President of the United States will take the time to scan over the record of the U.S. Congress and listen to the pleas of the people of Alaska, Oregon, Washington, California, and Hawaii.

Mr. GRAVEL. Mr. President, may I have just a moment?

Mr. INOUE. I yield.

Mr. GRAVEL. Mr. President, I also appreciate the spirit of conciliatory compromise put forth by the Senator from Rhode Island, and I commend him for it; but I also want to make clear the fact that though this is a compromise on the Senate side, it is not a compromise with respect to the problems in my State and other States.

I ask unanimous consent to have printed in the RECORD at the time a statement by Representative NICK BEGICH with respect to the AEC's past record on environmental protection statements, as enunciated by the U.S. Court of Appeals.

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

[From the CONGRESSIONAL RECORD, July 29, 1971, p. 28083]

NICK BEGICH'S STATEMENT ON CANNIKIN

Mr. BEGICH. Mr. Chairman, I am pleased to again join the gentlewoman from Hawaii (Mrs. MINK) in an effort to delay the Project Cannikin underground nuclear test by denying the funds necessary to carry out the test.

It seems completely unnecessary at this time to repeat the innumerable points which have been made regarding this test, and the many unanswered questions which remain. As far back as the Anchorage hearings on Cannikin on May 28 of this year, the AEC became aware of questions put forward by myself and a great many others in Alaska. I believe those questions were responsible and needed positive answers. For the record, I made those questions clear when H.R. 9388 was debated here only a few days ago. In my view, and the view of many who are professionally more qualified in the area of nuclear testing, the questions are still unanswered.

I think that three events which have occurred since the House last debated this question are of special interest here, and I would call your attention to them as this issue is reconsidered today.

First, on July 8, 1971, a U.S. court of appeals delivered some severe criticism to the Atomic Energy Commission for its planning and environmental impact statement relating to the Calvert Cliffs nuclear powerplant. In nearly unprecedented candor, the court said that the AEC's "crabbed interpretation of

the National Environmental Policy Act makes a mockery of the act." The court also accused the AEC of a "total abdication of responsibilities," and said its judicial duty was "to see that important legislative purposes heralded in the Halls of Congress are not lost or misdirected in the vast hallways of the Federal bureaucracy."

I do not for a moment wish to confuse the Calvert Cliffs case with the Cannikin project, or to confuse the technical issues involved. I would also not make the same blanket accusations of irresponsibility toward the AEC as the Calvert Cliffs court does. On the other hand, it must be made clear that the AEC has not been without fault in this area, and it is not unreasonable to suggest that perhaps some important questions remain unanswered about Cannikin. When the unanswered questions relate to an underground nuclear test five times larger than any previously attempted by the United States, they become very critical omissions, in my view.

Second, on July 19, 1971, a report entitled "U.S. Underground Testing: Cannikin as a Case in Point" was released under the auspices of Members of Congress for Peace Through Law. This report, several months in preparation, presents a comprehensive case on Cannikin which challenges the need for such a test and describes the risks involved even if need could be demonstrated. The report was released by the gentleman from Maryland (Mr. GUDE) and U.S. Senator MIKE GRAVEL, of Alaska, and I commend it to all those interested in a thoroughgoing treatment of this issue, both from foreign policy and environmental viewpoints.

Third, on July 23, 1971, before the Arms Control Subcommittee of the Senate Foreign Relations Committee, chaired by Senator MUSKIE, the attorney general of Alaska, Mr. John Havelock, offered strong testimony on Cannikin and entered a letter on the record which made clear the thinking of Gov. William A. Egan of Alaska on this project as well.

I continue to believe that the concern being expressed by all these responsible groups and officials is justified. My support of the Mink amendment is based on my continuing concern that the Cannikin test should not proceed until all questions are answered. I urge you to join me in supporting this amendment.

I include both the testimony and the letter at this point as a further indication of the response of Alaska's public officials to this proposed test:

Mr. INOUE. I yield to the Senator from Alaska (Mr. STEVENS).

Mr. STEVENS. Mr. President, again one of our colleagues has said he is not clear about my position, so I would like to state very clearly how I feel about this proposal.

I am still opposed to the Cannikin test, so long as the SALT talks continue. I think this compromise amendment, stating that we feel the President has a clear responsibility in the matter, is a step forward toward that goal, but I would still object and still press for the concept that this test is unnecessary as long as the SALT talks continue. If we do not achieve the goals we seek in the SALT talks, we should then, as Congress, review the necessity for the Cannikin test.

But I understand the situation. I have expressed our position to the Senator from Rhode Island as to his proposal. But I would again say that this does not go to the extent to which I would like the Senate to go today.

Mr. MUSKIE. Mr. President, on July 22 and 23, the Arms Control Subcommit-

tee of the Foreign Relations Committee held hearings on the subject of current possibilities for a comprehensive nuclear test ban treaty. We also heard testimony on the proposed Cannikin test by the distinguished Senator from Alaska, Senator GRAVEL, and the attorney general of Alaska, Mr. John Havelock. It was my great privilege to chair these hearings and to listen to these men, who presented a most persuasive case against the proposed test. I ask unanimous consent that their complete statements be inserted in the RECORD at this point.

There being no objection, the statements were ordered to be printed in the RECORD, as follows:

STATEMENT BY SENATOR MIKE GRAVEL, BEFORE THE SUBCOMMITTEE ON ARMS CONTROL OF THE SENATE FOREIGN RELATIONS COMMITTEE, JULY 23, 1971

Mr. Chairman, nearly two years ago, at my request, Chairman Fulbright called a special public hearing of the Senate Foreign Relations Committee to consider the Alaska underground nuclear test program.

I was deeply grateful for that courtesy. The record written at that hearing has served as a base point for all subsequent public discussion of the underground test program in Alaska.

Today's hearing demonstrates once again this Committee's leadership in dealing with the implications of our nation's underground test series.

I want to thank you personally, Chairman Muskie, for devoting this hearing of your Subcommittee on Arms Control to the Cannikin test and for your generous invitation to the Governor and myself to present the Alaska case against the test.

I know all Alaskans appreciate your continuing concern, a concern that dates back to the Milrow test in 1969.

I believe it is worth noting for the record that as Chairman of the Air and Water Pollution Subcommittee of Public Works, you held hearings on the environmental effects of underground testing in November, 1969.

Those hearings represented the first serious Senate exploration of the effects of underground nuclear testing on the environment and were an extremely valuable and pioneering service.

Despite this Committee's work, and your personal efforts, today the people of Alaska and the Pacific Rim are confronted with the spectre of the mightiest nuclear test ever detonated by our nation.

The test site is in one of the most seismically unstable regions on earth—Amchitka Island, at the western tip of the Aleutian Chain. The test will have a yield estimated at five megatons and create a shock wave about equivalent to a seven point earthquake reading on the Richter Scale.

For comparison, the destructive February 9 earthquake in Los Angeles earlier this year registered 5.6 on the Richter Scale.

As you so clearly described it in your Senate Floor Statement Tuesday, as long as there is any possibility of a major disaster, the concern of those who live in the affected area can hardly be dismissed as emotional or irrelevant.

There is cause for concern, Mr. Chairman. No one can reasonably argue that there is not.

In November, 1968, an ad hoc panel of eminent scientists met under the auspices of the President's Office of Science and Technology to review questions of safety related to underground testing.

That Committee, headed by the distinguished scientist Dr. Kenneth Pitzer, concluded:

"There does not now appear to be a basis for eliminating the possibility that a large

test explosion might induce, either immediately or after a period of time, a severe earthquake of sufficiently large magnitude to cause serious damage well beyond the limits of the test site.

"This possibility is more serious for tests of greater than a megaton since the larger initial explosion would lead to greater alteration of the regional stress pattern. . . .

"The recent evidence indicates that the risks of damaging side effects from megaton tests are larger than were estimated when the proposed tests were planned."

That is a portion of the Pitzer Report's conclusion. Certainly, that conclusion should cause concern to those who would have to bear the loss resulting from earthquake or sea waves.

Recently I wrote to Dr. Frank Press, Chairman of the Department of Earth and Planetary Sciences at M.I.T., and a member of the Pitzer Panel, asking whether the advancement of the science since 1968 would lead to different conclusions. Dr. Press said the conclusion would be the same.

Here is his reply:

"There is really not much I can add to the debate about the Cannikin test that has not already been said in the Pitzer Panel report.

"I believe that the chances of a catastrophe are very small but not zero. The consequences of an unanticipated destructive aftereffect of the explosion are very great indeed.

"Under these circumstances one must raise the question of the importance of Cannikin to this country's security. A very compelling case must be made on this basis to justify experimentation of this type. I have not been privy to such a justification."

"Compelling necessity", as Dr. Press so ably states it, should be the ultimate test of whether to proceed with Cannikin.

Surely none of us here today would oppose the test if its importance to our nation's survival were obviously compelling. The risk would be a necessity forced upon us by greater danger.

There is ample evidence, however, that the test is not a compelling necessity and has little to do with our survival as a free people.

Cannikin is a test of the large Spartan warhead. Its designated use is as a component of the ABM system, for the protection of some Minuteman missile sites.

There is reason to question just how important a function this type of Spartan may perform.

Recently, in Senate Committee testimony, Dr. Harold Agnew, of the Los Alamos Scientific Laboratory of the AEC said high yield Spartans would be useful in only a limited way. He said:

"I said that they would be useful in a limited way, as I said in my previous testimony, with regard to breaking up high rate attacks and to provide a mechanism for high altitude attacks against very large yield weapons which might be used in a particular role which the Soviets might employ."

A new, improved, lower yield Spartan warhead—a device that does not require Cannikin—will take over many of the basic Spartan functions.

Dr. John Foster, Director of Defense Research and Engineering for the Defense Department, has said the improved Spartans, ". . . will carry a smaller warhead but to much greater velocities. This missile will enable the system to more effectively intercept SLBM's and depressed trajectory ICBM's. They have a larger area capability than the standard Spartan and reduce the nuclear effects on the system."

So rather than being an integral part of the system itself, we see that the basic Spartan is of only marginal importance, for use only under certain conditions and in certain specific contingencies.

And these arguments are the only important if one accepts the notion that the ABM itself

is a weapon that will prevent war. All ABM protects is one aspect of our deterrent—the Minuteman system, and that system, once safely protected, can only take lives, not save them.

I do not believe the ABM will prevent a war. I do not believe it would help us "win" a nuclear exchange.

I certainly do not believe Cannikin is a compelling factor in the ABM picture.

Consequently, I do not believe Alaskans and others who reside along the Pacific Rim should be forced to take the risk to life and property that will be required if Cannikin is detonated.

Let me just outline some of these risks.

First, and most obvious, there is the risk of a triggered earthquake. Dr. James Brune, who will testify before the Committee this morning, certainly is far more competent than I to describe the suspected triggering mechanism of earthquakes.

A vast body of scientific opinion views the earthquake in itself as a triggering mechanism.

The great Alaska earthquake of 1964 began with a shock of about 6.5 and triggered itself to a peak of 8.4. The Aleutian Islands earthquake of September 11, 1969, began with a shock measured at 5.2 and peaked at 6.6.

Cannikin may provide a trigger of between 6.8 and 7.2. What type of energy can be released with that kind of trigger? No one knows.

Suppose there is an imminent earthquake very near Amchitka, for which Cannikin is the trigger. Would Cannikin's 7 point natural earthquake remain a harmless 7 point event?

The AEC believes the magnitude of shock would be slightly greater if both events occurred together. At 7 points on the Richter Scale we are already courting the birth of a tsunami wave. If 7 and 7 add up to 7.5, such a wave is a certainty.

The AEC's own literature lists 7.5 as the level of shock at which a dangerous tsunami is certain to occur.

To support its conclusion of minimal risk, the AEC offers the results of the 1969 Milrow test and experience at the Nevada test site.

Any competent statistician would question either the use of the Nevada experience of the one megaton Milrow test in calculating the odds for a five megaton test in Alaska.

Our nation has never before conducted a five megaton test anywhere. Certainly, the Nevada tests, in a seismically quiet area, cannot be applied to the experience in Alaska where the earth is violently unstable.

With the triggered earthquake there is the related danger of sea waves.

The entire Pacific Rim is vulnerable to these destructive waves, so often born in the Aleutian Trench area from natural earthquakes.

Most of the deaths resulting from the terrible Alaska earthquake March 27, 1964, were caused by sea waves generated by the earthquake, rather than the earthquake itself.

Despite the AEC's attempts at assurance in the Cannikin environmental impact statement, not enough is known about the origin of characteristics of sea waves to flatly predict that one will not result from Cannikin itself or an earthquake triggered by Cannikin.

Another danger is that of radioactive contamination of the water around the island, either dynamically or through absorption into the groundwater system of massive quantities of radioactive byproducts.

The Cannikin impact statement also includes what the AEC terms an "unlikely possibility" that the water within the cavity chimney system created by the blast will flow through a system of inter-connecting rock fractures.

This model is likened to an "open crooked pipe" through which radiated water would reach the surface within two or three years and flow into the ocean concentrations of ra-

dioactivity 1,200 times the level considered safe by the Federal Radiation Council.

That process would continue for 130 years. Rapid migration and ocean contamination is the most grotesque and worrisome possible consequence from Cannikin.

The AEC in its impact statement fails to mention the possibility that Longshot, Milrow and Cannikin could all three start discharging radioactivity concurrently around Amchitka. What would that do to the dilution factors and the accumulation factors?

The AEC downgrades the possibility of groundwater contamination and downgrades the effects if it should occur. But the risk is taken seriously by Alaskans and others who have an enormous economic stake in the resources of the sea.

In these days when the nation is deeply concerned about mercury poisoning and the market for seafood products has fallen off sharply, even the suspicion that radioactive water is leaking to the surface could devastate the market for all fishery species of the North Pacific.

It is not at all certain that radioactive waste is diluted by seawater. Radioactivity concentrates in seafood. Those who dumped mercury in seawater said it was safely diluted.

Now it is found that larger fish concentrate mercury at levels dangerous for those who eat them.

DDT is such a problem it is being outlawed by some states. Comparatively, certain radionuclides like Strontium and Cesium have fabulously greater concentration features in the food chain.

The danger that radioactivity will escape is no less than the danger that an earthquake may be triggered. Indeed, these two actions could inter-react, the earthquake affecting the cavity; not only the cavity caused by Cannikin, but the cavity caused by Milrow.

The Milrow test produced an enormous amount of radioactive waste that could still be brought to the surface by groundwater, or through an unsuspected fault opened by a natural earthquake or the Cannikin test itself.

State Commissioner of Fish and Game Wallace H. Noerenberg spelled out the risk to the fisheries quite clearly in his statement at recent hearings in Alaska. He said:

"Amchitka Island lies in an ocean zone used extensively by important segments of the North Pacific anadromous salmon fisheries. Chum salmon from Honshu and Hokkaido Island of Japan and pink, chum and sockeye salmon from eastern Kamchatka Peninsula pass through the surrounding water of the island during both mature and immature stages of their life history. Aleutian and Bering Sea stocks of U.S. sockeye, pink, coho and king salmon also are known to be present in waters near the island as maturing and immature stages.

"The 'ownership' of salmon passing by Amchitka is thus international in scope and the consequences of any contamination of these animals would be worldwide in regard to marketing and human consumption problems.

"The Bristol Bay sockeye fishery of Alaska is the world's single most important fishery in value; these fish are particularly vulnerable at Amchitka since they migrate past the island on feed and/or spawning migrations up to four times during their ocean life (i.e., first at a post-smolt stage, recently emerged from the Bristol Bay river and lake systems, once and often twice during their immature feeding migrations and finally while enroute to the Bay on their final spawning migration at the end of their second or third year in the ocean).

"Should contamination of these salmon occur, the economic disaster to one of Alaska's largest industries would be of very large magnitude. The value of pack from Bristol

Bay salmon in some years, e.g. 1970, approaches 50 percent of the total Alaska pack value.

"Further, the implications among the native people in and north of Bristol Bay, i.e., Kuskokwim, Yukon, Norton Sound and Kotzebue Sound districts, is also extreme since between one-third and one-half of the salmon catch in those districts is used for vital subsistence food by the people."

In conclusion, Mr. Chairman, let me reaffirm some key points:

First, there is no compelling necessity for this test.

Second, eminent scientists who have studied problems of safety associated with high yield nuclear tests caution that because of potential risks, any decision to test must be based on the most compelling national necessity.

Third, Alaskans do not wish to accept the associated risks of this test and have strongly urged the President to cancel Cannikin and restore Amchitka Island to its wildlife refuge status.

The people of Alaska are grateful, Mr. Chairman, for this opportunity to discuss the proposed Cannikin test. I sincerely hope that the test will be cancelled so that no one will have to bear the threat or suffer the consequences of experimentation with natural forces about which we know so little.

STATEMENT BY JOHN HAVELOCK, ATTORNEY GENERAL FOR THE STATE OF ALASKA, BEFORE THE SUBCOMMITTEE ON ARMS CONTROL OF THE FOREIGN RELATIONS COMMITTEE, SENATE, JULY 23, 1971

It is my understanding that this Committee is considering an extension of the treaty banning atmospheric nuclear testing to include all testing of nuclear weapons. It is probably beyond the competence of the state government of Alaska to express an opinion on the broad, theoretical issue: it is certainly beyond my personal capacity. But it might be of interest to the Committee to hear some observations on how the present American policy on testing is administered by the Executive Branch of government, under the present arrangement of only limited legislative instruction and broad executive authority as seen from the perspective of a state within which the largest test is to be conducted.

My comments will not extend as such to the desirability of exploding the giant device, the last in the series currently undertaken by the Atomic Energy Commission, code named Cannikin and scheduled for Amchitka, Alaska this autumn. For reasons which I will indicate, we do not have sufficient information to offer a definitive opinion on that issue. My comments will be addressed to the method by which the decision to hold a test has been arrived at, a method which is the subject of substantial concern among the elected leadership and the people of our state.

I suppose, whatever we may view as the shortcomings of discretionary executive decision-making on nuclear testing, the situation was a lot worse before the adoption of the National Environmental Policy Act by the 91st Congress. The Atomic Energy Commission has conceded in principle the application of this act and a copy of the final environmental statement purporting to satisfy the requirements of the act was furnished us late last month.

At risk of instructing the Committee on matters it already well knows, let me briefly recite the five points which the Congress required to be covered in detail in the environmental statement: 1. The environmental impact of the proposed action, 2. Any adverse environmental effects which cannot be avoided should the proposal be implemented, 3. Alternatives to the proposed action, 4. The relationship between local short-

term uses of man's environment and the maintenance and enhancement of long-term productivity, and 5. Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

While on paper these requirements constitute a substantial step forward in exposing the grist of analysis that feeds the policy mill, as administered by the AEC, this process is little short of sham.

In saying so, I do not mean to impeach the good faith or integrity of the scientists and generals who have attempted to direct the AEC in conformity with the Environmental Policy Act. The problem is not personal, but broadly systematic; the same problem which brought the country to the brink of constitutional calamity just a few weeks ago. That problem is the persistence of unwarranted official secrecy in governmental decision making.

The National Environmental Policy Act is based on assumptions diametrically opposed to the mystique of the superior wisdom of high science or high office which nurtures secrecy in government. The act requires that an agency considering an action having a significant effect on the environment lay out the rationale or the proposed decision, including the cons as well as the pros, for public scrutiny and participation through debate, prior to making a final commitment on the proposed action.

Though in the extremes of the practical applications of the act, there are dangers of administrative chaos, in the main, the act can be used as a quiet instrument of revolution in the struggle to avoid the total isolation of the people from their government and the government from the consent of the governed.

As Mr. Justice Stewart remarked on June 30, in the *New York Times* against the United States,

"In the absence of the governmental checks and balances present in other areas of our national life, the only effective restraint upon executive policy and power in the areas of national defense and international affairs may lie in an enlightened citizenry—in an informed and critical public opinion which alone can protect the values of democratic government."

It is this ultimate bulwark of the decision making process of a democracy which the National Environmental Policy Act was designed to strengthen. The government itself, as well as the press, has a solemn obligation to quench the people's thirst for knowledge, not by assuring us of the integrity and wisdom of our leadership, not by marshalling the supporting arguments for a position taken, but by telling us in detail, the bad with the good, the impact of a proposed decision on the human environment.

The reference to the "human" environment in the National Environmental Policy Act is one of its nicer features, not "natural" environment, but "human." This distinction, among others, the Atomic Energy Commission has missed, or is perhaps incapable of sensing after a pinch of secret national security spice scents the policy stew.

The National Environmental Policy Act calls for a cost-benefit analysis, but the AEC has rung up numbers of bald eagle nests dislocated, sea otters affected and fish killed, inferring incorrectly that the standard imposed by the act is an atomic absolute such as extinction of a species or a level of "safe" radiation dosage. The AEC is in much the same position as the unfortunate oil industry spokesman after the Santa Barbara spill who asked why all the fuss over a few dead birds?

The National Environmental Policy Act envisions a relative standard: Whether, considering the costs or risks and the benefits, the action is worth it, "in balance". But the

AEC shows us only half the scale with some dispensable otters and eagles on it.

The effect on the human environment of the decision to hold a test itself and the advantages and disadvantages of the testing program on this particular test are a brooding omnipresence unidentified in the impact statement. Secrecy has made a charade of the Act. But one sentence in the Environmental Impact Statement covers the point: "Cannikin is a vital part of the U.S. weapons development program."

Although the effect of the Environmental Statement is to minimize every adverse impact, these innuendos should be weighed against the warning of the report prepared for the President's Office of Science and Technology in 1968 by the ad hoc panel on the safety of underground testing:

"The need for these tests as planned should be compelling if they are to be conducted in the face of the possible risks that have been identified."

When, at the urging of Governor Egan, the Atomic Energy Commission generously agreed to hold public hearings last May under the National Environmental Policy Act, I quoted Dr. Harold Agnew, Director of the Los Alamos Scientific Laboratory to the panel as stating on April 20 in public testimony before the Senate Armed Services Committee that tests of the Spartan missile were to be carried out at Amchitka, Alaska. Since Dr. Agnew spoke, I asked the panel, has the President reviewed the need for continued national security on the general purposes of the test explosion? Though I was promised an answer, I have not yet received it.

What are the people of Alaska to think when they really do not know what the test is for, yet the press and the Congress itself debate the test question, pro and con, as if it were a fact that the test is part of the development of the first generation Spartan missile. Official secrecy has denied the general public the right to debate this issue except in a house of mirrors.

I have asked myself (and having no special access to information I do not know what the test is for) what harm would there be if this were the true purpose and the fact were officially confirmed? Since it has already been as much as stated by a number of people who have access to official secrets, then the harm is surely done already, but even then, what was the harm?

Has it caused "the death of soldiers, the destruction of alliances, a greatly increased difficulty of negotiation with our enemies, the inability of our diplomats to negotiate?" fears cited by Mr. Justice Blackmun in his dissent in the *New York Times* case, or has this secrecy, on the contrary, impaired the ability of this country, sensibly and democratically to make policy both external and internal to our boundaries?

It can be argued that the permanent officers of the AEC are today's battleship admirals at bay, their vision limited by the specialization of professional experience, protected in a last redoubt by the armorplate of official secrecy. If this is not so, let free debate determine the issue.

I hold no brief for breach of any official secrets act, but who is to bell the cat in another ten or twenty years if the government then reveals what so many now purport to know, that Cannikin tests the Spartan missile system? If it is a crime to make public the government's secrets, should it not also be a crime to make secret facts rightfully the public's? Spartan secrecy should not subvert America's Athenian democracy.

It is an irony of some poignancy that the men who, in their ways laid the foundation for the National Environmental Policy Act by introducing systematic analysis into public policy decision making have taken the brunt of the criticism of the nation's wayward course abroad the past several years.

If there are lessons to be learned from the history recited in the Pentagon Papers, one is surely that secrecy is a long-term course to public policy making is sometimes a short-term boon.

The value to the nation of shrouding the purpose of the CANNIKIN test of Amchitka from our enemies must be weighed against the damage done in disguising its purpose from ourselves.

In its preliminary calculus, the AEC should weigh the damage done to the quality of a public decision against the speculative values of secrecy. A debate carried on in a closed bureau of government or in the artificial atmosphere of suppositions does not produce as true a result as a public decision on the same subject publicly arrived at. Despite the semantic confusion between national security interests and national security secrets, the larger issues of national security are surely only in the rarest instance issues also for secrecy. In the sense that Congress looks for guidance to an informed public, the secrecy attaching to the test program also chills the ability of Congress to make effective decisions.

Another lesson of recent times is that moods and character of a people may be more important weapons in international relations than the hardware of war. This Committee is at the center of the exploration of this principle in its applications both home and abroad. The choice of weapons systems, the creative design of our politico-military structure in the world contest is an environmental issue of great delicacy. I do not envy this Committee its share of the responsibility for weighing the relevance of nuclear diplomacy to the needs of the world.

If that issue is to be weighed in keeping with our traditions, if we pursue the best chance of deciding these questions aright, the process must take place, in the words of the first *New York Times* case, *New York Times against Sullivan*, after "open and robust debate," having in mind, as the National Environmental Policy Act puts it, that "proposed action must be assessed from the perspective that each generation is trustee of the environment for succeeding generations."

Mr. Chairman, as an additional exhibit to my testimony, I would like to submit for the record a copy of a letter from Governor Egan to Secretary of Defense Laird urging at least a year's delay in arming the Amchitka device.

HON. MELVIN R. LAIRD,
Secretary, Department of Defense, Washington, D.C.

DEAR MR. SECRETARY: It is my understanding that, though the decision is ultimately the President's, the Atomic Energy Commission is still planning to go ahead this fall with the testing at Amchitka, Alaska of by far the largest underground nuclear device ever fired in North America.

The plan for an early detonation has not been disturbed despite considerable recent scientific testimony as to the environmental risks involved in such a test.

Even more disturbing has been testimony to the effect that the test is not even really necessary, but results from a definition of American security interests which has been overtaken by the march of events.

The only explanation given by the AEC for pushing ahead now is that the test is a "vital part of the U.S. weapons development program," an explanation which is years old and reveals nothing.

Mr. Secretary, Alaskans would be among the first Americans to assume any risk if it really was in the national security interest. But many Alaskans are troubled today that no current statement has been made by yourself or any member of the Executive ultimately charged with the protection of the

national security. Nor has any explanation been given as to what that national interest is.

Despite the debate which has raged in the Congress and the public press on the assumption that the Amchitka test is intended to test the warhead for a first generation Spartan missile system, the Department of Defense has been officially silent on what the test is really supposed to prove.

At the environmental impact hearings held this May before the Atomic Energy Commission, in Anchorage, we quoted Dr. Harold Agnew, Director of the Los Alamos scientific laboratory as publicly stating that the Spartan test was to be carried out at Amchitka, Alaska. Alaska Attorney General John Have-lock then asked the Commission, "Has the President since the April 20 statement of Dr. Agnew, reviewed the need for continued national secrecy on the general purposes of this test explosion?"

Though a response was promised, to this date, Mr. Secretary, we have not received a reply, underlining the inference that neither the official secrecy surrounding the purposes of the test nor possibly even the purposes of the test itself have received a review of the highest level in recent months.

I understand why such a recent review might not have taken place. There are many other events such as the President's call on Wednesday for endorsement of a treaty banning the placing of nuclear devices under the ocean floor which might bear upon an armaments decision with as many ramifications as this nuclear explosion project. Under the circumstances, it would seem prudent to give active consideration to postponing the arming of the Amchitka device for at least one year. This would give time for a complete review of the issue, preferably a public review, in keeping with the traditions of decision making in a democracy.

Only when the government has made available information on all possible aspects of the test which do not infringe upon secrecy interests in national security can the public, including the Alaskan public and its elected representatives make an independent evaluation of the wisdom of this major governmental action. Your frank explanation of these issues would be of great value to the American people and concerned Alaskans.

Sincerely,

WILLIAM A. EGAN,
Governor.

Mr. MUSKIE. Mr. President, this defense of Cannikin was challenged in a letter of July 22, which was addressed to me, as chairman of the Arms Control Subcommittee, by three recognized authorities in the field of strategic policy and arms control: Dr. Herbert Scoville, Jr., Dr. Marvin Goldberger, and Dr. Morton H. Halperin.

I ask unanimous consent that the statement by the AEC and the response by these distinguished scholars be inserted at this point in the RECORD. I also ask unanimous consent that a covering letter from Dr. Jeremy Stone, director of the Federation of American Scientists, also be inserted into the RECORD.

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

STATEMENT BY AEC: THE NECESSITY FOR THE
CANNIKIN EXPERIMENT

The nuclear device to be tested in the Cannikin event, scheduled for the fall at Amchitka Island, is related to the optimum development of a warhead for the Spartan missile of our Safeguard Ballistic Missile Defense Program. The measurements of device performance which will be obtained from the test are essential to our optimum defense

deployments of safeguards for protection of our Minuteman missile sites. Several nuclear tests have been conducted in the program leading to this requirement, but they did not have the hardware improvements incorporated in the present design nor were they at the yield level to demonstrate proper final performance. This device is the most intricate and complicated configuration ever undertaken in the weapons program and incorporates a design that is different from any other nuclear weapon ever produced.

Nuclear weapons produce energy output and effects in various forms such as thermal radiation, neutrons, fission products, x-rays, gamma rays, and shock waves. In the Cannikin experiment, it is vital that these various outputs be measured to be certain that the constituent parts satisfy the requirements of the device design.

This system is designed for exoatmospheric intercept with x-rays as the kill mechanism. This intercept mode puts two important constraints on the warhead: (1) it must have a low fission output in order to reduce radar blackout effects and (2) a large fraction of its output should be x-rays to increase lethality and make it more difficult for the attacker to harden his reentry vehicles. Full understanding of the x-ray output spectrum is important to successful operational planning. Cannikin objectives include determining the yield of the warhead and making extensive x-ray output measurements.

The principal reasons for the full yield test are:

To minimize the possibility of stockpiling a defective design. There is a chance that there is some deficiency in the warhead which has not been found in spite of extensive design calculations and testing of the warhead at partial yield. There is no way to demonstrate that such a defect does not exist other than by testing at full yield. Theoretical calculations indicate a good physics package, but a design as complicated as this could provide serious surprises. Although it is difficult to lay out a history of all past test failures, a recent example in 1967 was the full yield proof test of the Minuteman III warhead which produced only 40% of the predicted yield and resulted in a redesign before final proof test and production. Therefore, failure to do the Cannikin test would result in a drastically reduced confidence in the performance of the system.

To measure the yield. The test should permit the yield to be measured to an accuracy of plus or minus 15%. Without a test of the fully fueled design, one would have to rely on calculations and extrapolation of the results of testing at lower yields. The uncertainty of the calculations is difficult to estimate but in the absence of a full yield test, it would probably be possible to specify the yield only to plus or minus 25-30 percent.

To measure the x-ray flux and spectrum. The main uncertainty in x-ray output is the uncertainty in yield. If Cannikin were not conducted, one would be forced to rely on theoretical calculations to determine x-ray flux and spectrum without the benefit of any meaningful experimental data.

I would like to comment on some safety aspects of Cannikin.

A number of individuals and private organizations have recently questioned whether it is safe for the AEC to go head with the detonation of the Cannikin device at Amchitka. Some have charged that the AEC is acting with disregard for safety in its planning for Cannikin. These are serious charges which have led me to look into the AEC's study and investigation about the safety of Cannikin. I have found that the AEC has been conducting active investigations of all aspects of the Cannikin test safety since early 1967, studying these matters with extraordinary thoroughness. An important part of these investigations was the Milrow experiment which was conducted at Amchitka in

1969 for the sole purpose of verifying whether the larger Cannikin test could be conducted safely. This experiment accomplished the purpose of confirming preshot predictions as to the minimal effects of that megaton explosion.

Throughout its test operations the AEC utilizes the best advice and counsel that it can obtain in regard to safety. In planning for Cannikin the AEC has obtained the services of appropriate Federal agencies, of scientists at several universities and of several independently recognized experts from a variety of scientific disciplines. For Cannikin, a Standing Panel of Consultants for the AEC has performed a review of the effects predicted on the geology, groundwater, ecology, and natural and man-made structures from ground motion and radiation hazards. In addition, because of the seismic nature of the Aleutians, the Special Panel for Seismology has reviewed and advised upon programs which the AEC has conducted to study the seismological effects of Cannikin. For the most part, these experts were selected from candidates recommended by the National Academy of Sciences.

The Panel of Consultants as well as the Special Panel for Seismology was made up of individuals from the U.S. Geological Survey, University of California, University of Illinois, St. Louis University, University of Nevada, Washington State University, University of Michigan, Columbia University, California Institute of Technology, Palo Alto Medical Clinic, Scripps Institution of Oceanography, Sheppard T. Powell and Associates, and Shannon and Wilson, Inc. They represent such disciplines and subdisciplines as radiobiology, soil mechanics, structural engineering, geophysics, hydrology, radiation medicine, ecology, geology, oceanography, tsunamimology, seismology, and hydrogeology. All told the talents of some 60 recognized scientific and technical advisors and participants have been involved to varying degrees with deliberations on these subjects for the AEC's conclusions as to the safety of the Cannikin test. In addition, several hundred AEC and AEC contractor personnel have been engaged in direct performance of studies.

It is on the basis of these extensive investigations that the AEC has been able to state in its environmental statement for Cannikin that the Cannikin test can be fired without important detrimental impact. I am personally convinced that this conclusion is amply supported by facts, the most important of which are reported within the environmental statement.

The decision on the requirement for this system was made some time ago. Until such time as intelligent international understanding can be reached which makes such weapons developments unnecessary, we have no other choice. If we are to develop and deploy an effective system, we must have this test.

FEDERATION OF AMERICAN SCIENTISTS,
Washington, D.C., July 22, 1971.

HON. EDMUND S. MUSKIE,
Chairman, Subcommittee on Arms Control,
International Law and Organization of
the Senate, Foreign Relations Committee,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: For your possible information and use I list some of the credentials of the members of the Federation's Strategic Weapons Committee, signers of the attached letter:

Dr. Herbert Scoville, Jr., Chairman of the Committee, was formerly Deputy Director of the Central Intelligence Agency under Presidents Eisenhower and Kennedy, and Assistant Director of the Arms Control and Disarmament Agency under President Johnson.

Dr. Marvin L. Goldberger, presently Chairman of the Federation of American Scientists, was a member of the President's Science Advisory Committee (PSAC) and Chairman

of its Strategic Weapons Panel during years in which Cannikin was considered by the President's Committee. He is now Chairman of the Department of Physics of Princeton University, and was for seven years Chairman of the Jason Division of the Institute for Defense Analyses.

Dr. Morton H. Halperin was a Deputy Assistant Secretary for Policy Planning and Arms Control under President Johnson and a member of the senior staff of the National Security Council under President Nixon.

Respectfully,

JEREMY J. STONE,
Director.

FEDERATION OF AMERICAN SCIENTISTS,
Washington, D.C. July 22, 1971.

Hon. EDMUND S. MUSKIE,
Chairman, Subcommittee on Arms Control,
International Law and Organization of
the Senate Foreign Relations Commit-
tee, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: In a letter to Senator Pastore, Secretary Packard stated that the measurements of device performance which will be obtained from the Cannikin test (of the so-called basic or first generation Spartan missile warhead) are "essential in my view to the optimum defensive deployments of Safeguard for the protection of the Minuteman missile sites." (Italics added.)

It is highly significant that Secretary Packard did not say that Cannikin was essential to the deployment of Safeguard but only that it was essential to the "optimum" deployment of Safeguard. This assertion avoids completely the critical question raised by the Pitzer report and, indeed, by common sense: Is Cannikin sufficiently important to the deployment of Safeguard to justify the risks of the test.

In this connection, we wish to point out that Secretary Packard neglected to add that the first generation Spartan interceptor missile adds only marginally to the overall capability of Safeguard—which is in any case low—to protect the Minuteman sites. The primary purpose of the Spartan component of Safeguard was always one of light area defense against a Chinese threat or accident. Indeed, the Spartan component of Safeguard is ignored by the DOD experts in calculations of Safeguard's projected effectiveness—these calculations have always referred only to the number of Sprints.

Furthermore, Secretary Packard neglected to point out that Cannikin is testing the first generation Spartan. An improved Spartan with superior capabilities achieved without such a high yield warhead is being procured. Development of this advanced Spartan was begun in 1970 and Dr. Foster has testified that it could be deployed by 1976—ample time to cope with the threat of an attack against our deterrent forces.

We feel constrained to note that the specific data which support the relative unimportance of Spartan to Minuteman defense is classified unjustifiably since the necessary information would be readily available to the Soviet Union. The Defense Department has been so loath to permit the public to debate this test that it was only in this letter of Secretary Packard's—the day of the Senate vote—that the Department admitted the purpose of Cannikin.

In summary, the Cannikin test is for the Spartan ABM interceptor which plays only a minor role in the defense of Minuteman and which would be inferior to a more advanced Spartan which will be available in time to meet any possible Soviet threat. Therefore, Cannikin would hardly meet the criteria of the Pitzer report that "the needs for tests as planned should be compelling if they are to be conducted in face of the possible risks that have been identified."

Indeed, it is even hard to rationalize Secretary Packard's view that Safeguard would be

optimized by the use of the first generation Spartan when a more advanced Spartan will be available in its stead.

We hope this information may be useful to you in connection with the hearings on Cannikin of the Subcommittee on Arms Control, International Law and Organization of the Senate Foreign Relations Committee.

Respectfully,

Dr. HERBERT SCOVILLE, Jr.,
Chairman, Strategic Weapons Commit-
tee Federation of American Scientists.

Dr. MARVIN GOLDBERGER,
Member, Strategic Weapons Commit-
tee.

Dr. MORTON H. HALPERIN,
Member, Strategic Weapons Commit-
tee.

Mr. MUSKIE. Mr. President, when this subject was being debated in the Senate in connection with the AEC authorization bill on July 20, the distinguished Senator from Rhode Island, Senator PASTORE, chairman of the Joint Committee on Atomic Energy, placed into the record a memorandum which he had requested from the AEC entitled "The Necessity for the Cannikin Experiment." This statement was circulated to all Senators together with a supporting letter from Deputy Defense Secretary David Packard.

Mr. President, it continues to be my hope that the administration will decide to cancel the Cannikin test altogether. It was reported in the Washington Star of July 26 that various Government agencies have forwarded conflicting recommendations to the White House on whether to proceed with this nuclear test. The Defense Department and the AEC are already on record favoring the test. But, according to the Star, five agencies have recommended that the test be postponed or canceled. These agencies are: the Department of State, the Office of Science and Technology, the U.S. Information Agency, the Environmental Protection Agency, and the Council of Environmental Quality.

It is significant that the test has evidently been opposed by these five agencies on a variety of counts. The Environmental Protection Agency is reportedly opposed on grounds that even a slight possibility of earthquake is too much of a chance to take. The Office of Science and Technology, which is the President's scientific advisory arm, is apparently opposed because the warhead to be tested is designed for the basic Spartan anti-ballistic missile which is said to be obsolete. The State Department and Council of Environmental Quality were reportedly in favor of postponing the test until the completion of the SALT talks.

Mr. President, we should postpone this test, about which so many serious doubts have been raised. A postponement will not tie the hands of the administration and prevent them from carrying out the test next year if, after further reflection, it is still considered in the national interest to do so. But in view of conflicting advice going to the President on this question, it seems to me that further discussion of this matter within the administration is necessary.

We must guard against any irrational momentum that can build up within Government bureaucracies to carry out

a project even when the original purpose may no longer be justified. There is convincing evidence that Cannikin may no longer be necessary for our military security, and it certainly carries with it at least some danger of environmental disaster. Therefore, I hope this test will be postponed.

Mr. BYRD of West Virginia. Mr. President, on behalf of the senior Senator from Massachusetts (Mr. KENNEDY), who is necessarily absent, I wish to state that he would want the record to show that he would vote for the amendment of the junior Senator from Hawaii (Mr. INOUE).

The PRESIDING OFFICER (Mr. EAGLETON). The time of the Senator from Hawaii has expired.

All time having expired, the question is on agreeing to the amendment of the Senator from Hawaii (Mr. INOUE), as modified.

The amendment was agreed to.

Mr. STENNIS. Mr. President, I understand that the Senator from Wisconsin has an amendment.

The PRESIDING OFFICER. The Senator from Wisconsin is recognized.

Mr. NELSON. Mr. President, I send to the desk an amendment and ask for its immediate consideration.

The PRESIDING OFFICER. The amendment will be stated.

The legislative clerk proceeded to read the amendment.

Mr. NELSON. Mr. President, I ask unanimous consent that the reading of the amendment be dispensed with. I shall explain it.

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

Mr. NELSON'S amendment is as follows:

At the end of the bill, add the following new section:

"Sec. 502. No part of any appropriation contained in this Act shall be expended for construction in connection with any of the following projects until after review and comment by the President's Council on Environmental Quality of the environmental impact statement made with respect to any such project pursuant to section 102(C) of the National Environmental Policy Act of 1969, including a review of alternative measures for flood control and a sound area economy:

"(1) Tennessee-Tombigbee Waterway, Alabama and Mississippi;

"(2) La Farge Lake and Channel Improvement;

"(3) Normandy Dam, Duck River Projects;

"(4) Columbia Dam, Duck River Projects; and

"(5) Tellico Dam and Reservoir."

Mr. STENNIS. Mr. President, may we have it quite? This is a matter of considerable importance.

The PRESIDING OFFICER. The Senate will be in order, so that we may hear the Senator from Wisconsin.

Mr. NELSON. Mr. President, this issue involves several projects in the bill: the Tennessee-Tombigbee Waterway in Alabama and Mississippi, the La Farge Lake and Channel improvement project in Wisconsin, the Normandy Dam, Duck River projects, the Columbia Dam, Duck River projects, and the Tellico Dam and Reservoir, all three in Tennessee.

Mr. President, this amendment would provide that no money is to be spent on

construction for these projects until an adequate environmental statement, in compliance with the law, is filed with the President's Council on Environmental Quality and commented on by them.

The Normandy Dam, Duck River projects, the Columbia Dam, Duck River projects, and the Tellico Dam and Reservoir are TVA projects. The TVA has filed a draft statement, but not a final statement, on each of the three projects, and in fact final commentary by the appropriate Federal agencies is not due until late September. So clearly the law, the Environmental Policy Act, is not being complied with, with respect to those three projects.

As for the Tennessee-Tombigbee Waterway and the La Farge Lake and Channel improvement project in my State, both of those cases are in court, challenged on the same ground, that the Environmental Policy Act is not being complied with.

I think this is a serious matter. Congress decided, in enacting that legislation, that projects that have a significant impact on the environment have to meet certain standards of evaluation, comprehensive studies are required and the implications of the environmental impact have to be evaluated and comments on the project must be made, by all the appropriate Federal agencies. So far as I know, no agency is complying with the spirit or clear intent of the law.

This law is being honored in the breach. At best there is technical compliance, and in three of these projects, there is not even technical compliance.

I intend to raise the question about compliance with section 102 of the Environmental Policy Act on every single authorization bill and every appropriation bill which comes to this floor and contains any project which is covered under the provisions of the Environmental Policy Act, until such time as Congress begins to require compliance with the law, which is not now being done.

Let me read what the law says:

The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this Act, and (2) all agencies of the Federal Government shall—

(A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment;

(B) identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by title II of this Act, which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations;

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—

(1) the environmental impact of the proposed action,

(2) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of title 5, United States Code, and shall accompany the proposal through the existing agency review processes;

As I stated a moment ago, as to the three last projects listed on the amendment, the final environmental report has not yet been filed, and the comments of the agencies have not been received. The comments of the agencies are not required until sometime near the end of September. Yet Congress is proceeding to make appropriations in violation of the clear intent of the law we passed last year.

All this proposal provides is that those statements must be filed, with comments on them by the President's Council on Environmental Quality, prior to the expenditure of any money for construction.

It is a perfectly reasonable proposal. Certainly Congress ought to be prepared to comply with any law it passes.

Mr. STENNIS. Mr. President, I will be brief in response to the Senator from Wisconsin, because I intend to make the point of order with respect to this amendment that it is legislation on an appropriation bill.

With the greatest deference to the Senator from Wisconsin, I cannot agree with his conclusion that it is in violation of law to proceed here with construction of a project, unless there is a court order to the contrary. I cannot agree that it is a violation of law for us to appropriate the money and let the building agency start before there has been approval by the Council on Environmental Quality, because the law does not go that far in its requirements.

The Environmental Policy Act is a very involved, far-reaching act. It is experimental to a degree, and the Environmental Protection Agency does have to learn to walk before it runs. They are learning a great deal about the implementation of that act now, as it relates all these projects. But there is no requirement in the law that the Council on Environmental Quality approve or disapprove the statement or submit its comments.

Some of these projects, as Senators know, extend over a period of 8, 10, 12, or 15 years, or even more. There are changing facts as they go along, from time to time that could give rise to questions as to environmental violations. But to get it from the beginning so that everything is going to be clear for the next 10 or 15 years is impossible and unreasonable.

I believe that the only thing the law requires is that the construction agency has to file its statement, and they have to include the comments of the other agencies that are involved with their statement. Construction agencies would be the Corps of Engineers in most of these projects, or TVA, and others. Then they have to file the complete statement including the comments of other agencies with the Council on Environmental Quality.

But to delay construction until they get the comment or the ruling on the conclusion of the Council on Environmental Quality is not required by law, in my humble opinion.

If we are going to strike out the appropriations, for all the projects in this bill, just because someone has filed a lawsuit or because someone thinks the statements filed are not adequate and that the law has not quite been complied with, we can get around to the 50 States quite fast that way. It is not practical, and it was not a part of the original plan.

I respectfully submit to the Senator from Wisconsin that it could work this way, that it would work this way, and this body never intended a situation in which a project could be stopped simply because all the possible requirements now and in the future had not been completed with reference to environmental matters.

Mr. SPARKMAN. Mr. President, will the Senator yield?

Mr. STENNIS. I yield.

Mr. SPARKMAN. Is it not true that money has been appropriated in the past for some of these projects?

Mr. STENNIS. Yes.

Mr. SPARKMAN. Actually, bids have been put out, money has been spent, and they are in the process of starting construction.

Mr. STENNIS. Yes.

Mr. SPARKMAN. That happens to be the case with the Tennessee-Tombigbee project.

Mr. STENNIS. That is correct. That project was started 15 or more years ago and was finally authorized, and then all the planning was done and the planning money has been spent. They are right down to the contract now, and it is pending in court. Someone has filed a suit in the district court in Washington against the construction down there. Now we are legislating on a matter that is in court, in the first place. But wave that aside.

Mr. SPARKMAN. Does that not point up the fact that this proposal is out of order, because it certainly would be legislation—it would have to be—relating to appropriations that already have been made and construction projects that are already underway?

Mr. STENNIS. I think the Senator is eminently correct. But even a stronger ground is that the environmental protection law does not require that everything can be stopped in its tracks until all these matters have been decided to everyone's satisfaction and everything has been approved.

I have great respect for the Senator from Wisconsin and the fine work he has

done in this field, but I have to make the point of order.

The point of order is that the Senator's amendment—

The PRESIDING OFFICER. Does the Senator from Wisconsin yield back his time? The point of order would not be in order until he yielded back his time.

Mr. NELSON. Mr. President, how much time do I have remaining?

The PRESIDING OFFICER. The Senator from Wisconsin has 6 minutes remaining.

Mr. NELSON. Mr. President, I would like to make some further comment.

No construction has been started on Tennessee-Tombigbee, La Farge Lake, the Normandy Dam-Duck River Projects, or the Columbia Dam-Duck River Projects, unless all my information is erroneous. Appropriations are in the bill for construction to begin on Tennessee-Tombigbee Waterway, but no construction has yet begun.

The objective here is to require that the intent of the statute be complied with. The specific intent of the statute is to require an adequate environmental statement covering all the points enumerated in the law be filed prior to appropriations for construction. If the law does not mean that it does not mean anything.

The distinguished Senator from Mississippi, of course, is a very fine lawyer. He knows, as all lawyers know, that a statute may be interpreted in a half-dozen different ways.

I think that if one reads section 102, it is perfectly clear what the intent of Congress was. I do not know how the court might rule on this point of whether moneys could be appropriated for construction prior to the filing of the appropriate studies and the reports, and I do not suppose we ever will know until that issue is tested in court. But the fact is that if it does not mean that the provisions in this section be complied with before we appropriate money, then the Environmental Policy Act is a farce, and we ought to say so. We ought to say so now. We ought to decide whether we are going to have a law that has some teeth in it or whether we are going to have a law that all the highway departments in this country can violate—and I think all of them are—and the Corps of Engineers or any other Federal agency can violate when they want to, because they can get the authorization, they can get the appropriation and they can proceed to construction without meeting the requirements of the law. And finally, of course, they are the agency that makes the study. And I can just see some agency, after spending millions of dollars, coming in and saying, "It is all a mistake. We have finally made a study in compliance with the intent of the law, and now we find that there is irreparable environmental damage of significant consequence; we are sorry we spent the money in the first place and now recommend termination of the project. No agency is ever going to make such an admission.

That is nonsense. That is not what that law means, and everybody here knows that that it not what that law

means. All I am saying in this proposal is this: Make them comply with the intent and the spirit of this statute before they begin construction, none of which has started thus far.

Mr. President, I yield back the remainder of my time.

Mr. BROCK. Mr. President, will the Senator from Mississippi yield?

Mr. STENNIS. I decline to yield. I yield myself 1 minute.

Mr. President, I am advised that probably this point of order would be sustained and another amendment would be filed. I think that under the circumstances we will proceed now.

Mr. President, if I yield back my time, will I be recognized to make a point of order?

The PRESIDING OFFICER. The Senator from Mississippi may state his point of order on his own time. The point of order may be raised now.

Mr. STENNIS. Mr. President, I raise the point of order that this amendment constitutes legislation on an appropriation bill and therefore is out of order.

The PRESIDING OFFICER (Mr. EAGLETON). The Chair sustains the point of order raised by the Senator from Mississippi. Under rule XVI, legislation on an appropriation bill is not in order and the language of this amendment is obviously legislation.

PUBLIC WORKS FOR WATER AND POWER DEVELOPMENT AND ATOMIC ENERGY COMMISSION APPROPRIATIONS, 1971

The Senate continued with the consideration of the bill (H.R. 10090) making appropriations for public works for water and power development, including the Corps of Engineers—Civil, the Bureau of Reclamation, the Bonneville Power Administration and other power agencies of the Department of the Interior, the Appalachian Regional Development programs, the Federal Power Commission, the Tennessee Valley Authority, the Atomic Energy Commission, and related independent agencies and commissions for the fiscal year ending June 30, 1972.

Mr. NELSON. Mr. President, I send an amendment to the desk and ask that it be stated.

The PRESIDING OFFICER. The clerk will state the amendment.

The legislative clerk proceeded to read the amendment.

Mr. NELSON. Mr. President, I ask unanimous consent that further reading of the amendment be dispensed with, and I shall proceed to explain it.

The PRESIDING OFFICER. Without objection, it is so ordered, and the amendment will be printed in the RECORD as requested.

The text of the amendment is as follows:

At the end of the bill, add the following new section:

SEC. 502. No part of any appropriation contained in this Act shall be expended for construction in connection with any of the following projects until February 1, 1972.

(1) Tennessee-Tombigbee Waterway, Alabama and Mississippi;

(2) La Farge Lake and Channel Improvement;

(3) Normandy Dam, Duck River Projects;

(4) Columbia Dam, Duck River Projects;

(5) Tellico Dam and Reservoir.

Mr. NELSON. Mr. President, I was aware that the provisions in my first amendment were subject to a point of order. I had hoped that the point of order would not be raised since it made good sense to proceed with the method provided in that amendment. I offered it so as to make it perfectly clear that the intent was not to cut off the money for the planning of the projects as this time, or to hold up the projects, but simply to require the filing of the statements first, so that Congress will have an opportunity and the specialists in the scientific disciplines will have the opportunity to evaluate the environmental statements to see whether they comply with the law. There is no way we can do that now. Thus we are legislating while not knowing whether section 102 and other provisions for protecting the environment are being complied with.

I now offer the pending amendment which states:

No part of any appropriation contained in this Act shall be expended for construction in connection with any of the following projects until February 1, 1972.

Then is listed the five projects previously read in the previous amendment.

That is a period of 6 months in which the opportunity will be afforded the TVA to complete its environmental statement and file it, and for the Corps of Engineers to file an adequate statement in compliance with section 102.

The four projects and the amounts of money for each in this bill are: The La Farge Dam on the Kickapoo River in Wisconsin, \$1,730,000; the Tennessee-Tombigbee Waterway in Alabama and Mississippi, \$6 million; the Duck River dams in Tennessee, \$11.8 million; and the Tellico Dam on the Little Tennessee River in Tennessee, \$8 million.

The Kickapoo River and Tennessee-Tombigbee dams are U.S. Army Corps of Engineers projects; the Duck River and Tellico Dams are projects of the Tennessee Valley Authority.

In every one of these projects, the Federal agencies involved have fallen far short of meeting the requirements of the National Environmental Policy Act. For instance the Corps of Engineers has not even consulted the Federal Water Quality Office of the Environmental Protection Agency on the important water pollution questions raised by the \$25 million Kickapoo River Dam and Reservoir. And the corps is proceeding with plans for construction on the \$346 million Tennessee-Tombigbee project that would connect two river basins spanning two States and pose ecological implications for an entire southern region, in the face of grave water quality and resource use questions raised by the Environmental Protection Agency.

And on the Duck River and Tellico Dams in Tennessee, the Tennessee Valley Authority has even failed to file completed environmental impact statements, putting Congress in the position of appropriating funds blindfolded for proj-

ects posing great potential damage to these unique, scenic riverways.

For Congress to appropriate funds for these projects without the full and public environmental review required under its own laws would be making a mockery of the National Environmental Policy Act signed into law just last year.

There can be no question about the intent of the Environmental Policy Act to require advance review of all major Federally aided projects posing significant environmental effects. Section 102c of the act says all Federal agencies shall "include in every recommendation or report on proposals for legislation and other Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official" on the environmental impact of the proposed action, the relationship between local short-term uses of the environment and maintenance of an enhancement of long-term productivity, and any irreversible and irretrievable commitments of resources.

Further, prior to making any such detailed statement, the responsible Federal official "shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved."

On each of these four projects, the failure to comply with this Act and give Congress and the American public the benefit of a complete environmental assessment before the further expenditure of the taxpayer's money is dramatically clear:

On the Kickapoo River project in Wisconsin, I was surprised to learn recently that the Corps of Engineers apparently does not have comments on this project from the Federal Water Quality office either when it was in the Department of the Interior, or now in its position in the Environmental Protection Agency.

Yet the scale of project is in itself enough to justify an intensive review of its water quality implications alone. Involved is the planned expenditure of \$25.3 million for a 103-foot dam and 1,780-acre reservoir pool, flooding approximately 12 miles of scenic river.

Moreover, major water quality questions have yet to be resolved, even though the corps just recently initiated the first contracts for construction. Highly enriched run-off from surrounding farmland may cause overfertilization of the reservoir in a short period of time, stimulating the growth of algae and other aquatic plantlife, speeding up the eutrophication process, and damaging the substantial recreational potential which the corps argues the project will create.

Further, fluctuations in reservoir levels may well accelerate bank erosion, creating excessive siltation into the reservoir itself.

And although the Corps of Engineers acknowledges that there will be substantial sedimentation in the reservoir over time, the environmental impact statement as it now stands contains no discussion of this potential environmental and economic problem.

I am aware that a water study was conducted on the Kickapoo proposal in

1965 by the Department of Health, Education, and Welfare. However, the purpose of this study was not to evaluate water quality problems of the reservoir, but rather the possible need for and value of the reservoir for water supply and water quality control.

Moreover, this study was conducted prior to corps' major revisions of the project in 1967 when the planned reservoir level was raised from 822 to 840 feet and the proposed inundated area increased to 1,780 acres. Even then, the study concluded that current waste discharges could cause an immediate pollution problem in any proposed impoundment.

Thus, it seems to me that the Environmental Protection Agency and its Federal Water Quality Office—which is charged with protecting the quality of our national waterways—should be vitally concerned with the potential environment problems posed by the La Farge Dam and Reservoir and should very carefully review the project immediately and submit an environmental report.

And for compliance with the National Environmental Policy Act and to assure the careful review by all possible Federal expertise of all aspects of the projects, including possible alternative measures for flood control and sound economic development, my amendment would require the President's Council on Environmental Quality to review and approve the corps' final environmental impact statement on the Kickapoo.

As it demonstrated with its recommendations accepted by the President for a termination of the Trans-Florida Barge Canal Project on environmental grounds, the President's Council on Environmental Quality properly can and should adopt a role of vigorous defense of environmental values, requiring full assessment of environmental concerns in Federal activities and full review of all the alternatives.

If my amendment requiring this review and approval of the Kickapoo environmental study is adopted, there should be no delay in the project if it can stand on its merits as both an environmentally and economically sound effort that would merit its flood control and other objectives, or if there are alternatives.

The amendment would only require an adequate environmental review before further construction moneys are spent on the Kickapoo. Of the \$1.7 million in this bill for the Kickapoo, only \$350,000 is designated for construction—and the next construction contract is not scheduled to be let until sometime next spring, 8 months away.

Thus, the full \$1.7 million could be appropriated now, and if environmental concerns are satisfied by next spring, the next moneys for construction could be spent then, just as planned.

On the Tennessee-Tombigbee Waterway project in Alabama and Mississippi, it appears that as has happened so often in the past, the Federal Government is rushing headlong into a massive project whose environmental damages could outweigh any possible benefits.

While Congress has been asked to ap-

propriate \$6 million this year for the Tennessee-Tombigbee, partly for starting construction, comments under Federal law by the regional Environmental Protection Agency indicate the 253-mile waterway could well turn out to be an environmental disaster and an economic flop.

The environmental defense fund has filed suit based on the glaring inadequacies in the corps' environmental review of this \$346 million project.

In the face of the grave environmental questions that have been raised, the corps says it will do further environmental studies, yet wants to begin construction on the project in the meantime, and has submitted what it considers a final impact statement.

In brief, the EPA regional office review found that the construction of the Tennessee-Tombigbee would have a "profound and lasting effect" on the water quality and the ecology of the entire area. Among other things, it argued that the waterway's cut across river basins could expose waters in the Tombigbee River system to the pollution of Pickwick Pool of the Tennessee River, which has been closed for fishing because of mercury contamination.

Further, the EPA report pointed out that the waterway will lead to a massive new influx of pollution from a wide range of sources—barges, industries, and cities among them—that will be difficult if not impossible to effectively treat with current pollution control requirements and technology.

Citing even broader concerns of economy and land use, the EPA report urged a reevaluation of the basic question of whether the project should ever be built.

In conclusion, the regional EPA report said:

In view of the rapidly changing public opinion with regard to such areas and the questionable economic value of the project, the EPA believes that a reevaluation of the project should be made taking into consideration the fact that the project may not bring the commercial and industrial development to the area originally anticipated, particularly northeast Mississippi, and a scenic and natural area will be irreversibly damaged for all time.

Yet despite the overwhelming environmental concerns that have not even begun to be settled, Congress is being asked to appropriate millions of dollars to boost this project along.

Regarding the Tennessee Valley Authority's Duck River project in Tennessee, two dams would be built, creating 71 miles of reservoirs. Among other things, the plan is to attract major water using industries and supposedly provide reservoir-oriented recreation, even though there are already nine major reservoirs within a 50-mile radius of the project.

Now, the Duck River is the longest free flowing stream in central Tennessee, with unique and irreplaceable recreational and wild and scenic values. With the dam projects, much of the river's present fishing, canoeing, and camping would be destroyed forever. And the project would flood the homes and farms of 400 families and cover historic Indian areas.

Despite the major ecological impact of the proposed dams, TVA's environmental studies under the National Environmental Policy Act are only at the draft stage and are not due as final statements until this fall.

In the same State, the TVA's Tellico Dam on the Little Tennessee River will create a 33 mile reservoir inundating 16,500 acres of land flooding areas of key Indian history, destroying trout fisheries, eliminating about 10,000 acres of prime water fowl and small game habitat, and requiring some 350 families to relocate.

What is the cost-benefit ratio on the damming of one more river, the loss and potential pollution of one more scenic waterway? Yet as with the Duck River project, the TVA's environmental impact report required by law is only in draft stage. Meanwhile, we are being asked to appropriate \$8 million more for the Tellico project.

Conservationists are planning lawsuits on both the Duck River and the Tellico projects.

In sum, the sad state of affairs with environmental assessment on these four projects is a warning that without tough, continuous demands by Congress for effective implementation, the National Environmental Policy Act will become just a meaningless series of words on a sheet of paper.

We must firmly establish now the principle that Congress will require completed environmental impact studies before it will authorize or appropriate moneys for Federal projects with significant environmental impact. It is here, at this key decisionmaking point, that environmental review is so important. In the congressional process, the public has perhaps the best opportunity too to review the implications of such projects and assert its view of how to balance the values involved.

Thus I urge the Senate to adopt this amendment requiring adequate environmental assessment under the law before further funds can be spent out of this bill for any further construction on these projects.

Mr. STENNIS. Mr. President, I yield myself 10 minutes or so much thereof as I may use.

Mr. President, I want to call attention to the fact that the law we are talking about provides that the Attorney General of the United States shall be the legal adviser and shall represent these agencies that are in charge of construction of projects like this, and also shall represent and be an adviser to other agencies on environmental quality. Certainly there is nothing in here with reference to any complaint from the Attorney General's office.

The Tennessee-Tombigbee project went right down to the wire for the letting of a construction contract. The President of the United States went to Mobile, Ala., and dedicated the entire project.

The bids were to be opened in just a few days and suit was filed in the District Court of Washington, D.C., challenging the project and that suspended all operations.

We are here today being called on to legislate with reference to an appropriation, holding up this money. Suppose the suit should be decided within 30 or 60 days and decided favorably to the project. Then, in accordance with the amendment, the money would be stalled until that date, February 1 of next year, and then someone else, perhaps, could file a suit and stop it again.

We have to have a reasonable and practical plan of development. It can be stopped if there is a violation of the law. There is no question about that. The Attorney General can stop it. He is the agency that has this power and authority under that law, with the Federal Government behind him.

I say, we just did not pass a law that required comment on the ruling or the approval or disapproval of an entire project of this kind before construction started. There are just too many practical considerations to be considered. A law like that could not possibly have been passed. I do not know how many other projects are in the bill that could be condemned in the same way as the five which have been picked out. We heard witnesses testify in committee for months. The Senator from North Dakota (Mr. YOUNG) heard them day after day after day.

We understand fully the good faith involved on the part of the Corps of Engineers, the Tennessee Valley Authority, and others. They are moving along and making progress. They are meeting these requirements. However, if we come here with a hatchet and cut off one project after another, we can get all around the country very fast.

There is no statement here that the Senators have been through the entire bill.

Mr. YOUNG. Mr. President, will the Senator yield?

Mr. STENNIS. I yield to the Senator from North Dakota.

Mr. YOUNG. Mr. President, the Appropriations Committee listened for very nearly 3 months to testimony from the Atomic Energy Commission, Corps of Engineers, Bureau of Reclamation, and other agencies involved in the bill. There is hardly a project in this bill on which there was not some opposition from ecologists, and environmentalists. This is understandable.

If this precedent proposed by the Senator from Wisconsin were established, it would open a Pandora's box. There is not a project in the bill that would not be in jeopardy. Lawsuits could be filed, if nothing else to stop them.

The Bureau of the Budget has considered very carefully environmental objections to all projects. I doubt if there is a project in this bill where there was not some objection by environmentalists. I am sure the Budget Bureau does not approve projects now where there is reasonable objection from environmental interests.

Mr. STENNIS. I think the Senator has made a very fine statement. There are projects involved in the bill that are vital. The Bureau of the Budget has studied them, approved them, and has sent them to the Senate.

Mr. President, I understand that the Senator from Tennessee wanted me to yield him some time.

Mr. BROCK. Mr. President, will the Senator yield me 3 minutes?

Mr. STENNIS. I yield the Senator from Tennessee 3 minutes.

The PRESIDING OFFICER. The Senator from Tennessee is recognized for 3 minutes.

Mr. BROCK. Mr. President, first of all, I wish to correct an apparently erroneous impression. The Senator from Wisconsin questioned whether a project was under construction, the Tellico Dam and Reservoir. That project has been under construction for some time. It is not in the planning stage.

Mr. NELSON. Mr. President, will the Senator yield?

Mr. BROCK. The Senator from Mississippi has the floor. I regret I cannot yield on his time, too. I do not believe the implication should be left that the Tennessee Tombigbee project has not filed an environmental statement. They have filed it, and to my knowledge that statement is acceptable to the Council on Environmental Quality.

The problem is that it is in the Federal Court, as the Senator from Mississippi has stated. However, insofar as meeting the requirements of the law, the Tennessee Tombigbee project has done so to the best of my knowledge. Under these circumstances, and given the assurances of the council and the Corps of Engineers, it is imperative that construction proceed now.

Let me illustrate another problem that would be raised by this particular amendment. In the case of the Columbia Dam, the area of Columbia, Tenn., is afflicted by unemployment and it is getting worse.

One of the most important benefits envisioned in the Columbia dam is alternative opportunities for employment. Columbia is primarily dependent upon the phosphate industry, an industry under growing pressure as a result of other environmental questions about the use of phosphates. Thus the area is in great need of new employment opportunities, new industries which could result from this project.

Yet the Senator's amendment would strike this project from the bill on environmental grounds. I have talked with environmentalists and conservationists in the area. They find little to fault in the Columbia dam, and they recognize a demonstrable economic need.

I agree with the Senator from Wisconsin that the Environmental Quality Act of 1969 should be adhered to. I was sympathetic with his earlier amendment on the grounds that we, as a Congress, as well as the executive branch, should take into consideration the statements that are required to be filed. His efforts have raised a fundamental question as to the effect of the law as it is written. Apparently it is adequate for the purposes of the law for a statement to be filed, regardless of its applicability or logic.

Even so, the Senator's amendment does not correct that condition. Rather, it is simply a lumping of "apples and oranges," of widely different projects under different circumstances and con-

ditions. Thus I cannot support the amendment.

I thank the Senator from Mississippi for yielding.

Mr. STENNIS. Mr. President, I thank the Senator from Tennessee.

Mr. President, may I have the attention of every Senator? I request that they listen to this statement of facts as to the Tennessee-Tombigbee project.

The Secretary of the Army, under which the Corps of Engineers operates, forwarded an environmental impact statement on the Tennessee-Tombigbee project to the Council of Environmental Quality on April 20 of this year. There followed a 30-day grace period during which the Council could study the statement and rule adversely if it so desired.

The Council elected not to rule adversely, and the project became eligible for construction on May 20.

Some of these funds have been lying here since last year awaiting a start of construction. That project became eligible for construction on May 20 under the environmental law.

The President of the United States participated in the ground breaking for the project at a ceremony in Mobile, Ala.

Let me quote from an AP newsletter of June 2 in part:

The Council on Environmental Quality, which recommended work be halted on the across-Florida barge canal, had no such opposition to the Tennessee-Tombigbee waterway, a Council spokesman said today . . . It is obvious we have no objection to the waterway that would prevent the President from participating in the ceremony said the CEQ spokesman.

There is no question about the facts. We know that the President of the United States would not go to Mobile and dedicate the project unless it had the clearance of the appropriate agency of the Government. The quotation I have just read is from a member of that agency. So, let us not wander off here as to what someone thinks the law might imply. It is a law that has had no court interpretation as yet.

So, I submit that in spite of all the good faith involved here, the pending amendment is mischievous in its operation and would hold up projects in this way in spite of the facts we have before us.

If we are going to do that, we ought to stop and go through the entire bill and see how many more we could pull out that would come under this amendment.

Mr. SPARKMAN. Mr. President, will the Senator yield if he has time?

Mr. YOUNG. Mr. President, I yield the Senator from Alabama 3 minutes on the bill.

Mr. SPARKMAN. Mr. President, I thank the Senator from North Dakota.

Mr. President, I wish to ask the Senator from Mississippi if it is not true that the Army Engineers has a policy of checking carefully the ecology involved on any project under that agency, aside from the passage of this Environmental Act of last year. And may I add to that an inquiry as to whether it is not also true that the Tennessee Valley Authority has had a wonderful record in the improvements that they have

made in giving regard to all things that the environmentalists recommended.

Mr. STENNIS. Mr. President, we found on that point that they had been leaning over backward and moving forward all at the same time. Each of these agencies has been very cooperative. The Senator knows that they would not give a green light to a project that they had not checked.

Mr. SPARKMAN. Mr. President, I do not think that anyone is more interested in the environment than I am. As a matter of fact, I am a member of a conservationist group in the State of Alabama. They are very strong for upholding the environment.

Mr. President, I grew up in that area of the country. Malaria was rampant at that time. I was a malaria victim. For many years, I suffered from malaria, as a great percentage of the people in that area did. I would say that there has not been a case of malaria in the Tennessee Valley in the last 15 or 20 years, and perhaps longer.

They went at it systematically. I remember a protest meeting that was held at one time when I was a Member of the other body. A group of people who were interested in the environment and wild life protested the practice of the Tennessee Valley in raising and lowering water level because it would kill the malaria-carrying mosquito. They actually opposed that because the fish and wildlife fed on the mosquito.

I believe in environmental control and giving it close attention, but I think we can go to extremes, just as those people were going to extremes. Of course, it would be another matter if growing children had suffered from a mosquito bite from which they had gotten malaria, but that group of people said that nothing should be done because those mosquitoes feed the fish. So the matter can be carried to extremes.

I know studies have been made on the Tennessee-Tombigbee project, and I know they are prepared to abide by actions that will protect the ecology. I have absolute confidence that those protections will be carried out. A statement has already been filed. I believe the Senator from Wisconsin said the TVA had filed a statement and that it is not correct.

It seems to me it would be very bad and unreasonable to expect us to hold up these projects because of some technicality. If there is something wrong it can be solved as we go along.

Mr. STENNIS. Mr. President, the Senator made a fine statement.

If problems come up they can be solved as we go along. There is no question about the facts. The Army Engineers filed their statement. There has been no protest. The spokesman for CEQ said they have nothing adverse.

Mr. President, on an earlier occasion, on June 4 of this year, the distinguished Senator from Wisconsin (Mr. NELSON), voiced objection on the Senate floor to the Tennessee-Tombigbee Waterway, on environmental grounds. He stated at that time his intention of introducing an amendment which would deny funds, in this bill, for construction of the project.

The Senator apparently based his ob-

jection on one critical letter, written last winter by a man in the Atlanta office of a Federal agency. The letter was written, as comments on the preliminary draft—the preliminary draft—of the environmental impact statement. This is an obsolete letter, now disowned by its parent agency, and ruled out as a valid criticism by the Council on Environmental Quality, the agency which by law has jurisdiction of these matters. So that the facts will be very clear, let me review the sequence of events.

Under the Environmental Quality Act of 1969, every expenditure of Federal funds that has any significant effect on the environment must be preceded by the preparation of an environmental impact statement. This states all the pros and cons and arrives at a judgment whether the gains are worth the losses.

These impact statements are presented to the Council on Environmental Quality, an independent council in the Office of the President. They are also made public. The Council may accept or reject the conclusions reached in the impact statements.

The District Engineer in Mobile prepared a draft of an environmental impact statement on the Tennessee-Tombigbee Waterway, and sent it to State and Federal agencies for comments, as he is required to do by the Council on Environmental Quality. The comments must be responded to by the impact statement in its final form, and the letters containing the comments became part of the appendix to the impact statement.

The letter placed in the RECORD by the Senator from Wisconsin was a comment from a man in the Atlanta office of the Environmental Protection Agency, then newly established to take over all of the pollution control programs. It was signed by a man from the Federal Water Pollution Control Administration, as acting director of the EPA office. The critical allegations in the letter are completely undocumented and unreferenced. That they are irresponsible is attested to by the fact that he took it upon himself to criticize the project economics, a subject entirely outside the knowledge and jurisdiction of his agency, which deals with water and air pollution.

The impact statement in its final form responded to all the points the letter raised, as well as to points raised by any other agency. The letter also said that if a formal response on the final statement was desired, it should be obtained from the Washington headquarters of his agency. In response to this, EPA headquarters was given an opportunity in writing to protest the project formally, if it desired, but did not respond.

The Secretary of the Army forwarded the impact statement to the Council on Environmental Quality on April 20. There followed a 30-day grace period, during which the Council could study the statement, and rule adversely if it desired to do so.

The Council elected not to rule adversely, and the project became eligible for construction on May 20. The President participated in the groundbreaking for the project, at a ceremony in Mobile.

Let me quote from an AP news release of June 2, in part:

The council on Environmental Quality, which recommended work be halted on the Cross-Florida Barge Canal, had no such opposition to the Tennessee-Tombigbee Waterway," a Council spokesman said today. It is obvious we had no objections to the Waterway that would prevent the President from participating in the ceremony, said the CEQ spokesman.

My remarks include an explanation of the great care with which the environmental aspects of this waterway project are being handled. I also have a list of the issues that have been raised and the answers to those issues. They are all answered, and have been for some time, in the body of the final environmental impact statement, which is a public document, available to all who want answers, and not merely issues.

I will not take the Senate's time to cover the issues and answers, but I ask unanimous consent that it be placed in the RECORD at the conclusion of my remarks.

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

(See exhibit 1.)

Mr. STENNIS. Mr. President, the statement has been made that in undertaking construction of the Tennessee-Tombigbee waterway the Government is rushing headlong into a massive project that could very well be an environmental disaster and an economic flop. I consider this statement unfounded on both counts.

Naturally an undertaking of this magnitude will have an effect on the water quality and the ecology of the region. But a careful assessment of its expected environmental impact has discovered no potential environmental problems for which present science and technology cannot be expected to develop satisfactory solutions.

The economic feasibility of the project has already been reevaluated twice since its authorization in 1946, the latest analysis having been submitted to the Congress in 1967. Both of these studies confirmed the economic justification of the waterway.

The claim that it would be far wiser to take a thorough look now, than to wait through years and tens of millions of dollars of construction before deciding the water's environmental destruction would be too high a price to pay sounds valid when taken out of context. It is not valid, however, in reference to this project, because it fails to recognize the environmental evaluations which have been made and are still being made in connection with planning the Tennessee-Tombigbee Waterway. Withholding funds for construction of the project while another complete reevaluation is made and submitted to Congress would only delay realization of the benefits to be derived from the project, risk increases in construction costs, and result in failure to disclose any environmental concern for which appropriate solutions are not available.

As a part of the preconstruction planning already accomplished for this project, the Corps of Engineers has undertaken a major study of the impact on the environment that development of the

Waterway would have. This study is a comprehensive program dealing with fish and wildlife, air and water quality, mineral and energy resources, and many other environmental concerns.

A board of consultants, composed of 3 members having special expertise in the fields of ecology, environmental planning and hydrogeology, has been engaged to provide guidance, consultation, and evaluation of the study. The distinguished members of this Board are: Dr. Daniel J. Nelson, ecologist, assistant division director, Ecological Sciences Division, Oak Ridge National Laboratory, Oak Ridge, Tenn.; Dean Gerald J. McLendon, environmental planner, dean, school of environmental design, Louisiana State University; and Prof. Philip E. LaMoreaux, hydrogeologist, international consultant, Alabama State geologist, and professor of geology, University of Alabama. Cooperation with educational institutions and Federal, State, and local agencies is being utilized to provide complete and comprehensive coverage in assessing the environment of the project area.

The study is being accomplished in three phases.

A major complaint of those who fear an "environmental disaster" resulting from the construction of the waterway is that only phase I of the environmental study of the project area has been completed and that all phases of the study should be completed before a decision is made for or against the project. It is understandable that today's public, so acutely aware of environmental concerns, should wish that a thorough environmental study be completed before initiation of construction of a project as large in scope as the Tennessee-Tombigbee Waterway. But I believe that those who are clamoring for preconstruction completion of all three phases of the Tenn-Tom environmental study have a basic misunderstanding of the three-part study by the Government. The first phase of the study, which has been completed, was a thorough environmental research program which investigated the effects of the proposed project and concluded that there would be no detrimental effects serious enough to warrant foregoing development of the project, and moreover the project could be implemented in such a way that the over-all environment of the area would actually be benefitted. During this phase, a detailed environmental statement was filed with the Council on Environmental Quality. The second phase of the environmental study, now under way, was planned to be executed as designing of the waterway progressed. This phase consists of sustained environmental research which will allow the Corps to make ecologically desirable design changes and project modifications. The final phase of the environmental study is planned to be implemented as project construction proceeds and after actual operations being.

The main point I wish to make in answer to those who feel that all three phases of the environmental study should be completed before a proper evaluation of the project can be made is that phase I of the study has provided comprehensive data sufficient to

show that the project can be economically and ecologically desirable. Phases II and III of the study—to be executed as design, construction, and operation proceed—are merely parts of a continued effort to assure that the project will be implemented in the way most compatible with the natural environment of the area.

Some sources have complained of the anticipated population increase in the project area. The fallacy of this complaint is that many of the people who migrate to the rural project area will come from overcrowded urban areas where the rate of unemployment is high. The implementation of the project will not cause a population problem; it could actually bring about a desirable population redistribution, relieving overcrowded cities of at least a part of their overpopulation and related unemployment problems.

In addition to lowering production and marketing costs by affording cheaper transportation between the gulf coast and much of the midcontinental United States the project will provide recreation and esthetic benefits. Recreational and associated natural areas will be developed at each of the project's five lock and dam sites.

The majority of the objections to the waterway are without basis and the benefits of the project outweigh any possible adverse effects. The Government is not "rushing headlong" into an economically and environmentally disastrous project. Rather, it is carefully planning the implementation of a waterway which will benefit the region and the entire Nation both economically and environmentally.

EXHIBIT 1

ISSUES AND ANSWERS

The issues and answers are as follows:

Issue: Channelization and loss of natural shallow water areas, flood plains, pools, sand bars and riffles with their associated aquatic vegetation conducive to stream purification and a balanced water quality.

Answer: Principal areas involving channelization outside the impounded river section will be on the East Fork of the Tombigbee River adjacent to canal section. This channelization will consist of several cut-offs on the East Fork to alleviate encroachment on the canal. The stream has numerous cut-offs as a result of channel work performed in the past and the additional cut-offs are not expected to create any water quality problems. The majority of cut-offs within the river section will be submerged and will not present water quality problems.

Issue: Assimilative capacity of streams will be lessened and the pollution will be carried farther downstream.

Answer: The increased flow provided to the Tombigbee River will supplement the waste assimilative capacity of this stream. The absence of pollution from the major portion of the project area, particularly the Yellow Creek embayment, raises a question as to the basis of this issue.

Issue: The impoundments created by the locks and dams will increase the overall water temperature and decrease the water's capacity for absorption of oxygen.

Answer: Increases in water temperatures, if they occur, will not be of a magnitude which will cause concern about the maintenance of a quality of water capable of supporting all requirements. The total available oxygen due to larger volumes, the large surface areas, and other reservoir dynamic fac-

tors will more than offset any reduction in re-oxygenation capacity due to higher temperature and slower velocities. The Black Warrior-Tombigbee River system is an excellent example of this. Those lakes and their spillway discharges result in recovery from large pollutional loadings in much shorter distances downstream than would occur under free-flowing stream conditions.

Issue: The change from a free-flowing stream to a semiquiescent reservoir environment will alter the dominant fish species and organisms in the fish food chain.

Answer: Those species dependent upon flowing water will be reduced in number and those not dependent upon flowing water will increase. This change will not necessarily be bad or good, but it will be different. The waterway will constitute a more diverse, stable, and productive ecosystem than the existing river. Sport fishing opportunity and success should increase above present levels. Many tributaries will become more accessible by boat.

Issue: Pickwick Pool on the Tennessee River, which will supply water to the proposed waterway, is presently closed for fishing because of mercury contamination. This mercury contamination will be transferred to the Tombigbee River.

Answer: This possibility is remote due to several factors. Pickwick Lake was closed to fishing due to concentrations of mercury found in fish taken from these waters. Although the water may contain small concentrations of mercury, T.V.A. found no detectable concentrations of mercury in the waters of Pickwick Lake. The fish and bottom organisms concentrate the mercury which is introduced to them primarily from the bottom sediments which release soluble methylated mercury compounds. The principal mercury concentrations are in the sediments of the main channel of the Tennessee River and the chances of it migrating up the Yellow Creek arm and through the divide cut to Bay Springs Lake are remote. In addition, principal sources of mercury contamination have significantly reduced the mercury being discharged to the Tennessee River. The actual connection of the waterways will not take place for about ten years and the mercury problem in the Tennessee River should be lessened to a great extent by that time. An oddity of a sort is the fact that although the upper Tombigbee has no known sources of mercury, this metal has been found in fish taken from this stream. State water quality standards for the Tombigbee River will not be violated.

Issue: Stratification will probably occur in the impoundment at Bay Springs and there may be a deficiency in oxygen in the waters received by the canal section through lockages.

Answer: Stratification will occur in Bay Springs Lake and measures will be incorporated to assure acceptable oxygen levels in releases. In addition, lockage water from the Bay Springs lock in excess of the requirements of the canal will be diverted to the East Fork to sustain low flows.

Issue: The cumulative long-term overall effect of the project on the environment will be one of overall degradation of water quality values in spite of the presently known techniques which can be applied to help maintain water quality.

Answer: It is considered that overall degradation will not occur as a result of project implementation. Present heavy silt loads in the Tombigbee River will have to be reduced by erosion control measures and state and Federal authorities must enforce established controls and standards to minimize potential adverse effects. The net effect of these actions will be the maintenance of the water quality within the Tombigbee Basin and will not result in degradation. In fact, it is believed that project implementation with its several lakes will result in enhancement

of water quality in some areas to the extent that existing stream classifications can be upgraded. Minimum continuous releases will be made throughout the waterway to assure that the water quality is maintained above the standards prescribed for its designated use. These uses include public water supply, fish and wildlife propagation and water contact recreation.

Issue: The joining of two separate ecosystems, the Tennessee and Tombigbee Rivers, will cause potentially serious ecosystem disturbances and consequences.

Answer: This is highly unlikely. A study has indicated that fish species shared by the two river systems will not be altered to a great degree. The fish species in the two river systems are very similar and no species are known to occur in either system which would cause problems upon introduction into the other system. Mixture of botanical or other zoological forms is unlikely to result in an ecological imbalance. Aquatic species comprising these broad taxa tend to be distributed regionally and it is unlikely that significant difference in species composition exists. This is particularly true for the microscopic phytoplankton and zooplankton communities since most species are readily transported by wading birds or even the wind when in resistant stages in the life cycle.

Larval insects are a major constituent of the stream benthos. Since adults are relatively widespread, this community is expected to be similar in both river systems. Even if some species in the two river systems are different, the effect of their mixing is expected to be minor.

The waters of the Tennessee River in Pickwick Lake, particularly the Yellow Creek embayment area, and in the Tombigbee River have similar chemical characteristics. Although the values for alkalinity, total hardness and chlorides are slightly higher in the Tennessee River than the East Fork of the Tombigbee, both would be excellent for public water supplies based on these parameters. As an item of interest, the waters of the West Fork of the Tombigbee River have higher total hardness, alkalinity and chlorides than the Tennessee River. The additional alkalinity provided to the Tombigbee from the Tennessee will be beneficial to the water quality by increasing its buffering capacity or resistance to change in pH.

Radiological determinations on samples collected on a monthly basis in Pickwick Lake indicated that the radioactivity level was well below the permissible limits in drinking water.

Issue: Introduction of Tennessee River water into the Tombigbee River will result in degradation of water quality of the Tombigbee River.

Answer: This item has been discussed at length in some of the above issues. However, it should be pointed out that the Tombigbee River is not pristine. Although the existing water quality of the Tombigbee River is generally good overall, portions of the river exhibit conditions which are less than desirable. For the most part, the worst conditions occur during critical low-flow periods. Bacterial levels have been reported which exceed the accepted standards for swimming and other water contact recreational activities. Also a progressive decline in dissolved oxygen concentration occurs as the natural assimilative capacity of the river is exceeded. Values range from about 68 percent saturation (6.2 mg/l) in the upper reaches of the East Fork to less than 50 percent saturation (4.1 mg/l) below Gainesville, Alabama.

The color of the Tombigbee has a natural brownish hue and is subject to becoming highly turbid following rains. This turbidity drops off after the flow has stabilized for a period of about five days.

Issue: Construction of the project is about to commence before the environmental studies have been completed.

Answer: The environmental statement was based on existing information and concluded that the construction of the waterway would not result in unacceptable environmental degradation. Consider two boundary conditions, the upper limit representing maximum enhancement and the lower limit representing the onset of serious degradation of the environment. Studies to date indicate that construction and operation of the project fall between these two boundary conditions. The environmental study is continuing during the advanced planning and design phases to assure that the project moves toward maximum enhancement of the environment. Although the Corps of Engineers has complied with the National Environmental Policy Act by filing a detailed environmental statement, the environmental study, which is not required, has environmental enhancement as its major goal.

Issue: The area from the Tombigbee River along the East Fork, Mackeys Creek and over the divide to the Yellow Creek is one of the most picturesque and unspoiled areas still remaining in Mississippi. Its value as a recreational, hunting, fishing, and scenic area is of immeasurable importance.

Answer: Apparently this view is not shared by all concerned. For example, this area was not included in a bill introduced in the 1971 regular session of the Mississippi Legislature to establish the Mississippi Natural and Scenic Waterway System. This act, House Bill No. 302, was for the purpose of preserving and developing the natural and scenic quality of designated rivers and streams and for related purposes. However, certainly as much of the scenic attractiveness of the area will be retained as possible and aesthetics and beautification, important considerations in Corps projects, will be given full consideration during project design. Non-structural measures such as land use plans and zoning will aid in preserving much of the picturesque of the area.

Aesthetics are, more often than not, a matter of personal preference. Much of the scenery in the Tombigbee Basin may look conspicuously like an impenetrable swamp to some persons. The lakes created by the project will be landscaped and placid. There will be more opportunity for varied public recreation and sport fishing. The Tombigbee River will become a more valuable resource to a larger segment of the public.

Issue: The project should be re-evaluated in view of its questionable economic value and the rapidly changing public opinion with regard to environmental aspects.

Answer: The project has been considered for years and studies to date do not show that it is of questionable economic value. The economic justification has been re-evaluated in accordance with criteria approved by the Office of Management and Budget and was found to have a favorable benefit-to-cost ratio of 1.6. In addition, the project will be built with environmental enhancement as a major item. This will result from the detailed environmental study now underway.

Mr. NELSON. Mr. President, the distinguished Senator from Tennessee made the point that the Tellico Dam and Reservoir was under construction. I did not intend to say that it was not, but that construction of Tombigbee, La Farge Lake, Normandy Dam, and Columbia Dam have not been commenced.

The point has been repeatedly made here that this amendment would stop construction. It would not stop construction of those first four projects at all. It would simply require a filing and compliance with the intent and the spirit of the law by February 1972.

I might point out as an aside that it is correct as stated by the Senator from

Mississippi that the President went down to dedicate the Tennessee-Tombigbee Waterway, and I am sure not knowing that the Environmental Protection Agency regional office was filing a strong criticism of the Tennessee-Tombigbee project saying it would cause irreparable damage and that it should not be built. I will read some of their comments about that in a moment.

Also, I would like to point out that Congress made a tragic blunder in authorizing the Cross-Florida Barge Canal. We spent millions of dollars in some 15 years cutting a canal across Florida without gathering to study the environmental effects in advance. It was a preposterous project that was never justified on any ground.

Finally, a lawsuit was filed citing the irreparable damage that would result. The final court issued an injunction and the Council on Environmental Quality recommended to the President that he terminate that foolish project. To his credit, the President did terminate it. It is unfortunate that the canal was ever authorized and that millions were wasted on it but at least the President had the courage to face the issue and recommend termination of the project.

Why do we not have the good judgment now to require comprehensive environmental studies on these projects before we become too deeply committed? Why do we not require that the studies be made before we make the financial commitments? That is what I do not understand. The law is absolutely clear in this regard, if the law is logically interpreted.

There has been talk here about what a fine project Tennessee-Tombigbee is. The day after the President was there dedicating it the regional EPA report was made public. It said:

In view of the rapidly changing public opinion with regard to such areas and the questionable economic value of the project, the EPA believes that a reevaluation of the project should be made taking into consideration the fact that the project may not bring the commercial and industrial development to the area originally anticipated, particularly northeast Mississippi and a scenic and natural area will be irreversibly damaged for all time.

This is the EPA evaluation of Tennessee-Tombigbee. All I am saying is: Construction has not been started; for heaven sake, do not give them construction money prior to February 1972 until we can get further information. Certainly we should not permit conservation to start until we have the environmental studies required by law.

We are not even following the recommendations of our Federal agencies and the EPA regional office in Atlanta.

A few weeks ago I placed in the RECORD a summary of the regional office report. At this time I wish to read a summary of it for the RECORD:

In brief, the EPA review found that the construction and the operation of the channels, dams, and impoundments of the waterway, plus the associated changes in the region, would have a "profound and lasting effect" on the water quality and the ecology of the entire area.

Channelization and cut off of river bends would cause a loss of natural shallow water areas, flood plains, pools, and sandbars.

The ability of the streams to absorb wastes would be diminished and any pollution would be carried farther down river.

The impoundments would increase the water temperature, decrease the water's capacity to absorb oxygen, and, with the changed water environment that would result, would alter the food chain and fish life.

The cut across river basins would expose waters in the Tombigbee River system to the pollution of Pickwick Pool on the Tennessee River, which is already closed for fishing because of mercury contamination.

In addition, the 9 years of construction will subject the river systems to extensive turbidity and silting, with some materials probably going all the way to Mobile Bay.

The EPA report also points out that the waterway will lead to a massive new influx of pollution from a wide range of sources—barges, industries, cities among them—that will be difficult if not impossible to effectively treat with current pollution control requirements and technology.

In view of these grave environmental questions, the regional EPA report strongly recommended further pollution control studies and urged adoption of a tough, comprehensive plan of pollution abatement for the entire project. Even with this, the EPA expressed serious doubts as to whether overall degradation of the area's water quality values could be avoided.

Mr. President, I ask unanimous consent that the statement I made on June 4, 1971, on this matter to which I have just referred, may be printed in the RECORD.

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

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Citing even broader concerns, however, the EPA report urged reevaluation of the basic question of whether the project should ever be built.

In making this key recommendation—which I strongly support—the EPA report noted the picturesque and unspoiled nature of much of the waterway area, its current recreational value to already industrialized areas in the region, its historic and geologic values, the questions as to whether the original commercial and industrial development promise of the project would ever be fulfilled, and the probably massive environmental impact of the project.

As the regional EPA report so aptly noted, these broader concerns are reflected in the changing public opinion nationwide with regard to the development of such areas and the construction of such projects.

In arguing for the waterway, the Army Corps of Engineers claims a cost-benefit ratio of 1.6 to 1, supposedly promising a return of \$1.60 for every \$1 invested.

However, it has become dramatically clear in the last year that the American public has awakened to some of the hidden long-range environmental and economic implications of such projects and is raising tough new questions in view of these concerns. In fact, I believe we are on the way to establishing as a society new cost-benefit ratios more accurately reflecting the values and the problems of new technology and the building of massive public works.

Fortunately, there is still time to take account of these important new factors in the decisionmaking on the Tennessee-Tombigbee project.

Mr. NELSON. Mr. President, I think the questions involved here are very simple. The EPA says the study should be made. The EPA has grave reservations about going ahead with the project at all. The Corps of Engineers has said it is going to make these environmental studies as construction proceeds.

The EPA report says the environmental hazards are serious and that adequate studies have not been made. Nevertheless Congress is going to appropriate the money and authorize full speed ahead. Then the corps, which is committed to the project is going to make a study as the project proceeds. How is that study going to come out? Everyone knows the answer. I can give it to them. No matter what the evidence is, the Corps of Engineers is not coming back to the Congress of the United States, after spending millions of dollars on Tombigbee, and say, "We have now made studies and found out that the project is a big blunder and that the regional EPA office was right in the first place. We know they are not going to come back with anything but an affirmative report no matter what the studies disclose.

If Senators want to support this kind of project, go ahead. It is another tragic and foolish commitment on the part of Congress. When in Heaven's name will we wake up?

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

Mr. STENNIS. Mr. President, I yield myself 2 minutes.

The letter to which the Senator referred, dated February 12, 1971, was a part of the impact statement filed by the Corps of Engineers, and it went to the Council that really passes on these matters.

As I said a few minutes ago, after that was filed with the Council, the following facts happened: The Secretary of the Army forwarded the impact statement to the Council on Environmental Quality

on April 20. It included the letter that the Senator referred to, along with many letters from other agencies and many other pages of the impact statement, containing all the facts. The letter was just one of many pages in the impact statement.

After the Secretary had forwarded all of that, there followed a 30-day grace period, during which the Council could then study it and rule adversely if it desired. The Council elected not to rule adversely. The project became eligible for construction on May 20. The President then appeared at the groundbreaking for that project in a ceremony at Mobile. Then again came the report of the EPA of June 2 that I have already read, that is, the quotation from one member of the Council, in which he said the Council on Environmental Quality, which recommended work be halted on the Cross-Florida Barge Canal, had no such opposition to the Tennessee-Tombigbee. It was obvious they had no objection to the waterway, which would prevent the President from participating, and so forth.

That is the state of the matter today. It is pending in court. I trust that the facts are clear. It would be highly premature and set a dangerous precedent for every project in progress in the whole United States if the Senate should vote to adopt the amendment.

Mr. President, I am ready to yield back my time.

Mr. NELSON. Mr. President, has my time expired?

The PRESIDING OFFICER. The Senator's time has expired.

Mr. STENNIS. Mr. President, I yield the Senator from Wisconsin a couple of minutes.

Mr. NELSON. Mr. President, the distinguished Senator from Mississippi said the President's Council on Environmental Quality did not rule against the project. The law does not give the Council the authority to rule against it. However I think it ought to be pointed out that the President did go down to dedicate Tombigbee, and after he dedicated it, the story came out of Atlanta, Ga., that the EPA was critical of the project.

The Senator from Mississippi read a comment from one of the members of the council saying that they did not have objection. I would only point out that I think it would be doubtful that the Presidential appointee, serving at the pleasure of the President was going to come out against the project after the President went to dedicate Tennessee-Tombigbee.

Mr. ALLEN. Mr. President, I hope the amendment of the Senator from Wisconsin (Mr. NELSON) is defeated. There is no need to delay the construction of these projects. They are much overdue; and delay could only cause added expense, confusion; and loss of benefits that can be obtained by the construction of the projects.

Now, Mr. President, speaking with reference to the Tennessee-Tombigbee Waterway specifically—

This mighty waterway has been the objective of farsighted men for more than a century. From a look at a map,

one is impressed by the fact that from the point where the Tennessee River turns north, the Tennessee and Tombigbee Rivers together form an almost direct line between the port of Mobile and Paducah, Ky., where the Tennessee joins the Ohio River. It is as if providence had preordained a connecting link between the two rivers.

For decades, however, a manmade link, consisting of a canal and locks to enable boats and barges to pass over the strip of high ground which separates the Tennessee River from the headwaters of the Tombigbee River was considered by the Army Engineers as economically unsound. It was not until the Tennessee Valley Authority built the Pickwick Landing Dam, which raised the water level in the Tennessee River by 55 feet, that the Army Engineers determined that the benefits to shippers and receivers on the two river systems and the benefits to industry, business, and agriculture in the regions would exceed the cost of constructing a waterway link to connect the Tennessee and Tombigbee Rivers.

The Congress authorized the construction of the Tennessee-Tombigbee Waterway in the Rivers and Harbors Act of 1946, but the first construction funds, in the amount of \$1 million, were not appropriated until last year. The budget for the coming fiscal year earmarks \$6 million in construction funds for the Tennessee-Tombigbee Waterway and these moneys will be used for the construction of the channel and lock near Gainesville in Sumter County, Ala.

When the Tennessee-Tombigbee Waterway is completed, it is abundantly clear that the benefits to the people of the Nation will be incalculable. This waterway will tie together in one protected inland waterway system the Tennessee, the Cumberland, the Ohio, the Illinois, the Monongahela, the Allegheny, the upper Mississippi, the Missouri, the Tombigbee, the Warrior, the Alabama-Coosa, and the Chattahoochee-Apalachicola-Flint Rivers. All will be connected by the Intracoastal Canal with such great gulf ports as Mobile, New Orleans, Galveston, and other port cities along the gulf coast from Texas to Florida. All will be tied to the Great Lakes.

Barge trains descending south to such cities as Mobile and New Orleans, carrying the products of midwestern farms and such midwestern cities as Minneapolis, Chicago, Detroit, St. Louis, Cincinnati, and Kansas City, may take advantage of the swift current of the Mississippi River.

Such barge trains may, along with other ascending traffic, return with the products of southern farms, forests, mines, factories, and oil fields, via the slack water route of the Tennessee-Tombigbee Waterway.

The new route will shorten the distance between Mobile, Birmingham, and other points on the Warrior-Tombigbee system to the Tennessee River and the entire midwestern waterway empire by from 800 to 1,000 miles. Shorter hauls and the avoidance by ascending traffic of the swift current of the Mississippi River can cut the cost of transportation

up to 75 percent. This means that producers, shippers, and consumers will enjoy millions of dollars a year in savings from lowered transportation costs.

From the foregoing, Mr. President, we see that construction of the Tennessee-Tombigbee Waterway will play a vital role in the continued economic growth of our Nation. Areas now denied the benefits of low-cost water transportation will enter a new day of industrialization. New businesses and industries will be established and existing ones will be expanded. A more favorable balance between industry and agriculture will be achieved. Such a balance means new and better markets for the farmers' products, more and better jobs for our men and women, and a stronger, better, and more prosperous economic life for all our people.

Mr. President, on May 25 of this year President Nixon came to Mobile and participated in ceremonies celebrating the start of construction on Tennessee-Tombigbee Waterway.

After more than 100 years of waiting, the project is now getting underway, thanks to the recommendations of the President and action of Congress.

Let us not delay the matter further. The amendment should be defeated.

Mr. STENNIS. Mr. President, I yield back the balance of my time.

The PRESIDING OFFICER. All time having been yielded back, the question is on agreeing to the amendment of the Senator from Wisconsin.

Mr. NELSON. Mr. President, I request the yeas and nays.

The yeas and nays were ordered.

Mr. STENNIS. Mr. President, what is the question before the Senate?

The PRESIDING OFFICER. The question is on the adoption of the amendment by the Senator from Wisconsin to H.R. 10090.

The clerk will call the roll.

The assistant legislative clerk called the roll.

Mr. STEVENS (after having voted in the affirmative). Mr. President, on this vote I have a pair with the Senator from Tennessee (Mr. BAKER). If he were present and voting, he would vote "nay." If I were at liberty to vote, I would vote "yea." Therefore, I withdraw my vote.

Mr. BYRD of West Virginia. I announce that the Senator from Indiana (Mr. BAYH), the Senator from Texas (Mr. BENTSEN), the Senator from Michigan (Mr. HART), the Senator from Minnesota (Mr. HUMPHREY), the Senator from Washington (Mr. JACKSON), the Senator from Massachusetts (Mr. KENNEDY), the Senator from Louisiana (Mr. LONG), the Senator from South Dakota (Mr. McGOVERN), the Senator from Minnesota (Mr. MONDALE), the Senator from Maine (Mr. MUSKIE), the Senator from Rhode Island (Mr. PELL), and the Senator from California (Mr. TUNNEY) are necessarily absent.

I further announce that, if present and voting, the Senator from Washington (Mr. JACKSON) would vote "nay."

Mr. SCOTT. I announce that the Senators from Ohio (Mr. SAXBE and Mr. TAFT) and the Senator from Vermont (Mr. PROUTY) are absent on official business.

The Senator from Colorado (Mr. ALLOTT), the Senator from Tennessee (Mr. BAKER), the Senator from Massachusetts (Mr. BROOKE), the Senator from New Hampshire (Mr. COTTON), the Senator from Arizona (Mr. GOLDWATER), the Senator from Michigan (Mr. GRIFFIN), the Senator from Oregon (Mr. HATFIELD), the Senator from Iowa (Mr. MILLER), the Senator from Nebraska (Mr. HRUSKA), and the Senator from Illinois (Mr. PERCY), are necessarily absent.

The Senator from South Dakota (Mr. MUNDT) is absent because of illness.

If present and voting, the Senator from Colorado (Mr. ALLOTT), the Senator from Oregon (Mr. HATFIELD), the Senator from Iowa (Mr. MILLER), and the Senator from Illinois (Mr. PERCY) would each vote "nay."

The pair of the Senator from Tennessee (Mr. BAKER) has been previously announced.

The result was announced—yeas 17, nays 56, as follows:

[No. 183 Leg.]

YEAS—17

Buckley	Harris	Nelson
Case	Hartke	Proxmire
Chiles	Hollings	Roth
Cook	Hughes	Spong
Cranston	Javits	Stevenson
Gravel	Mathias	

NAYS—56

Alken	Eastland	Moss
Allen	Ellender	Packwood
Anderson	Ervin	Pastore
Beall	Fannin	Pearson
Bellmon	Fong	Randolph
Bennett	Fulbright	Ribicoff
Bible	Gambrell	Schweiker
Boggs	Gurney	Scott
Brock	Hansen	Smith
Burdick	Inouye	Sparkman
Byrd, Va.	Jordan, N.C.	Stennis
Byrd, W. Va.	Jordan, Idaho	Symington
Cannon	Magnuson	Talmadge
Church	Mansfield	Thurmond
Cooper	McClellan	Tower
Curtis	McGee	Weicker
Dole	McIntyre	Williams
Dominick	Metcalf	Young
Eagleton	Montoya	

PRESENT AND GIVING A LIVE PAIR, AS PREVIOUSLY RECORDED—1

Stevens, for.

NOT VOTING—26

Allott	Hatfield	Mundt
Baker	Hruska	Muskie
Bayh	Humphrey	Pell
Bentsen	Jackson	Percy
Brooke	Kennedy	Prouty
Cotton	Long	Saxbe
Goldwater	McGovern	Taft
Griffin	Miller	Tunney
Hart	Mondale	

So Mr. NELSON's amendment was rejected.

Mr. STENNIS. Mr. President, I move to reconsider the vote by which the amendment was rejected.

Mr. YOUNG. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. STENNIS. Mr. President, I understand that the Senator from Florida has an amendment to which the Senator from Kansas wants to offer an amendment.

I yield myself a half minute.

As I understand, there are a few minor amendments that probably can be considered favorably, and then we expect to ask for the yeas and nays on final passage. It may not take more than a few minutes.

Mr. ALLEN. I hope the Senator from Mississippi will yield to the junior Senator from Alabama at some time.

Mr. STENNIS. I will.

The PRESIDING OFFICER (Mr. MONTOYA). The yeas and nays have been ordered on final passage.

The Senator from Florida is recognized.

Mr. STENNIS. Mr. President, may we have quiet, so that we can all hear? We probably can dispose of these matters very quickly.

The PRESIDING OFFICER. Senators will take their seats. The Senate will be in order.

Mr. CHILES. Mr. President, I call up my amendment which is at the desk, and ask that it be read.

The PRESIDING OFFICER. The amendment will be stated.

The assistant legislative clerk proceeded to read the amendment.

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

The PRESIDING OFFICER. Without objection, it is so ordered; and, without objection, the amendment will be printed in the RECORD.

The amendment is as follows:

On page 6, lines 15 and 16, strike out "\$936,493,000" and insert in lieu thereof "\$936,568,000".

On page 7, line 10, strike out the period at the end of the sentence and insert in lieu thereof the following: "Provided further, That \$75,000 of this appropriation is used for preconstruction planning of a shore protection project in Duval County, Florida."

The PRESIDING OFFICER. Does the Senator ask unanimous consent that the amendments be considered en bloc?

Mr. CHILES. I so request.

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

Mr. CHILES. Mr. President, this amendment would add \$75,000 for engineering work in regard to a beach erosion project in Duval County, Fla. The amendment was not included.

The project, authorized by the River and Harbor Act of October 1965, provides for Federal participation in the cost of artificial placement of fill to form a protective and recreational beach for about 10 miles of shore in the reach between St. Johns River and Duval County-St. Johns County line, and periodic nourishment of the restored beach for the first 10 years of project life. The improvement would provide a beach with a level berm 60 feet wide at elevation 11 feet above mean low water. Stability of the restored beach would be accomplished by periodic replenishment of losses.

The estimated cost of this project is \$10.2 million, of which \$4.5 million is non-Federal cost. No funds were requested in the budget for this project; however, the Florida Department of Natural Resources has recommended, and I concur, that \$75,000 is needed for preconstruction planning to permit initial work on the Atlantic beaches.

As Senators may know, this area suffered extensive damage in 1964 during Hurricane Dora. Following that, the Federal Government provided funds for temporary emergency protection works that were placed on the beaches, and the Government told Duval County that

permanent works would have to be installed in the near future.

The temporary protection works are no longer effective. The citizens of Duval County have been placing funds in escrow for several years so as to have their matching money. This fund now has several hundred thousand dollars in it, and all that needs to be done is for the Federal Government to fulfill its responsibility. Unless permanent protection is soon provided, the beaches will be eroded to their previous condition.

Mr. GURNEY. Mr. President, this amendment offered by my distinguished colleague from the State of Florida and myself to provide \$75,000 to begin to combat increasing erosion problems in Jacksonville, Fla., is an extremely important one.

An indication of that importance is the fact that the local government of Jacksonville has already placed in escrow \$500,000 to prepare to meet this problem. It is anticipated that this fund will be augmented by \$200,000 per year.

The Jacksonville area is essentially a waterfront community with a lengthy shoreline which is experiencing increasing erosion problems. In 1964, Hurricane Dora devastated an area extending from the mouth of the St. John's River to the southern boundary of St. Johns County, Fla. While temporary protection of the shoreline was established at that time, it has not been effective.

With the addition and expansion of harbors and inlets all along the southeastern coast of the United States, Florida can no longer depend on the natural redistribution of sand along its shoreline.

The proposal to restore and protect the beach areas has been strongly urged by the State of Florida's Department of Natural Resources. Remedies for this problem must be found and found quickly. The funds provided for in this amendment are an important step in that direction.

I am glad the floor manager of this bill, the distinguished Senator from Mississippi (Mr. STENNIS), and the distinguished Senator from North Dakota (Mr. YOUNG), are willing to accept this amendment.

Mr. CHILES. Mr. President, I believe the distinguished Senator from Kansas would like to amend the amendment to include an item with which he is concerned.

Mr. DOLE. If the Senator will yield, I believe my amendment is a separate amendment, which would follow the adoption of the Senator from Florida's amendment.

Mr. CHILES. Would the Chair advise the Senator from Florida as to whether his amendment can now proceed, or whether the Senator from Kansas needs to amend the amendment of the Senator from Florida?

The PRESIDING OFFICER. It can proceed, by unanimous consent.

Mr. CHILES. I so request.

The PRESIDING OFFICER. Is there objection? The Chair hears none, and it is so ordered.

The Senator from Kansas may offer his amendment.

Mr. DOLE. Mr. President, I call up my

amendment at the desk, and ask that it be read.

The PRESIDING OFFICER. The amendment will be stated.

The assistant legislative clerk read as follows:

On page 6, lines 15 and 16 strike out "\$936,493,000" and insert in lieu thereof "\$936,918,000".

Mr. DOLE. Mr. President, this amendment is offered by myself and the senior Senator from Kansas (Mr. PEARSON). It refers to the Blue River project, which is near the border of Kansas and Missouri. It adds \$350,000 to the appropriation bill. In effect, it is an amendment to the amendment offered by the Senator from Florida (Mr. CHILES).

Mr. President, I commend the chairman, Mr. ELLENDER, and members of the appropriations committee for their work on this important bill. I particularly want to express my appreciation to the subcommittee chairman (Mr. STENNIS), and the senior Senator from North Dakota (Mr. YOUNG), for their gracious treatment of the many individuals interested in water projects from throughout the Nation.

We are all aware of the many demands on the tax dollar, but water resource development must be given greater attention. Appropriations for water projects have dropped to less than one-half of 1 percent of the Federal budget.

Kansas has benefited tremendously from construction of multipurpose water projects, but there is much left to be done. The threat of damaging floods and a shortage of water during the summer months still exists in parts of Kansas.

The appropriations provided in H.R. 10090 by your committee for Kansas projects is greatly appreciated. But there is one project that is of major importance with which I am very familiar, and it is not contained in this bill. I speak of the Blue River basin project containing three reservoirs in Johnson County, Kans. As a member of the Flood Control Subcommittee of the Senate Public Works Committee, and because three of the four reservoirs are to be in Kansas, I attended the authorization hearings on this project and have studied its implications and discussed the project at great length with many people in Johnson County, Kans.

The need for flood protection is important to both Kansas City, Kans. and Kansas City, Mo.; in addition, the recreational benefits for the metropolitan area will be invaluable. The Senate Public Works Committee recognized the need to move quickly on this project and authorized the four reservoirs last year. Because of the fact that the three reservoirs in Johnson County, Kans., are in an area that is undergoing rapid urban growth, land prices are escalating rapidly. If we do not act this year, the entire cost of the project will be greatly increased. It is for this reason—because the three reservoirs are in an area experiencing rapid urbanization—that I feel the Blue River project deserves the special attention of Congress, and I have therefore offered this amendment.

I might say, in addition, that while there is great support for the Blue River

basin project, there has been opposition to Tomahawk Reservoir from citizens of Leawood, Kans. In order to determine if the Tomahawk Reservoir is necessary to the feasibility of the Blue River basin project, the Senate Public Works Committee included a requirement that prior to the initiation of the project, the Secretary of the Army was to be assured by the Chief of Engineers that the most feasible combination of improvements having the most favorable impact upon the environment and future development of the Tomahawk Creek watershed has been assured. While the Corps of Engineers initially interpreted this provision to require a restudy of the Blue River basin project, I am now informed that they are prepared to proceed with the project including all four reservoirs, and that the necessary investigations are to be done in conjunction with the initial design of the four reservoirs. In order to allow them to initiate the planning on the three reservoirs in Kansas, my amendment provides \$350,000 to be divided as follows:

Indian Lake.....	\$100,000
Tomahawk Lake.....	150,000
Wolfe-Coffee Lake.....	100,000

I urge the Senate to support this amendment.

Mr. President, I ask unanimous consent to have printed at this point in the RECORD an editorial published in the Johnson County Scout of May 12, 1971, entitled "Reservoirs Need Funding."

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

RESERVOIRS NEED FUNDING

The Blue River Basin flood control project, which has confronted challenge upon challenge in its struggle to survive, will encounter another stern test in late May in the nation's capital.

The 4-pool reservoir system goes before the House and Senate public works appropriations subcommittees May 24 and unless the authorized but unfunded project receives congressional financing, its future will become clouded.

A delegation of more than 100 persons from Kansas and Missouri, including Johnson Countyans and the Scout-Sun's editor, will fly to Washington by chartered jet to endorse the reservoir project. It is expected the delegation will push for \$900,000 to 1 million dollars in first-year planning and land acquisition funds.

"It's extremely critical that we get some funding this year," David Owen, president of the 150-member Johnson County Water Resources association, said last week. "We got to get the project started because of increasing land values, and expenses will just continue to grow unless we can move now."

Although there are 450 authorized but unfunded projects across the nation, we hope the delegation can convince Congress the Blue River reservoir must have key priority. Unless first-year funding is granted, the controversial 2,500-acre Tomahawk pool could be swept away by Northeast Johnson County's suburban sprawl.

Without the Tomahawk pool, long opposed by Leawood city officials, the complete Blue River project could be endangered from a feasibility standpoint and on the basis of water quality and flood control service benefits.

Tomahawk reservoir and its sister pools are important to Johnson County and Greater Kansas City. We wish the delegation

well as it faces the most important challenge in the history of a battle-worn reservoir system.

Mr. PEARSON. Mr. President, I concur in the views expressed by my distinguished colleague. He has worked very hard on this project. He is a member of the Public Works Subcommittee. This project happens to be in my home county. It has been authorized, we seek about half of the corps capability on these projects. These are projects that, really should go forward.

Mr. STENNIS. In response to the amendment now offered by the Senator from Kansas, which was for \$350,000, the only reason the committee left them out was our information that there was considerable contest, opposition, and division about the project. We have found from experience that when those conditions prevail, it is better to let it settle down before we move forward.

However, the two Senators from Kansas who are the ones that know about this in their area—one is in the home county of the Senator from Kansas (Mr. PEARSON), as he just stated—he has assured us that this matter has been essentially cleared up now. I will let them speak for themselves on that point, but under those conditions, we would recommend that the amendment be agreed to.

Mr. DOLE. Mr. President, there is often some opposition to water projects, and in this case we have worked with the opponents to give them the opportunity to present their views on the Tomahawk Creek Reservoir to the Congress. We have resolved some of the questions concerning the project and the appropriation provided by our amendment will allow the Corps of Engineers to further investigate the feasibility of the Tomahawk Creek Reservoir. In addition, as my senior colleague knows, there has been a municipal election, and the Tomahawk Creek Reservoir was the major issue, and the proponents prevailed. So although I would not say all the problems have been resolved, this amendment provides funds to find the proper solutions.

I appreciate very much the comments of the Senator from Mississippi.

Mr. STENNIS. I think the election was significant when that was the chief issue.

We recommend that the amendment be agreed to.

Mr. President, on the Florida project for erosion control, we think that is a worthy matter. It is for \$75,000 to initiate planning. The committee would recommend that that be approved.

Mr. YOUNG. Mr. President, this meets with my approval. I think the committee would have accepted it at the time it was discussed, had we had all the facts.

Mr. GURNEY. Mr. President, I want to take just a few seconds to express my appreciation to the distinguished senior Senator from Mississippi (Mr. STENNIS) who is handling the bill, as well as the distinguished ranking minority member, the Senator from North Dakota (Mr. YOUNG), for their understanding of this serious problem in Florida and their approval of the amendment.

The PRESIDING OFFICER (Mr. MON-

TOYA). The question is on agreeing to the amendment of the Senator from Kansas to the amendment offered by the Senator from Florida.

The amendment was agreed to.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Florida as amended, by the Senator from Kansas.

The amendment was agreed to.

Mr. ALLEN. Mr. President, I call up my amendment now at the desk, submitted on behalf of myself and my senior colleague (Mr. SPARKMAN), and ask that it be stated.

The PRESIDING OFFICER. The amendment will be stated.

The legislative clerk read the amendment as follows:

On page 5, line 23, strike \$5,873,000," and insert in lieu thereof the following: "\$52,094,000,"

Mr. ALLEN. Mr. President, I yield myself 5 minutes.

Mr. President, the purpose of the amendment proposed by my distinguished senior colleague, Mr. SPARKMAN, and myself, is to add \$220,000 in survey funds for a model study by the Army Engineers of the authorized Mobile Harbor complex, including the Theodore Ship Channel project.

The model investigation will be carried on by the Corps of Engineers Waterways Experiment Station at Vicksburg, Miss.

The study is authorized under a resolution adopted by the House Public Works Committee on June 24, 1965, pursuant to a recommendation of the Department of Interior contained in House Document 91-335 to determine the environmental impact of the authorized Theodore Ship Channel. Among other things, the investigation would involve a determination of the effects of the Theodore project and spoil islands on tides, currents, salinities, circulation patterns, and flushing in Mobile Bay.

Mr. President, the Theodore Channel was authorized as a part of the plan of improvement of Mobile Harbor pursuant to section 201 of the 1965 Flood Control Act. This project is badly needed for new industry in the Mobile area, whose economy has continued to suffer as a result of the shutdown of Brookley Air Force Base some years ago and the result of loss of some 15,000 jobs.

The Theodore Channel would provide deep-draft navigation and connect the Theodore Industrial Park to the main ship channel in Mobile Bay. This 4,000-acre industrial park was established in 1965 and State, county, utilities, and private industries already have invested many millions of dollars in the Theodore facility. It is vital to the realization of the full industrial potential of the Theodore Industrial Park, however, to provide deep-draft navigation for dockside delivery of raw materials by ocean-going vessels.

I should like to emphasize that the benefit-to-cost ratio on the Theodore Ship Channel project is a most impressive 2.1 to 1.0. I hold in my hand a letter I have received from the office of the Chief of Engineers advising me that the Army Engineers have the capability dur-

ing fiscal 1972 to utilize \$295,000 to carry out the model study of Mobile Harbor. I ask unanimous consent to have this letter presented in the RECORD at the conclusion of my remarks.

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

(See exhibit 1.)

Mr. ALLEN. Mr. President, this amendment would provide the full \$295,000, and I can safely say that nothing will contribute so much in the immediate future to the economic well-being of the people of southwest Alabama than the improvement and deepening of the channel from the Theodore Terminal to the main ship channel in Mobile Bay.

Mr. President, the reason the amendment is directed to a larger item is that there is no line item on this appropriation. It is the intention of the junior Senator from Alabama, by this statement, to indicate that the appropriation is being increased for the purpose of utilizing funds as requested in the remarks of the junior Senator from Alabama.

EXHIBIT 1

DEPARTMENT OF THE ARMY,
Washington, D.C., May 17, 1971.

HON. JAMES B. ALLEN,
U.S. Senate,
Washington, D.C.

DEAR SENATOR ALLEN: This is in response to a telephone request from your office for the Corps of Engineers Fiscal Year 1972 capabilities for a model study of Mobile Harbor and for the Mobile Harbor (Theodore Ship Channel) project.

The model study of the harbor has been incorporated into the study of Mobile Harbor which was scheduled to be completed with available funds. With the addition of the model study, however, we can express a capability of \$295,000 for Fiscal Year 1972.

The Mobile Harbor (Theodore Ship Channel) project was recently authorized under Section 201 of the 1965 Flood Control Act. The current estimated Federal cost is \$8,090,000. No funds were requested in the Fiscal Year 1972 Budget. The Corps of Engineers capability for Fiscal Year 1972 is \$75,000 to initiate preconstruction planning.

Corps capabilities are stated from a strictly engineering standpoint considering each study or project by itself without reference to our overall program, our overall capability or fiscal considerations.

Sincerely yours,

LEONARD EDELSTEIN,
Colonel, Corps of Engineers, Assistant
Director for Civil Works for Atlantic
Divisions.

Mr. STENNIS. Mr. President, that study is well known to the committee. We approved the study, but we find additional facts, which show that this relatively small additional sum is necessary to what we originally approved and, therefore, we support the amendment and recommend its adoption.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Alabama.

The amendment was agreed to.

Mr. YOUNG. Mr. President, I send an amendment to the desk and ask that it be stated.

The PRESIDING OFFICER. The amendment will be stated.

The legislative clerk read the amendment as follows:

On page six, line 15, strike out \$936,493,000 and insert in lieu thereof \$937,118,000.

Mr. YOUNG. Mr. President, this is an increase of \$200,000. It is required for the McGee Creek Levee and drainage project in Illinois. The Senator from Illinois (Mr. PERCY) is unable to be here today.

The PRESIDING OFFICER (Mr. MONTROYA). The Chair wishes to inform the Senator from North Dakota that the amendment would not be in order because that figure has already been amended. It would be in order, however, by unanimous consent.

Mr. YOUNG. Mr. President, I ask unanimous consent that we may do so.

The PRESIDING OFFICER. Without objection, it is so ordered, and the Senator may offer his amendment now. The clerk will please report the amendment.

The Senator from North Dakota may proceed with his statement pending reformation of the amendment.

Mr. YOUNG. Mr. President, this is an increase of \$200,000 and is required for the McGee Creek Levee and drainage project in Illinois. The Senator from Illinois (Mr. PERCY) is unable to be here today—and that was so when we marked up the bill in the full committee yesterday—because of an important engagement, and he asked that I propose this amendment in his behalf.

Mr. President, I ask unanimous consent that at an appropriate place in the bill the \$200,000 be added.

The PRESIDING OFFICER. The amendment has been corrected so that it is in order and the clerk will report it.

The LEGISLATIVE CLERK. The Senator from North Dakota (Mr. YOUNG) offers an amendment as follows:

On page six, line 15, strike out \$936,493,000 and insert in lieu thereof \$937,118,000.

The PRESIDING OFFICER. Is there objection to the request of the Senator from North Dakota? The Chair hears none, and it is so ordered.

Mr. YOUNG. Mr. President, the \$200,000 would be used to initiate construction. It is for just such an occasion as this. The existing levy offers only partial protection to 12,080 acres, of which 11,200 acres are highly developed agricultural lands.

The maximum flood of record, that of 1943, caused damages estimated at three-quarters of a million dollars. The benefit-to-cost ratio is 1.21 to 1. The average annual benefits, all flood control, are presently estimated at \$340,000.

Mr. President, I have discussed this with the chairman of the committee. I believe he would be willing to take it to conference.

Mr. STENNIS. Mr. President, this is a relatively small sum. It is to initiate construction of a worthy project. The amendment was not presented to us at the time of the markup of the bill, as has been said. I am sure that if it had been, the amendment would have been adopted. I am glad to join with the Senator from North Dakota and will accept the amendment.

Mr. President, I yield back the remainder of my time.

Mr. YOUNG. Mr. President, I yield the remainder of my time.

The PRESIDING OFFICER (Mr. MONTROYA). The question is on agreeing

to the amendment of the Senator from North Dakota. (Putting the question.)

The question was agreed to.

The PRESIDING OFFICER. The bill is open to third reading.

Mr. GRAVEL. Mr. President, I send an amendment to the desk and ask that it be stated.

The PRESIDING OFFICER. The Chair informs the Senator from Alaska that his amendment is not in order. The figure he refers to has already been amended. In the absence of unanimous consent, he cannot offer the amendment.

Mr. GRAVEL. Mr. President, I ask unanimous consent that I may offer my amendment.

Mr. STENNIS. Mr. President, reserving the right to object, and I do not expect to object, this is a matter that comes under the Atomic Energy Commission. As I said before, the Senator from Rhode Island (Mr. PASTORE) is a member of that committee and also of our committee. I yield to him on the matter. I do not object.

Mr. PASTORE. Mr. President, I do not object.

The PRESIDING OFFICER. Is there objection? The Chair hears no objection, and it is so ordered. The Senator may offer his amendment.

Mr. GRAVEL. Mr. President, I send the amendment to the desk.

The PRESIDING OFFICER. The clerk will report the amendment.

The legislative clerk read as follows:

On page 2, line 19, to strike out the figure \$1,962,520,000 and to replace it with \$1,963,720,000.

HOW TO HELP THE FUSION PROGRAM
CONGRESSIONAL ACTION THIS YEAR

Mr. GRAVEL. Mr. President, on July 20, the Senate amended the AEC authorization bill specifically to increase the budget for controlled nuclear fusion research, by \$1.2 million. Senator PASTORE called this, "a reasonable amount"—CONGRESSIONAL RECORD, page 26090.

The amount of \$1.2 million would permit a meager 2 or 3 percent increase in fusion effort over last year. Without the amendment, the important and peaceful fusion program would have to be curtailed by 1 percent, due to inflation.

[In millions]

1971 appropriation; some reports say \$28.61	\$28.41
1972 authorization before amendment; this is a 4.9 percent dollar-increase over 1971, but a 1 percent net reduction in real work, due to inflation	29.80
1972 authorization after amendment; this is an 8 percent dollar-increase over 1971, meaning a net 2 percent to 3 percent increase in possible work	31.00
Request from AEC fusion division	34.30

On July 27, the House agreed to the amendment. Consequently both Senate and House have authorized a \$31 million operating budget for fusion.

On July 29, the House voted on the appropriation. The final mark-up and committee report on the appropriation had occurred before the final action on the authorization. Therefore, the Appropriation Committee was unable to ap-

propriate more than the \$29.8 million which had been authorized for fusion before approval of the amendment.

However the House Appropriations Committee stated in its report dated July 26, 1971—page 8:

The committee has approved \$29.8 million, the full amount budgeted for (fusion). . . . The committee continues to be concerned at the slow pace of the development of this program which, if successful, could be the answer to the long range energy problems facing the Nation and the world. . . . The production of energy from the controlled fusion process has certain unique characteristics which make it extremely attractive from the safety and environmental points of view. . . . The committee expresses the hope that future budget submissions will make more adequate provision for acceleration of this research and development effort in the public interest.

Furthermore, I have been assured that the House committee would happily agree in conference to an increase in fusion, if the Senate will only deliver it.

Therefore, I was particularly shocked this morning to discover that the Senate Appropriations Committee has not recommended the full \$31 million authorization for fusion.

I hope the committee chairman will take a favorable position on my amendment to add \$1.2 million to the fusion appropriation, as authorized.

COMPARATIVE VALUES

I am really at a loss to understand the reasoning of the Appropriations Committee when it failed to recommend the full authorization for fusion.

Let us compare the \$2.6 million authorized increase over 1971 for fusion, with some of the dollar increases over 1971 which the committee did recommend:

First. \$26.1 million for "nuclear materials."

Second. \$15.4 million for nuclear warheads.

Third. \$46 million for nuclear powerplant development.

Fourth. \$6.5 million for administration.

First. The committee recommended a \$26.1-million increase in "nuclear materials." Apparently that is the line which contains about \$20 million net, annual, Government cost to reactivate the "N-Reactor" at Hanford—JCAE authorization hearings, page 2461.

The decision to reactivate the N-Reactor apparently represents a welfare substitute for that part of Washington. The administration's decision to shut down the N-Reactor would have put about 750 people out of work there, according to the Wall Street Journal—February 1, 1971. The reversal of that decision, according to Representative PRICE of the JCAE, represents a reconsideration of "the impact on the community" of shutting it down—CONGRESSIONAL RECORD, July 15, 1971, page 25213.

Now, Alaska is an economically depressed State, so I can fully sympathize with decisions which keep jobs going. But \$1.2 million for fusion would also maintain and create jobs—the kind of jobs which would contribute to accelerating a magnificent achievement for all

mankind: abundant, safe energy. By comparison, the \$20 million for the Hanford N-Reactor produces an unparalleled risk for that community and all communities on the Columbia River or downwind from Hanford.

According to the New York Times—February 7, 1971, "An authoritative administration official" described the reactor as "a possible safety hazard," "a sloppy engineering job," and a reactor which does not even possess the safety features of commercial nuclear powerplants.

The fact is that the Hanford N-Reactor was able to operate only 42 percent of the time in 1970, is subject to frequent breakdowns, and came close to having a major accident on September 30, 1970. There was double trouble.

First, there was a blockage of coolant, which can be extremely dangerous, so the reactor had to be scrambled.

Second, the primary automatic shutdown system did not work "because of a malfunction of an electrical component"—AEC official release.

But fortunately the backup safety system had all circuits working, and the reactor was shut down before it went out of control.

Now, what makes the committee recommend \$20 million to perpetuate this particular radioactive hazard, while denying \$1.2 million to increase our effort in fusion?

It seems just about crazy to cut fusion, which was described last year by the late AEC Commissioner Theos Thompson as—

The ultimate source of energy here on spaceship earth . . . (fusion) would provide the world with enough energy for over 3 million years. One can thus recognize the truly dramatic promise which fusion power holds—Nov. 5, 1970.

Can we actually allow such a program to be reduced this year? And yet that is exactly what will happen unless we amend the appropriations bill now before us—see testimony JCAE authorization hearings, page 2490, about reduction of fusion manpower.

Second. How can we refuse fusion a \$2.6 million increase over last year, when we are giving a \$15.4 million increase for more nuclear warheads? We already have enough warheads to give us 30,000 pounds of TNT for each man, woman, and child on earth.

Third. How can we refuse a \$2.6 million increase for fusion research over last year, when we are increasing the fission research by \$46 million over last year? We should compare the merits of the two programs:

FUSION AND FISSION CHARACTERISTICS
FUSION

Cheap, safe fuel such as seawater—deuterium—lithium, helium.

Little or no radioactivity.

Inherently safe anywhere.

Potentially 90 percent efficient; no thermal pollution.

Potential for fusion torch solving the solid waste recycling problem.

No fissionable material which could be diverted for proliferation of atomic bombs around the world.

FISSION, BREEDER OR CONVENTIONAL

Breeders fueled by plutonium, the most dangerous substance known to man; both breeders and conventional nuclear plants creating immense quantities of plutonium.

Immense radioactive legacy for the next 50 generations.

Inherently dangerous anywhere.

Only 33 to 40 percent efficient; tremendous thermal pollution.

Potential for permanently poisoning the planet with radioactive pollutants, and massive increases in cancer, genetic mutations, mental retardation, deformities, and all kinds of diseases.

Probability of atomic bomb proliferation, and growth of a plutonium black market.

Massive increase in security checks to prevent plutonium thefts and sabotage.

Vulnerability of powerplants to sabotage, attack, earthquakes, and accidents whose consequences could practically bring this country to its knees and impair its national security.

Fourth. How can we refuse a \$2.6 million increase for fusion research over last year, when we are willing to give a \$6.5 million increase over last year to AEC "administration," paperpushers, and overhead? If I were a scientist in the fusion program, I would be sick with disgust.

IS FUSION BEING SACRIFICED?

When I compare the \$1.2 million which the committee is denying to fusion, with the many, many millions by which the committee is increasing other AEC programs—especially fission—I can not help fearing that there must be an effort somewhere deliberately to postpone the success of fusion.

Everyone knows that progress in fusion is now tied to dollars. In the last 18 months, our fusion experts have made exciting breakthroughs, largely as a result of initial breakthroughs made by the Russians—whose fusion program is three times larger than our own.

Now our fusion people have good reason to think they are on the brink of real fusion success. They know what they need to try next, and they do not have the money to do it. They asked for \$34.3 million for next year. When they could make good use of a 100-percent increase, is this Congress actually going to reduce their capabilities by 1 percent?

I believe there are fission enthusiasts who want to do exactly that. They know that the moment fusion succeeds, their nuclear powerplants will be obsolete. That is not only obvious, but even the experts admit it:

On May 13, AEC Chairman Glenn Seaborg testified to the JCAE as follows:

I suppose if you went into the breeder reactor program and were well launched on that kind of economy and then somehow the fusion reactor came in before you thought it would as an economic proposition, you would, despite your investment, begin to move in that direction. . . . You would not hold off on the fusion reactor. You would begin to use it.—(p. 2485).

On November 5, 1970, AEC Commissioner Thompson admitted the same thing:

I believe it is likely that the fusion process will provide sufficient advantages so that

it will naturally replace fission reactors whenever it becomes available and economic.

Clearly, the breeder could look like a better investment if fusion could be delayed. Representative CHET HOLIFIELD came close to saying it explicitly on May 13:

I personally do not believe that it (fusion) should be escalated within, let us say, the next few years. . . . I do not want it escalated to the point where it in any way detracts from the urgent work that we need to do on the fast breeder reactor—(JCAE Authorization Hearings, p. 2489).

With all the merits of fusion, and the hazards of fission, how can we explain a 47 percent net increase in this bill for fission research, and a 1 percent decrease in fusion research—unless there is a deliberate decision to sacrifice successful fusion?

The omission from this bill of the \$1.2 million authorized for fusion simply can not be explained in terms of dollar-shortages and economy—not after we notice the following dollar-increases:

About \$20 million for the n-reactor at Hanford, \$15 million for more nuclear warheads, \$46 million for fission, and \$6.5 million for "administration."

If democracy still means anything, we will stand here and ask ourselves "what would the people want us to do? Would they want us to delay fusion, or accelerate it?" The only answer to that question, in my opinion, is to accelerate it. I urge my colleagues to vote for this modest amendment, which matches our full authorization for fusion.

Mr. President, the pending amendment was accepted on the authorization bill by the distinguished chairman of the committee and by the Senate.

Mr. PASTORE. Mr. President, will the Senator yield?

Mr. GRAVEL. I yield.

Mr. PASTORE. Mr. President, I think that Senators will recall that during the discussion and debate on the authorization bill, a much larger amount than the \$1.2 million was requested to be added to the authorization. We compromised and kept the total figure at \$31 million. The administration requested \$29.8 million. This falls short by \$1.2 million of the authorized amount. This would bring it up to the authorized amount. If the amendment is agreeable to the Senate, it is certainly agreeable to me to accept the amendment.

Mr. STENNIS. Mr. President, it is the Senator's judgment that the amendment should be accepted.

Mr. PASTORE. I believe that it should be accepted and taken to conference.

Mr. STENNIS. Mr. President, will the Senator from Alaska yield for a question?

Mr. GRAVEL. Mr. President, I would be happy to yield to the Senator from Mississippi for a question.

Mr. STENNIS. Mr. President, is the Environmental Agency in approval of this project?

Mr. GRAVEL. Mr. President, I can say that I have worked harder than anybody to get an environmental statement on this whole nuclear area.

Mr. President, if the Senator would accept an amendment in that regard, I would be very happy to offer it right now.

Mr. PASTORE. Mr. President, I think

the wrong question was asked. If it is clean, it is clean.

Mr. GRAVEL. Mr. President, I thank the Senator for asking the question.

The PRESIDING OFFICER. Do the Senators yield back their time?

Mr. GRAVEL. Mr. President, I yield back the remainder of my time.

Mr. PASTORE. Mr. President, I yield back the remainder of my time.

The PRESIDING OFFICER. All time having been yielded back, the question is on agreeing to the amendment of the Senator from Alaska. (Putting the question.)

The amendment was agreed to.

Mr. BOGGS. Mr. President, I wish to express my support for H.R. 10090, the public works appropriations bill.

The bill appropriates \$65,000 in order to begin, during fiscal 1972, the design and engineering work on the Delaware Bay-Chesapeake Bay Inland Waterway project. This project has been vigorously supported by the people of southern Delaware, and it will create, for residents and vacationers along the Delmarva Peninsula, new recreational opportunities.

Under this project, authorized by the Congress last year, a number of existing waterways will be deepened and widened and new waterways dredged along the Atlantic coast of the peninsula. This will create a safe, protected waterway running from Roosevelt Inlet at Lewes, Del., to Cape Charles, Va., a distance of 145 miles. The channel would have a minimum depth of 6 feet and a width of no less than 100 feet along most of the route.

While the estimated Federal cost of the project will ultimately be \$7,267,000, the \$65,000 appropriated in this legislation is the sum the Corps of Engineers can, as a practical matter, use in fiscal 1972 for design and engineering. As construction will not begin for 3 years after the design work is initiated, I am very pleased that the committee has voted to move this project forward as rapidly as possible.

My colleagues are aware of the great increases that have occurred in recent years in recreational boating in our Nation. This project will serve that need well. But I would be derelict if I did not point out that safety represents another vital facet of the waterway project.

At a number of locations along the eastern shore of the Delmarva Peninsula, owners of recreational and small commercial boats now have no route behind the barrier islands for use and protection at times of heavy seas and strong winds. A voyage down the coast necessarily involves long detours into the open sea. The completion of this new link in the Intercoastal Waterway system will hasten the day when a safe, protected passage is available to all boaters in that area of Delaware, Maryland, and Virginia.

Mr. President, this is an excellent project, and I commend the committee for its decision to include it in the bill.

May I point out for the benefit of my colleagues that this bill contains several other items of importance to the people of Delaware.

The bill, for instance, appropriates \$150,000 to continue the planning work, initiated in fiscal year 1971, for a beach

protection and improvement project along Delaware's Atlantic coastline, from Cape Henlopen to Fenwick Island. When construction work begins a year or two hence, this project would rebuild many of the beaches to the width that existed before severe erosion and storm damage.

The bill further provides \$4,624,000 for additional improvements to the Chesapeake and Delaware Canal. This new commitment would raise the total appropriation on this work to \$92,143,000; the total Federal cost will eventually be \$105,300,000.

Mr. President, another \$4,574,000 is appropriated in this bill for the operation and maintenance of various projects in Delaware: \$3,900,000 for the Chesapeake and Delaware Canal, \$663,000 for Wilmington Harbor, and \$11,000 for existing inland waterway sections near Rehoboth Beach.

There is \$50,000 for an investigation on the dimensions of the Delaware River Channel from Philadelphia to the sea, \$2,300,000 for an investigation of water supply needs in the Northeastern part of our Nation, including Delaware, and \$95,000 for operation, maintenance, and other work along the Nanticoke River.

One final aspect of the bill I want to touch on is an appropriation of \$243,000 to assist the important work of the Delaware River Basin Commission. Most of this money—\$179,000—will be the Federal contribution to the operation of the Commission itself. As my colleagues know, the four basin States—Delaware, Pennsylvania, New York, and New Jersey—are partners with the Federal Government in the running of the Commission and its activities, such as the establishment of strict water pollution control standards. An appropriation of \$64,000 is also made for the expenses of the Federal representative to the Commission.

In closing, Mr. President, I wish to commend the chairman of the Subcommittee on Public Works Appropriations (Mr. STENNIS) and his colleagues on the subcommittee for their lengthy and thoughtful evaluation of the issues and projects involved in this legislation. The result is a most beneficial one for our Nation.

Mr. MATHIAS. Mr. President, as always the distinguished Committee on Appropriations, in considering the public works budget for this fiscal year, has faced the difficult challenge of promoting fiscal responsibility and at the same time advancing those projects which are necessary to our Nation's health and growth. In general, the committee has done its work well.

In examining this bill I found myself in the painful, but not unusual posture, of being both glad and sad at the same time. While I appreciate the inclusion of some recognition of the national interest in saving the Chesapeake Bay, I am deeply disappointed that this bill does not include the full amount requested by the President for one vitally important project, the Chesapeake Bay hydraulic model and associated technical center to be built by the Corps of Engineers at Matapeake. The President, recognizing the immediate need for this great research tool, recommended ap-

propriations of \$4 million, including \$1,575,000 for technical studies, design work and the collection of prototype data, and \$2,425,000 for the initiation of construction. This bill does contain the \$1,575,000 to continue research and development, but funds for the actual construction have unfortunately been cut.

In my view this is a clear case of false economy. Every year of delay on the Chesapeake Bay model, in the midst of rising construction costs, means that this project will cost us more in the long run. Even more important, every year of delay is another year in which the people and officials of Maryland and the Nation are denied the benefits and understanding of the bay which this model alone can bring. Every year of delay means 1 more year in which crucial decisions about the bay will have to be made with inadequate facts and only partial comprehension of the delicate ecology of the Nation's greatest estuary.

The hard fact is that we cannot defer the growing pressures on Chesapeake Bay. We cannot postpone the surging population growth in the bay country and the metropolitan areas of Baltimore and Washington. We cannot put off until a more convenient time the booming growth in water-based recreation, the increases in commercial traffic on the bay, or the competing demands for bay water for new powerplants and other uses. These pressures are mounting now. Although the bay has been remarkably resilient so far, we must not rely on good luck and piecemeal decisions to insure its future health.

The hydraulic model of Chesapeake Bay was first authorized by Congress in 1965, and its full estimated cost, about \$15 million, was authorized last year. The scope of the project, which will be the size of 13 football fields, does not appear excessive in relation to the great expanse of the bay itself and the need for a model large enough to reflect accurately all of the intricacies of currents, tides, water inputs and diversions, salinity, and other elements. Engineers have concluded, in fact, that the proposed model is actually quite modest in relation to the resource and the sophistication of the research planned. Arbitrary reductions in its size could easily prove to be counterproductive, saving pennies in the short run but denying us knowledge worth millions in the years to come.

Again, I deeply regret that the Congress did not agree with the President that the construction of the bay model should begin this year. I intend to seek a reconsideration of this project at the earliest possible time with a view toward obtaining funds for construction next year.

In regard to other projects, this bill does contain \$4,624,000, as requested by the President, to continue the widening and deepening of the C. & D. Canal; \$6,220,000, as requested, for construction of the Bloomington Dam and Reservoir; \$50,000 to resume work on the Baltimore Harbor channel connecting with the C. & D. Canal; \$65,000 for planning for the inland waterway from the Chesapeake Bay to the Delaware Bay; and funds for flood control studies of the

Nanticoke River and tributaries, \$20,000; the Patuxent River and tributaries, \$35,000; and the Youghiogheny River Basin, \$110,000.

In a statement submitted to the Subcommittee on Public Works on May 26, I fully supported these efforts, and urged additional appropriations to advance the completion date of the C. & D. Canal project and connecting channel, to insure that the Bloomington Dam will remain on schedule, and to begin preconstruction planning of the 50-foot channel from Baltimore Harbor to the mouth of the Chesapeake Bay. While the funds contained in this bill do not fully meet those goals, the pending appropriations will bring great benefits to Maryland and the Nation's economy.

Mr. FULBRIGHT. Mr. President, regarding the pending public works appropriations bill, H.R. 10090, I wish to express my appreciation to the Appropriations Committee for the inclusion of a number of items which will benefit the State of Arkansas. Most of these projects are ongoing, and I shall not discuss them separately at this time, except to say that in behalf of many interested Arkansans, I would like to particularly thank both the subcommittee and the full committee for adding \$375,000 to initiate planning on the Felsenthal lock and dam. In addition to improving navigation on the Ouachita River in southern Arkansas, these funds will significantly contribute to the realization of a recently proposed national wildlife refuge. This refuge was authorized in the Rivers and Harbors Act of 1970, with the cooperation of the Department of the Interior and the Corps of Engineers. The benefits expected to accrue to our State were expressed recently in a letter of Mr. H. K. Thatcher, executive vice president of the Ouachita River Valley Authority. I quote as follows from Mr. Thatcher's letter:

Construction expenditures will in the long run be only a small portion of the benefits from this federal work project. It is estimated by the U.S. Army Corps of Engineers and the ORVA that the full operation of the 9-foot navigation project in the Ouachita River will yield approximately \$6,000,000 annually. The U.S. Department of the Interior estimates that the state's income from sportsmen expenditures and the tourist business from the project, when fully developed, will exceed \$100,000,000 annually.

ATOMIC ENERGY APPROPRIATIONS

Mr. GRAVEL. Mr. President, this \$4.6 billion appropriation bill contains \$2.3 billion for atomic energy. This is the bill which funds what is widely acknowledged to be the most dangerous process known to man: nuclear fission, both in warheads and powerplants. Therefore, this is the bill which makes misery for life on earth into a real possibility or perhaps a probability. This is the very bill which could make all other bills irrelevant.

Furthermore, this is the bill which starves a program which could provide overwhelming benefits, instead of dangers, to all mankind. I am referring to controlled nuclear fusion for the production of abundant, safe, electrical energy. This bill gives it about 3 percent of the amount which it gives to overkill

weapons. If this bill reflects the values of this country, then I am ashamed.

I do not mean that as a criticism of my esteemed colleagues on the Appropriations Committee. They alone are certainly not making the nuclear policies of this country. Every Member of Congress is responsible, mostly for doing nothing about this supremely important subject.

Why are we almost automatically passing the bill which funds nuclear fission? We are passing it—and I shall vote for it too—because the money for atomic energy is in the same bill with public works projects desired by the people we each represent. If we vote "No" because of atomic energy, we would also be voting against other projects which our States desire. Who among us wishes to go back to our State and say, "I just helped defeat a bill which would have put \$8 or \$9 million in this State"? Politically, we feel helpless to oppose any program which would produce dollars and jobs—even if the dollars and jobs are part of a dangerous program.

The dangers of the nuclear arms race are obvious; I shall not describe them now. According to the Gallup poll, July 25, 1971, 43 percent of the public says that "war is an outmoded way of settling differences between nations." Perhaps 43 percent wish we would vote "No" on more nuclear weapons. There is nearly a billion dollars in this bill just for warheads. That budget item makes me think of President Eisenhower's remark that—

People want peace so much, that one of these days, governments had better get out of their way and let them have it" (August 1956).

Mr. President, I ask unanimous consent to have the July 25, 1971 Gallup poll printed at the end of these remarks.

The PRESIDING OFFICER. Without objection it is so ordered.

(See exhibit 1.)

Mr. GRAVEL. Mr. President, the dangers and obsolescence of the civilian nuclear electricity program—which accounts for about \$400 million in this bill—also are becoming obvious to a growing number of people. In this one week alone, a group of nuclear engineers and physicists in Cambridge warned that the licensing of nuclear powerplants with dubious, untested emergency core cooling systems may result in a "catastrophe and loss of life exceeding anything this Nation has seen in time of peace," while a Federal court ruled that AEC licensing policy is making "a mockery" of the National Environmental Policy Act.

Mr. President, I ask unanimous consent that the paper entitled "Nuclear Reactor Safety: An Evaluation of New Evidence," by the Union of Concerned Scientists, July 1971, and the Washington Post story "A-Plant Safeguards Held Faulty by Court," July 24, 1971, be printed at the end of my remarks.

The PRESIDING OFFICER. Without objection it is so ordered.

(See exhibit 2.)

Mr. GRAVEL. In spite of these warnings and many others, most of my colleagues today will approve funds for the civilian nuclear electricity program, on

the grounds that they are not "expert" enough to defend or even hold a dissenting opinion.

I have a cheerful message: The problem is blazingly simple. It centers around the unavoidable production of potentially lethal radioactive garbage inside nuclear powerplants. That is a fact of physics, and the quantity of radioactivity is determined by nature, not by man. Every time we hear about the startup of one more 500-megawatt nuclear plant, it means that we are irrevocably committed to controlling and guarding about 250 megatons' worth of long-lived fission products for a few hundred years. That is 200 times more long-lived fission than will be produced if we do the "Cannikin" weapon test, and about 40 times greater than the entire amount of radioactive fallout which clobbered this country from the pretreaty atmospheric bomb tests.

In other words, every single nuclear powerplant inevitably creates a giant radioactive legacy. It runs equivalent to exploding about 1,000 Hiroshima-size bombs per year, per 1,000-megawatts of electrical capacity. The arithmetic is in the July 8, 1971, CONGRESSIONAL RECORD, page 24013.

If our 22 operating nuclear plants, which combined produce about 9,000 megawatts, each operate for 25 years, they will leave behind as much long-lived radioactivity as the explosion of about a quarter of a million Hiroshima bombs.

The risk is positively grotesque when you do the arithmetic on the 80 additional plants which the AEC expects to license for operation in the next 9 years, and the additional 900 plants before the year 2000. The inevitable radioactive garbage would be so enormous—equivalent to a million Hiroshima bombs per year—that even 99.99 percent success in its perpetual control and guardianship would produce not a success, but rather a catastrophe in terms of radioactive contamination, cancer, mental retardation, physical deformities, heart disease, and many other serious afflictions.

When the AEC assures us all that nuclear electricity is less hazardous than leaning against a granite wall or wearing a luminous wrist watch, the AEC is postulating a miraculous human infallibility when it comes to handling radioactivity.

How many of us have the slightest confidence in human infallibility? Yet today, we will all vote as if we did, indeed, have that foolish feeling. Today we will all vote "yes" on a bill which accelerates a radioactive future and provides a 53 percent increase for "breeder" reactor development.

Why do we do it? We vote "yes" because we share a mentality which will vote for just about anything, provided it brings jobs and dollars to our constituents. We think we know what they want. Have not we all seen localities so desperate for jobs that they have wooed nerve-gas depots, radioactive reprocessing plants and dumps, and even reactivation of one of the country's most dangerous nuclear plants? It is pathetic to see a so-called free people forced to sacrifice their own safety in return for

jobs and the privilege of a roof over their heads.

I refuse to believe the creativity of Congress is so limited that we cannot start thinking of useful, productive activities instead of hazardous ones to fill the "pork barrel" and to gladden the hearts of our constituents. I believe we do have a responsibility to see that people have jobs or other opportunities to live decently, but the responsibility does not end there. We have a moral responsibility to replace death-oriented "opportunities" with life-oriented ones.

The connection between appropriation bills and jobs is obvious. The Federal budget is about one-fifth of our gross national product. Military activities alone are creating about 1 job out of every 10 in this country. This particular appropriations bill secures thousands and thousands of jobs in atomic energy. If today, we simply said "no" to nuclear electricity, thousands of people would be out of jobs.

No one wants that. So we vote for jobs. We hardly stop to think that today we are voting also for substantially increasing our radioactive legacy and for escalating the nuclear arms race. We hardly stop to use our heads on the alternatives—like giving the same people in the same States the same money to do something else besides split atoms.

For instance, it might actually be better for this country and mankind, to vote \$130 million for the "breeder" nuclear power program with one proviso: "Do not do it." Such a scenario might sound fanciful, but actually it would not be very different from paying farm owners not to grow crops.

We who essentially create one job out of every five with our annual appropriation bills, should not be too prissy about admitting that we regard appropriation bills as a form of welfare, in the literal sense, for our constituents. Since we all agree to give it, I think we should pay far more attention to finding out what sort of work the people want to do, and to have done, with their tax dollars. Perhaps nuclear fission is not one of their favorites. Perhaps we are forcing it on them.

This country is fast getting unstuck from its 1954 vision that nuclear fission would be the only possible source of electricity for the future. In 1954 and in 1957, Congress made the encouragement of the atomic energy industry part of the law of the land. But in those years, there was no sputnik yet, no space program to provide breakthroughs in solar electricity, and no program providing breakthroughs in controlled fusion energy. So our vision was limited to fission.

Seventeen years later, it is clear that nuclear fission is not the only possible source of electricity for the future: it is becoming clear that our 1954 vision may be the worst possible choice today.

However, I know that an automatic "yes" today for nuclear fission dollars is inevitable. Therefore, I am wasting no one's time with an amendment on the civilian nuclear electricity program. A year from now, the situation will be different.

EXHIBIT 1

THE GALLUP POLL: WAR SEEN "OUTMODED"
BY 43 PERCENT OF U.S. PUBLIC
(By George Gallup)

PRINCETON, N.J.—President Nixon's recent announcement that he will visit China to promote peaceful relations comes at a time not only of widespread disillusionment over our involvement in Vietnam, but of belief among many Americans that war is an outmoded way of settling differences between nations.

In a late June survey, nearly half of Americans interviewed (46 per cent) say war is outmoded. However, almost as many (43 per cent) hold that wars are sometimes necessary to settle differences between nations, with a significant proportion specifying, "when our survival is at stake."

A total of 1,501 adults, 18 and older, were interviewed in person to obtain the results of this survey, which was conducted in more than 300 scientifically selected localities across the nation during the period June 25-28. This question was asked:

Some people feel that war is an outmoded way of settling differences between nations. Others feel that wars are sometimes necessary to settle differences. With which point of view do you agree?

	Outmoded	Sometimes necessary	No opinion
National.....	46	43	11
Under 30 years.....	43	45	7
30-49 years.....	43	46	11
50 and older.....	46	41	16
College background.....	52	43	5
High school.....	45	45	10
Grade school.....	43	40	17
Men.....	43	49	8
Women.....	48	38	14
Republicans.....	41	46	13
Democrats.....	48	42	10
Independents.....	48	43	9
East.....	50	39	11
South.....	35	52	13
Midwest.....	46	45	9
West.....	55	34	11

NUCLEAR REACTOR SAFETY: AN EVALUATION OF
NEW EVIDENCE

(By Ian A. Forbes, Daniel F. Ford, Henry W. Kendall, and James J. MacKenzie; of the Union of Concerned Scientists, Cambridge, Mass., July 1971)

(NOTE.—Copies of this report are available from the Union of Concerned Scientists, P.O. Box 289, M.I.T. Branch Station, Cambridge, Massachusetts, 02139. Please include \$1 to help cover costs of printing, handling, and postage.)

(Ian A. Forbes—Nuclear Engineer, Faculty, Lowell Institute of Technology. Sometime Research Associate, Nuclear Engineering Department, Massachusetts Institute of Technology)

(Daniel F. Ford—Economist, Coordinator, environmental research, Harvard Economic Research Project, Harvard University)

(Henry W. Kendall—Nuclear and High Energy Physicist, Faculty, Physics Department, Massachusetts Institute of Technology, Chairman, Union of Concerned Scientists Committee on Environmental Pollution)

(James J. MacKenzie—Nuclear Physicist, Joint Scientific Staff, Massachusetts & National Audubon Societies, Chairman, Union of Concerned Scientists)

(The Union of Concerned Scientists is a Boston area coalition of several hundred scientists, engineers, and other professionals who are concerned with the impact and effects of uncontrolled technology on society. UCS was founded on March 4, 1969 and has been most active in the areas of arms control and environmental pollution.)

(UCS is an advocate organization dedicated to the protection of the long-term public interest. Its Committee on Environmental

Pollution has worked on problems related to nuclear power, air and water pollution, oil spills, highway construction, and unrestricted pesticide uses.

(The Union of Concerned Scientists is the Boston Chapter of the Washington-based Federation of American Scientists.)

"Our safety lies, and lies exclusively, in making public decisions subject to the test of public debate. What cannot survive public debate—we must not do."—John Kenneth Galbraith

I. INTRODUCTION

The nation faces a growing electric power shortage whose roots lie in an ever increasing per capita demand for electricity to support our rising standard of living and in a burgeoning population whose size is expected to grow by 50% in the next thirty years. Our electric power problems are aggravated by an increasing reluctance on the part of the public to permit the construction of environmentally damaging fossil-fuel plants. To help alleviate this power shortage the nation is turning to nuclear power: the controlled release of the enormous energies available from the atomic nucleus. Widely heralded as 'clean power' because its production generates no sulfur oxides, smoke, or other visible pollutants so much in evidence from coal or oil generating plants, it has come, so its proponents say, just in time to augment and ultimately dominate as the national source of electricity.

Recent tests, carried out under the sponsorship of the United States Atomic Energy Commission, however, have indicated that emergency systems incorporated in presently operating and planned reactors might not function adequately in the event the reactor should lose its cooling water (loss-of-coolant accident). In such a circumstance the reactor core would be expected to melt down and breach all the containment structures, very likely releasing some appreciable fraction of its fission product inventory. The resulting catastrophe and loss of life might well exceed anything this nation has seen in time of peace. The nation cannot move to dependence on nuclear power until the possibility of such an accident is totally negligible.

Our deep concern over this situation has led us to study the technical nature of a loss-of-coolant accident and the emergency core-cooling systems designed to prevent meltdown. We have evaluated the possible consequences of a major fission product release and have assessed in some detail what the lethality and range of the radioactive cloud might be from an accident involving a large modern reactor.

In the United States, the reactors in almost all nuclear power plants are cooled by the circulation of ordinary water. These reactors are called "light water reactors", and it is this type that we shall be concerned with in this document. There are presently 21 operating light-water power reactors in the United States, 56 more under construction, and 44 others are in planning and design stages. By the year 1980 there will be more than 100 reactors operating singly and in clusters across the country, with a total electrical generating capacity of 150,000 megawatts of electricity.

Nuclear reactors have some unique problems associated with their operation that are unlike those accompanying any other source of energy. These problems are generally related to containing the potentially lethal nuclear radiation that accompanies the power developed by the fissioning (splitting) of uranium atoms. There are two major sources of this radiation. The first accompanies the release of energy by the atomic nuclei as they are split or fissioned. This energy is the source for generating the steam to drive the turbine. If the reactor were to be deliberately shut down or if its

cooling water were lost through a pipe rupture or other accident, the levels of this radiation, and the principal energy release, would be quickly reduced.

The second source of radiation is the spent fragments of the fissioned atoms. These fission products are the nuclear ashes that result from the 'burning' of uranium. They are intensely radioactive and accumulate in great abundance as a reactor continues to run. This source of radiation persists at very high levels even when the reactor has been shut down. Under normal circumstances these fission products remain within the fuel elements where they are formed.

Fuel elements, composed of small ceramic-like cylinders of uranium dioxide enclosed in long thin tubes of an alloy of Zirconium and Aluminum (Zircaloy), must be periodically replaced. The highly radioactive waste products that have accumulated in them must then be removed by chemical processing and stored safely away for thousands of years until the radioactivity has died away.

A nuclear reactor employs heavy shielding of steel, water, and concrete to absorb the radiation from the fissioning nuclei and from the fission products. Very substantial precautions are taken to prevent the escape of more than the most minute quantities of radiation or radioactive materials. Multiple sensor systems detect improper operation and initiate emergency procedures designed to prevent an unwanted release. Should one level of reactor containment be breached, others, still effective, are there to prevent major releases.

Nevertheless, as we shall see, there is an enormous potential for damage from a large release of fission products. Accordingly, there is a great burden on the designers of reactors to understand fully all aspects of potential accidents and have known and proven facilities to prevent or largely mitigate the consequences of a major accident. We have grave concerns that this is not presently the case with regard to the consequences of a loss-of-coolant accident.

In the following sections we describe: first, the consequences of a loss-of-coolant accident that releases a substantial amount of radioactive material into the environment; second, how such an accident could occur through the failure of inadequate safeguards; and, finally, our urgent recommendations. The aim of these recommendations is to lead to nuclear power generation that is as secure from a hazardous accident as human ingenuity and care can provide.

II. THE CONSEQUENCES OF A MAJOR
REACTOR ACCIDENT

"If the emergency cooling system did not function at all, the core would melt and the molten mass of Zircaloy and UO₂ would collapse and probably melt through the pressure vessel in 30 minutes to 1 hour."—C. G. Lawson, *Emergency Core-Cooling Systems for Light-Water-Cooled Power Reactors*, Oak Ridge National Laboratories, 1968 (ORNL-NSIC-24), p. 52.

"It seems certain that melt-through will be a catastrophic event in that large quantities of molten material will be discharged suddenly."—Report of the Task Force Established by the U.S. AEC to Study Fuel Cooling Systems of Nuclear Power Plants, *Emergency Core Cooling*, 1967, p. 145.

The emergency core-cooling system is the reactor safety feature whose reliability is our pressing concern. Although the nature and sequence of events accompanying reactor accidents is subject to much speculation and conjecture, owing both to the fortunate lack of experience with major reactor accidents and the unfortunate lack of extensive experimental data on reactor safety systems, it is clear that the emergency core-cooling system is a vital safety system in currently operating reactors. As the statements from

the two AEC reviews of emergency core cooling quoted above affirm, emergency core-cooling performance determines whether a loss-of-coolant accident can be terminated without a major catastrophe. To facilitate an understanding of the seriousness of the recent indications of emergency core-cooling system unreliability, we describe in this chapter the consequences of emergency core-cooling system inadequacy in a loss-of-coolant accident. The evidence of this inadequacy is presented in the following chapter.

If through equipment malfunction or failure, human error, or an externally initiated event such as sabotage or severe earthquake, one of the major cooling lines to a large reactor core were ruptured, the water circulating through the primary cooling system would be discharged from the system through the rupture and the reactor core would be without coolant. As stated earlier, the absence of water (which normally serves as a 'neutron moderator' as well as coolant), plus emergency insertion of the control rods, would prevent the continuation of uranium fission. That is, the reactor would become, and would remain, subcritical and the primary source of reactor energy would be removed.

There is, however, the other source of heat which could not be turned off by reactor shutdown—the heat generated by the intense radioactivity of the fission products in the fuel rods. In a 2000 Mw (thermal) reactor (allowing generation of about 650 Mw of electricity), which is typical of many now operating, the heating provided by this source 3 seconds after control rod insertion amounts to approximately 200 Mw; after 1 hour, 30 Mw; after a day 12 Mw; and would still be appreciable for some months.

Under normal reactor operating conditions, the external surfaces of the fuel cladding is at a temperature of about 660° F, while the interiors of the fuel pellets are very much hotter, typically 4000° F, near the melting point of the material. After coolant loss, the pin surfaces begin to heat rapidly both from the higher temperatures inside and from the continued heating by the fission products. In 10 to 15 seconds the fuel cladding begins to fall and within one minute the cladding has melted and the fuel pins themselves begin to melt. If emergency core cooling is not effective within this first minute, the entire reactor core, fuel and supporting structure, begins to melt down and slump to the bottom of the innermost container. Emergency cooling water injected at this stage may well amplify the disaster as the now-molten metals can react violently with water, generating large quantities of heat, releasing steam and hydrogen in amounts and at pressures that can themselves burst the containers (see Battelle Memorial Institute Report BMI-1825). Approximately 20% of the fission products are gaseous and the meltdown has released them entirely from the now fluid core. If the containment vessels do not burst, the molten mass of fuel and entrained supporting structure continue to melt downward, fed by the heat generated by fission-product radioactivity. At this point in the accident there is no technology adequate to halt the meltdown—it is out of control (cf *Emergency Core Cooling*, Report of the Task Force Established by the U.S. Atomic Energy Commission to Study Fuel Cooling Systems of Nuclear Power Plants, 1967). This meltdown situation has been referred to as a 'China Accident.' How far down the core would sink into the earth and in what manner the material would ultimately dissipate itself are not entirely understood, but what is close to certain is that virtually all the gaseous fission products and some fraction of the volatile and non-volatile products would be released to the atmosphere.

The released radioactive material would be transported and dispersed in the atmosphere.

Unlike the fission products of a nuclear weapon explosion which are distributed in an immensely hot bubble of gas that rises rapidly, the gases here are relatively cool. Accordingly, they rise little at best and may easily be trapped under temperature inversions common at night. The cloud can be lethal at dozens and, in some circumstances, at close to one hundred miles.

In 1957 the Atomic Energy Commission published a detailed and thorough report entitled "Theoretical Possibilities and Consequences of Major Accidents in Large Nuclear Power Plants", frequently referred to by its document code designation: WASH-740. It presented the results of a detailed analysis of the dispersion of radioactivity, amounting in one of their examples to 50% of the fission products contained in a reactor, and of the human exposure to radiation that would result if these fission products were released from a reactor in forms easily dispersed by the winds. We have studied the report in detail and it forms the basis for our evaluation of the accident hazards.

The implications and conclusions of WASH-740 are generally discounted by the Atomic Energy Commission and the nuclear power industry on the grounds that (1) no mechanisms exist that would disperse 50% of the reactor fission product inventory through a breach in all the containment vessels, as was assumed in the report, and (2) it is essentially impossible to breach all the containment vessels, anyway, in view of the elaborate safety equipment incorporated in modern reactors. We discuss these two criticisms next.

The fission product inventory of a modern 2000 Mw(t) reactor after a long period of operation can be as much as 15 times greater than that assumed in WASH-740. Accordingly, the consequences of the worst accident discussed in WASH-740 could be duplicated by the release of barely more than 3% of the radioactive material in a modern reactor. This much material represents less than 1/7 of a reactor's volatile or gaseous fission products, all of which (and more) could well be expected to be released after a complete core meltdown.

With reference to the second criticism of WASH-740, we shall see in the next section in more detail that it is not at all impossible to breach the containment vessels.

There are other assumptions in WASH-740. They concern the mechanisms of radiation exposure from the cloud of radioactivity released by the reactor; the deposition of radioactive materials on the ground (fall-out); and the mechanisms of transport and dispersion by the atmosphere for a variety of commonly occurring meteorological conditions. We have examined these assumptions and the calculations based on them and have concluded that they represent an adequate basis for estimating the consequences of a major accident.

We have considered in this example an accident just prior to refueling in a reactor generating 2000 Mw of thermal power, typical of many now operating. We have assumed that one third of the fuel is removed for reprocessing each year, as is customary, and replaced with fresh fuel. The quantity of fission products in the reactor core reaches a maximum just before refueling. We consider an accidental release of a portion of these products to the atmosphere. The manner and speed with which the material spreads will depend on a number of parameters. These include the particle size (for the non-gaseous fission products), the temperature of the emitted materials, and the then-existing weather conditions: wind speed and direction, rain, temperature stratification, and so forth.

A release that involves primarily highly volatile or gaseous materials is more likely than one that involves dispersal of substantial solid material as a smoke or dust, although the latter may certainly occur. The

volatile and gaseous radioactive materials are the halogens and noble gases and include the Xenons, Kryptons, Bromines, Iodines and Strontiums and comprise some 20% of the fission product inventory. These and the semivolatiles—Ruthenium, Cesium, and Tellurium—are released in an uncontrolled core meltdown. The Iodines and Strontiums are biologically the most hazardous.

As in WASH-740, we have considered hot clouds (3000° F), cold clouds, fumes, dust and gaseous emissions, and a range of commonly occurring meteorological conditions including rain, no-rain, daytime and nighttime lapse rates (that is, the presence or absence of temperature inversions) and various cloud rise distances from zero to several hundred meters. The larger cloud rises depend on initial temperatures that appear improbably high, and the most probable situation appears to be the emission of a ground level cloud. This latter case unfortunately results in the greatest damage.

In the case of emissions from the reactor of purely gaseous radioactive products, the biological effects are dominated by radiation exposures from cloud passage. If, in addition, there is radioactive particulate matter, as dust or smoke, then one expects deposition of radioactive materials quite similar to nuclear weapons fallout. Unlike weapons fallout, which decays rapidly from the first, reactor 'fallout' decays rather slowly for some time. Some of the radioactive materials have half-lives in the years or tens of years and evacuation, land denial, or land restrictions may thus persist for appreciable periods of time. Substantial uptake and ingestion of radioactive materials would occur in humans exposed to clouds containing radioactive dusts or smokes.

We shall summarize a number of cases from our study in terms of maximum distances at which various consequences of cloud passage and radioactive deposition might occur. The effects refer to a person exposed to cloud passage with no shielding or protection. The cloud would be increasingly difficult to see after it had moved away from the accident site, and would be invisible long before it had lost its lethality. Persons inside structures at the time of cloud passage would receive substantially less initial exposure from cloud passage but would receive continuing exposure from material finding its way into the structures and only slowly dispersing.

Under daytime conditions, with no temperature inversion, a cold, ground-level cloud, and an 11.5 mph wind, lethal injuries might be expected to a distance of 2.5 miles, injuries likely to 5 miles, and possible but unlikely effects no further than 20 miles, assuming 20 percent of the fission product inventory is released. If 5% is released, these distances become 1 mile, 2.5 miles, and 12 miles, respectively. The region affected is a strip, extending downwind and as wide as 3/4 mile across.

Injury here means radiation sickness and other prompt effects in addition to increased susceptibility to many other diseases throughout the lifetime of the exposed persons. In particular, enhanced incidence of leukemia and other cancers would be expected in addition to genetic damage.

If, however, the radioactive materials are released under a temperature inversion, by no means an uncommon nocturnal condition, with a 6.5 mph wind, the meteorological trapping greatly extends the range of possible death or damage. Assuming a 20% release, lethal effects can extend 75 miles downwind in a strip of maximum width up to 2 miles. Injuries would be likely at up to one to two hundred miles, the presence of moderate rain yielding the lower figure. For release of 5% of the fission products these numbers are reduced to 40 miles and 80 to 100 miles, respectively, in a strip up to one mile wide.

Non-gaseous, particulate fission products

might be generated in chemical explosions arising should molten reactor core material contact water in appreciable quantity or if the core meltdown generated high temperatures. These products will, in part, be deposited on the ground as fallout. If they are initially borne aloft in a hot cloud, the point of maximum deposition may be some distance down wind, but if emitted in a cloud at essentially ambient temperatures, deposition would be expected to be a maximum at the reactor site and decrease downward. Rain, depending on its rate, can substantially increase the rate of deposition, and by depleting the cloud, much reduce the range of fallout, at the cost of increased local concentrations. Non-volatile particulate material would include entrained amounts of Cesium-137 with a half-life of 30 years, and of the partially volatile Strontium-90 with a half-life of 28 years. The latter material is an especially noxious contaminant for, in addition to its long half-life, it is chemically similar to calcium and when ingested, lodges in the bones. Low concentrations of Strontium-90 on arable land require agricultural restrictions for it can move through various food chains into humans.

The estimates of the distances at which evacuation (urgent or merely necessary), severe land restrictions, or agricultural use restrictions would occur, are particularly sensitive to the particle size, emission mechanism from the core, and meteorological conditions during transport. It is presently not possible to refine these estimates and select among them owing to a lack of knowledge of the nature of possible accidents. If we assume 4% of the non-volatile core products are released then urgent evacuation might be required out to 15 to 20 miles, within 12 hours, or might not be required anywhere. Necessary evacuation might be required on a less urgent basis out to 80 to 100 miles, or possibly not at all. Land use restrictions would be inevitable, however, for this postulated release, and would extend a minimum of fifteen miles and could reach to distances of 500 miles or more. Denial or land use restriction might persist for some years.

Some idea of the hazardous nature of the materials involved comes from recognizing that the Strontium-90 inventory in the reactor we are considering is sufficient to contaminate more than 1000 cubic miles of water in excess of permitted AEC tolerance levels.

Many of the power reactors now operating are sited near metropolitan areas and a very large number are planned to be similarly sited. One reactor under construction near Boston is within 50 miles of close to 3,000,000 persons, and is 6 miles from a town of 15,000 persons.

We should emphasize that in making these estimates, we have considered only commonly occurring meteorological conditions and the release of no more than one-fifth of the hazardous materials from the core. Uncommon, but by no means rare, weather conditions might appreciably extend the range of lethal or damaging effects.

G. W. Kellholtz, C. E. Guthrie, and G. C. Battle, Jr. (*Air Cleaning as an Engineered Safety Feature in Light-Water-Cooled Power Reactors*, ORNL-NSIC-25, September 1968, page 4) state that:

"Several power reactors with outputs of over 1000 Mw(e) each are scheduled for Startup in 1970-71, and reactors of about 1500 Mw(e) are being designed. The increase in numbers is increasing the probability that a major accident might occur, the increase in size is increasing the fission-product inventory in the average power reactor, and increases in both number and size are increasing the total amount of fission products that must be contained, within reason, to prevent excessive contamination of the earth's atmosphere."

Reactors of 1000 Mw and 1500 Mw electrical power are respectively 1½ times and 2¼

times larger than the reactor we considered in our calculations on the consequences of reactor accidents. For these larger reactors the ranges of accident effects would be greater than our estimates.

It is certainly conceivable that more than one fifth of the fission products might be released in a wholly uncontrolled core meltdown. The range estimates for lethal or damaging effects we have made should be regarded as conservative and by no means considered extreme distances that could not be exceeded in particularly unfortunate circumstances.

Quite aside from the direct and indirect damage and loss of life that might ensue from a drifting, lethal radioactive cloud, there is the fear and anxiety that its existence would entail. It is probably not possible to evacuate a major city, near the accident site, exposed to the threat of cloud passage and radioactive fallout, and little could be done aside from warning the majority of the inhabitants to seek shelter from the invisible materials moving toward them. It is hard to doubt that the warning alone would initiate a great urban dislocation and panic even if the cloud were diverted by the wind.

It is abundantly clear from our study that a major nuclear reactor accident has the potential to generate a catastrophe of very great proportions. The full scale and consequences of a catastrophe cannot fully be reckoned, yet it is against such an ill-understood but awesome event that the scale of, and confidence in, the reactor safeguards must be weighed.

We next turn to the question of how emergency core-cooling system inadequacies may lead to a major catastrophe in the event of a loss-of-coolant accident.

III. EMERGENCY CORE COOLING AND A LOSS-OF-COOLANT ACCIDENT

We have already pointed out that in the unlikely event that the primary coolant flow is interrupted, as through a break in one of the recirculating lines causing ejection of the primary coolant from the core, a simple shut down of the reactor (that is inserting the control rods and halting the chain reaction) may be insufficient to prevent a release of core radioactive materials into the environment. Even though fissioning ceases when the reactor 'scrams' or shuts down, the heat generated by the decay of fission products produced during normal operation is sufficient, in a large reactor, to cause meltdown of the core within a minute or so.

The function of the emergency core-cooling system is to resupply the core with coolant water in the event of the loss of primary coolant in a loss-of-coolant accident. If the emergency cooling system did not function at all, the core would melt and the molten mass of fuel cladding and uranium dioxide fuel, weighing a few hundred tons for a large reactor, would collapse to the bottom of the inner containment vessel and would be expected to melt through the vessel in 30 to 60 minutes. Other containment might still prevent loss of radioactive material (if none had not already escaped through the rupture) but, driven by fission product heating, the mass would continue to melt downward, through all man-made structures. The possibility of avoiding the release of radioactive materials once this happens appears negligible and the stage is then set for the kind of catastrophe discussed earlier.

In the course of reviewing this paper, Prof. James A. Fay, of M.I.T.'s Mechanical Engineering Department, has made some preliminary estimates of the rate of descent of the molten mass of fuel, fission products and supporting structure following core meltdown. From this we have made some crude estimates of the nature of last stages of a melt-down accident. Although melting of the fuel elements themselves requires very high temperatures (of order 5000° F), it would appear likely that the core and sup-

porting material after meltdown and after melt-through of the steel containment structures would be appreciably cooler. If the mass were at a temperature of 3000° F it would sink through rock at nearly 200 feet per day. As it continued to cool from melting and entrainment of rock, from loss of its heat source through radioactive decay and by loss to the environment, its rate of descent would slow. At 2100° F it would be melting downward at 50 feet per day and when at 1300° F descending no more than one foot per day. Radioactive decay alone diminishes the heat source by about ninety percent by the end of a week, compared to its strength at the time of meltdown, so the sinking would be nearly arrested after a few weeks or a month, with the hot mass expected to have descended no more than a fraction of a mile. Ejection of substantial amounts of radioactive materials would have ceased much before this time, unless the mass encountered ground water on its trip down. Chemical reactions of explosive violence could, in this instance, cause more hazardous material to be spewed forth. Ultimately the mass would cool off slowly, entombed well underground. Extensive deposition of fallout at and near the accident site and possible contamination of groundwater would be a reminder for many tens of years of the core meltdown accident.

It is clear why a reliable emergency core-cooling system is, therefore, such an important component of nuclear reactor safety equipment.

A series of tests of a simulated emergency core-cooling (ECC) system were conducted during the period of November 1970 through March 1971 at the National Reactor Testing Facility in Idaho. In these tests, the simulated emergency core-cooling system failed in a particularly disturbing manner and, accordingly, we have carried out a detailed examination of the test results and a systematic evaluation of the issues thus posed. We have examined the technical documents pertaining to the Idaho experiments, talked with some of the investigators who performed the tests and to other reactor experts, and examined data on reactor safety systems contained in internal AEC reviews of the issues, in an effort to form a sound judgment as to the Idaho tests' implications for the safety of nuclear reactors.

The tests of the ECC system, part of the Loss-of-Fluid Test (LOFT) program, were performed on a small semi-scale reactor mockup. The ECC system on the mockup was of the type common to pressurized-water reactors, i.e., it was designed to flood the core from the bottom.

The mockup consisted of a small, cylindrical core (about 9 inches high and 9 or 10 inches in diameter) with upper and lower plenum, inside a pressure vessel and a single coolant loop.¹ The core contained Zircaloy, or, in other tests, stainless-steel rods, which were electrically heated.

Operating power was about 1.1 Mw, yielding a typical commercial reactor power density. Core pressure and temperature were likewise typical of a large pressurized-water reactor, about 2180 psig and 575° F, respectively. All but the first two tests used orifices on the core inlets to simulate the pressure drop across a large core.

The tests were intended to study the effects of ECC after a rupture of the primary coolant loop piping. The system was generally made in the cold (inlet) leg at a point higher than the core top. The break area-to-system volume ratio was varied between 0.007 ft⁻¹ and 0.0007 ft⁻¹. In one test, a break was made in the hot (outlet) leg. The emergency coolant was introduced into the inlet plenum. Between 3 and 10 seconds (depending on break size) were required to depressurize the

¹Three coolant loops are generally employed in power reactors.

system to the 660 psig level required for ECC flow to commence.²

Only a negligible fraction of the emergency core-cooling water reached the core in any of these tests, even in those tests where a quick-closing valve on the ECC line, or other fast-acting bypass systems, was added. In fact, no appreciable difference in post-break core temperatures was observed when the tests were conducted without the emergency core cooling utilized.

The official reports of the Idaho Nuclear Corporation, which performed the experiments for the Atomic Energy Commission, express the test results: "The first semi-scale test involving emergency core cooling (EEC), test 845, was performed in which EEC was injected into the annulus between the flow skirt and vessel wall. Early analysis of test data indicates that essentially no emergency core coolant reached the core." Subsequent tests were performed with ECC fluid injected directly into the inlet plenum to reduce the "potential for entrainment of ECC coolant in the escaping primary fluid". Similar behavior of ECC fluid was observed in these subsequent tests: "... no significant amount of ECC fluid reached the core". A further test was conducted "... with a high-inlet break configuration with a nozzle in place of an orifice in the blowdown line. A quick-opening valve was installed in a bypass line around the system low point to determine whether pressure buildup due to a water seal was responsible in previous tests for emergency coolant expulsion through the break. ECC liquid was ejected from the system in test 849 as in previous tests and at no time did ECC liquid reach the core".

The ECC fluid was observed in the tests to escape through the same break in the primary coolant loop as the primary coolant. As noted in the official test reports, "On the basis of these data, the conclusion was reached that the ECC fluid entered the inlet annulus and was swept out of the vessel to the inlet nozzle and external downcomer, and out the break". Thus the ECC system would fall at the same time as the primary cooling system and would be, therefore, of no assistance in a loss-of-coolant accident.

The Idaho test results raise a major *prima facie* uncertainty about the reliability of the emergency core-cooling system. To develop a full interpretation of the experimental data, we have carefully considered numerous technical issues related to the use of the semi-scale test data in the analysis of the emergency core-cooling system of commercial-size power reactors. On the basis of our analysis we conclude that there are no convincing grounds upon which the *prima facie* problem with the ECC system indicated by the Idaho data can be dismissed. In our judgment the results of the Idaho tests clearly demonstrate the basic inability of current pressurized-water reactor emergency core-cooling systems to perform the functions for which they were designed.

The fact that the mockup used in the tests was very small detracts little from the apparent unreliability of the emergency core-cooling system for pressurized-water reactors. It is said that similar tests will be run with a larger core: the results will shed light on this question.

The situation for boiling-water reactors is somewhat different, inasmuch as the ECC system for these reactors consists of a spray arrangement located at the top of the core (sometimes in conjunction with a lower plenum flooding arrangement—which might now be considered useless), rather

than of the bottom-flooding system used in the semi-scale test system. The spray arrangement ought to provide at least some core cooling in the event of a break. It is not apparent, though, whether it could be expected to provide sufficient cooling in view of the facts:—

a) The Idaho tests, the only ECC tests under simulated accident conditions conducted to date, failed completely;

b) The Idaho tests demonstrated a severe lack of knowledge of the mechanics of emergency core cooling;

c) The Idaho reports (February 1971) include the statement that "... parameters used in the G.E. (General Electric) model for top spray cooling used for accident evaluation require modification".

We have concluded, from an extensive study of data available on various aspects of the problems of emergency core cooling, that several mechanisms exist in a loss-of-coolant accident situation that would very likely render the emergency core-cooling system ineffective. These mechanisms (discussed in detail below) tend to force emergency core coolant away from the core hot-spot (at the center) and propel coolant around, rather than through, the center of the core, to the cold leg break, so that there is a loss of emergency coolant through the same break as the primary coolant.

Any tendency for coolant to be forced away from the center of a reactor core would greatly diminish the efficiency of the emergency core coolant since it is the center of the core which is hottest and most requires emergency coolant in an accident situation.

The following mechanisms could produce this kind of effect:

a) Flow Blockage—with a loss of primary coolant as the result of a break, the temperature of the fuel rods will rise. For temperatures above about 1400° F. the fuel rods will swell and buckle, restricting or preventing normal flow. The greatest swelling and blockage would occur in the hottest part of the core, and would force diversion of ECC around the hot-spot through the cooler core region.

b) Steam Expansion—with loss of pressure as the result of a break, much of the primary coolant in the reactor will flash to steam. Expansion of the steam will tend to prevent emergency core coolant from entering the core. Also the steam expansion will be greatest in the hottest core region, again preventing the emergency core coolant from reaching the point where it is most needed.

c) Lidenfrost Migration—during emergency core coolant injection, steam-entrained water droplets, behaving like drops of water in a hot frying pan, can cool the fuel rods many feet above the water surface. These droplets are forcibly repelled from hot surfaces by a rapid buildup of steam between the droplet and the surface. Since the forces exerted on the droplets by cool surfaces are less than the forces exerted by hot surfaces, there is a tendency for the droplets to migrate from the hot central core regions to the cooler periphery (Lidenfrost migration). This produces hot-spot flow starvation.

The mechanisms described above may diminish drastically the amount of emergency coolant reaching the reactor core's center. Far more serious than this, however, is the possibility that only part or none of the emergency core coolant reaches any portion of the core. Accumulation of steam in the core or steam generators after a break may form a pressure head which the emergency core-coolant injectors cannot overcome (i.e. a steam 'bubble' which prevents the emergency core coolant from entering the core). In this event, part or perhaps all of the emergency core coolant will bypass the core and merely flow out the ruptured pipe.

A good experimental knowledge of both emergency core coolant flow starvation and bypass effects is required if the ability of

emergency core cooling to prevent core meltdown is to be relied upon. Our review of AEC and industry safety research, however, indicates that almost no attempt has been made, up until the last few months, to obtain this information, even though, of course, it relates in a vital way to the safety of currently operating and planned reactors.

This palpable lack of engineering knowledge obtained through experiments under realistic accident simulations was emphasized in the Oak Ridge National Laboratory report, *Emergency Core-Cooling Systems for Light-Water Cooled Power Reactors*, 1968, by C. G. Lawson. (ORNL-NSIC-24) The purpose of the report was "to identify inadequacies in assumptions, available data, or general basic knowledge" with regard to emergency core cooling so that "areas of meaningful research and development" can be determined.

The Lawson Report's major findings were:

"Tests of emergency cooling equipment have never been performed in the environmental conditions of the dynamic pressure, temperature, and humidity that might prevail in a loss-of-coolant accident." (p. 6)

Parameters used to calculate the design-basis criteria for ECCS safety margins were based on "insufficient data" and were to be judged "tentative and arbitrary" (pp. 7-8)

So little engineering information existed on the behavior of the Zircaloy-clad fuel rods during a loss-of-coolant accident "that a positive conclusion of the adequacy of these emergency systems would be speculative". (p. 9)

The swelling of Zircaloy cladding during blowdown was indicated by existing data, but "additional information is required to determine how much and whether cooling would be prevented." (p. 59)

Emergency power for the ECCS was found unreliable ("The emergency diesels failed to operate 1% of the time they were tested."), from which it is concluded, "The relatively poor showing of the emergency power supply makes the effectiveness of emergency cooling systems questionable." (p. 63)

"The emergency core-cooling systems of several boiling- and pressurized-water reactors, were reviewed, the design basis and backup data were examined, and the need for certain additional data was established. Generally, the design approach used by the manufacturers is conservative when evaluating the energy released or the cladding temperature. Occasionally there is an absence of experimental data that is inconsistent with the apparent sophistication of the calculational procedures." (p. 88)

The basic criticisms in Lawson's report are not out of date, as the remarks of George M. Kavanagh, AEC Assistant General Manager for Reactors on May 13, 1971 before the Joint Committee on Atomic Energy, demonstrate:

"Heavy reliance has been placed on engineering safety features such as the ECCS, which technology is complex... Some of the information needed to confirm convincingly the adequacy of such systems, which are intended to arrest the course of hypothetical large primary system failures, is not yet available." (quoted in *Science*, May 28, 1971, p. 191)

Further comment on the basic lack of engineering data pertaining to ECCS reliability was made in February 1970 in an important document by the AEC Division of Reactor Development and Technology:

"If the primary coolant system fails at elevated temperature and pressure, there will inevitably be a loss of some fraction of the primary coolant by the blowdown, or depressurized process. Forces resulting from the depressurization may cause mechanical core damage, and the loss of primary coolant may lead to a loss, or at least a significant lowering, of cooling capacity. The safety features interposed at this point include adequate design of the core structure to resist such

²This is probably fast enough, but the topic warrants further examination.

blowdown forces and the use of emergency core cooling systems such as sprays or core-flooding systems to ensure that the cooling capacity remains great enough that fuel cladding will remain intact. *Since little experience with such systems is available*, the principal problems are those related to the performance of emergency core cooling systems; i.e., whether they will operate as planned under the postulated accident situation, with respect to the time of initiation and the rate of flow." (p. I-10; emphasis added)

The Division of Reactor Development and Technology's comment was made as it presented its *Water-Reactor Safety Program Plan* February, 1970 (AEC Document WASH-1146) whose "general objective is to present a comprehensive plan for the timely and effective solution of water-reactor safety problems" (p. I-11). The report identified "major problem areas" in nuclear power reactor safety and emphasized that determination of "all the factors affecting the performance and reliability of ECCS" as "the most urgent problem area in the safety program today". The Safety Program Plan gave priority ratings to dozens of items on its safety research agenda. What was surprising was the length of the list of "very urgent, key problem areas, the solution of which would clearly have great impact, either directly or indirectly, on a major critical aspect of reactor safety."

These AEC documents and others we have examined, indicate the palpable lack of experimental proof of ECCS reliability. *The Safety Program Plan* indicates that basic safety research has yet to be completed and is, instead, scheduled over the next decade. These reports bring to light the AEC's manifest failure to adhere to the vital and important procedure of establishing the safety of nuclear power plants before initiating its full-scale program for nuclear power plant construction, a program which today has produced 21 operating plants and 53 under construction.

IV. CONCLUSIONS AND RECOMMENDATIONS

The grave weaknesses apparent in engineering knowledge of emergency core-cooling systems and the strong implications that these systems would fail to terminate safely a loss-of-coolant accident makes it clear that in the event of a major reactor accident, the United States might easily suffer a peacetime catastrophe whose scale as we have seen might well exceed anything the nation has ever known.

The gaps in basic knowledge concerning the effectiveness of the safety features of large power reactors, the surprising scarcity of adequate tests—amounting nearly to a total lack—has astonished our group, especially in view of the large number of reactors of apparently hazardous design that are already operating. Not until 14 years after the publication of WASH-740 do we see experimental tests of an emergency core-cooling system, tests carried out on nothing larger than a nine inch model, described by the AEC as not meant to simulate a reactor fully. It is now over eleven years since the first reactor for the commercial production of power was brought into operation.

The hazards inherent in the present situation have not gone entirely un-noticed by the AEC; the Commission was evidently disturbed by the Idaho test results and appointed a Task Force to assess them. The Task Force report has not yet been released but "interim" criteria for determining the adequacy of emergency core cooling systems were published in the *FEDERAL REGISTER*. In an unusual move the AEC waived the normal 60-day waiting period, noting, "In view of the public health and safety considerations . . . the Commission has found that the interim acceptance criteria contained

herein should be promulgated without delay, that notice of proposal issuance and public procedure thereon are impracticable, and that good cause exists for making the statement policy effective upon publication in the *FEDERAL REGISTER*."

In the delicately chosen words of AEC Chairman Glenn T. Seaborg, "The use of recently developed techniques for calculating fuel cladding temperatures following postulated loss-of-coolant accidents, and the results of recent preliminary safety research experiments, have indicated that the predicted margins of ECCS (Emergency Core-Cooling System) performance may not be as large as those predicted previously".

The Chairman has failed to indicate why obviously critical preliminary safety tests have not, until this year, been carried out in view of the potential hazards associated with the 21 power reactors authorized by the AEC and now operating.

We have concluded that there are major and critical gaps in present knowledge of safety systems designed to prevent or ameliorate major reactor accidents. We have further concluded that the scanty information available indicates that presently installed emergency core-cooling systems would very likely fail to prevent such a major accident. The scale of the consequent catastrophe which might occur is such that we cannot support the licensing and operation of any additional power reactors in the United States, irrespective of the benefits they provide to our power-shy nation.

We do not believe it is possible to assign a reliable numerical probability to the very small likelihood of a loss-of-coolant accident in a power reactor. There are too many sources of uncertainty whose importance cannot be adequately assessed. The acquisition of this information by trial and error, in the absence of safeguards that would mitigate or prevent core meltdown, could be extremely costly to the nation.

While it appears that the probabilities are not very large we do not believe that a major reactor accident can be totally or indefinitely avoided. The consequences of such an accident to public health are too grave to assume anything more than a very conservative position. Accordingly we have concluded that power reactors must have assured safeguards against a core meltdown following a serious reactor accident.

We have grave concern that reactors now operating may at present offer unacceptable risks and believe these risks must be promptly and thoroughly assessed.

Accordingly, we recommend:

1) A total halt to the issuance of operating licenses for nuclear power reactors presently under construction, until safeguards of assured performance can be provided.

2) A thorough technical and engineering review, by a qualified, independent group, of the expected performance of emergency core-cooling systems installed in operating power reactors to determine whether these reactors now constitute an unacceptable hazard to the population.

It is apparent that a major program will be required to develop, through both theoretical studies and experimental measurement, information adequate to design reactor safety features that will ensure protection against core-meltdown following a loss-of-coolant accident.

We believe that a complete and adequate understanding of loss-of-coolant accidents can be gained. Moreover, there appear to be no technical difficulties so acute that adequate protection from the consequences of a major accident cannot be assured. The United States will become increasingly dependent on nuclear power. Nuclear power can be both clean and safe but it will not be, in years to come, if the country is allowed to accumulate large numbers of aging reactors with flaws as

critical and important as those we now see. It is past time that these flaws be identified and corrected so the nation will not be exposed to hazards from the peaceful atom.

EXHIBIT 2

A-PLANT SAFEGUARDS HELD FAULTY BY COURT (By Bart Barnes)

In a decision that could force changes in plans for 55 nuclear power plants across the nation, the U.S. Court of Appeals here ruled yesterday that the Atomic Energy Commission has failed in its duty to implement environmental safeguards in projects it oversees.

The court directed the AEC to overhaul its procedures for insuring protection of the environment against potential damage from the operation of nuclear installations.

Specifically, the court ordered the commission to conduct a "full and fruitful" environmental review of the Baltimore Gas & Electric Company's nuclear power plant under construction at Calvert Cliffs, on the shore of the Chesapeake Bay in Calvert County.

And it suggested the Commission "should consider very seriously the requirement of a temporary halt in construction pending its review."

Deciding two cases that combined objections to the Calvert Cliffs project with a broad attack on AEC environmental protection procedures, the court said the Commission's "crabbed interpretation of the National Environmental Policy Act makes a mockery of the act."

It accused the AEC of "total abdication of responsibility" to act positively to protect the environment and it assailed the commission for allowing a "shocking" time lag between the effective date of the act and the date it instituted procedures to require compliance.

"The very purpose of the National Environmental Policy Act was to tell federal agencies that environmental protection is as much a part of their responsibility as is protection and promotion of the industries they regulate," the court held.

Yesterday's decision has broad implications not only for the Calvert Cliffs plant but also for the 55 other nuclear generating plants under construction around the nation.

They may have to be held to stricter measures for protection of their environments than are now contemplated before they can receive AEC authorization to install or operate nuclear reactors. The 22 nuclear power plants already in operation are presumably not affected.

Both Baltimore Gas & Electric and the AEC declined to comment on the court's ruling yesterday, saying they needed time to study it.

Suits challenging AEC environmental procedures were brought by the Calvert Cliffs Coordinating Committee—a collection of civic groups in Maryland—the Sierra Club and the National Wildlife Federation.

The decision is one of several on environmental issues by courts at the District and Appeals level here during the 18 months since the Environmental Policy Act went into effect. Other rulings have blocked a proposed oil pipeline in Alaska and a canal in Florida and paved the way for possible elimination of the pesticide DDT.

In the introduction to yesterday's ruling, Judge J. Skelly Wright said the cases are "only the beginning of what promises to become a flood of new litigation—litigation seeking judicial assistance in protecting our natural environment.

"Our duty, in short is to see that important legislative purposes heralded in the halls of Congress are not lost or misdirected in the vast hallways of the federal bureaucracy," he continued.

Wright was joined in the opinion by Judges

Edward A. Tamm and Spottswood W. Robinson III.

In the Calvert Cliffs generating plant and in other nuclear power plants under construction, the court said that once construction permits had been issued, the AEC refused to consider requiring changes in construction plans to account for environmental concerns.

Staff members produce, as a matter of course, reports on the environmental impact of projects under construction "but nothing will be done with them," the court said.

The commission does provide for an environmental review once construction is completed and an operating license is applied for but by the time any alterations to minimize the environmental impact may be prohibitively expensive, the court said.

"Either the licensee will have to undergo a major expense in making the alteration or the environmental harm will have to be tolerated. It is all too probable that the latter result would come to pass," the decision held.

In the Calvert Cliffs plant, construction of the \$300 million facility is about 45 percent complete and operations are set to begin in 1973.

Since its inception it has been under fire from environmental groups who fear not the possibility of a nuclear accident but a potential threat to the Chesapeake Bay.

The plant, about 45 miles southeast of Washington on the western shore of the bay, will use more than a billion gallons of bay water a day to cool its equipment.

The water will be returned to the bay as much as 10 degrees warmer than when it was taken out. Critics of the plant have argued that this heat will damage marine life.

Baltimore Gas & Electric officials have said the 1,600-megawatt facility is essential if they are to continue to provide uninterrupted service to their more than 700,000 customers in central Maryland.

In yesterday's ruling, the appellate court remarked that the AEC had not demonstrated "overenthusiasm" in drawing up its environmental policy rules.

It was especially critical of a rule prohibiting any consideration of environmental issues by AEC hearing boards if the notice for the hearing had appeared in the Federal Register before March 4, 1971.

This was more than 14 months after the Environmental Policy Act went into effect, the court noted.

The decision also criticized the AEC for accepting certifications of other federal and state agencies that certain environmental standards were being met, without making its own evaluations.

And it attacked the commission for failing to require that hearing boards consider environmental issues although staff members are required to consider such matters in making evaluations.

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 of the amendments and third reading of the bill.

The amendments were ordered to be engrossed and the bill to be read a third time.

The bill (H.R. 10090) was read the third time.

THE PRESIDING OFFICER. The bill having been read the third time, the question is, Shall it pass? On this question 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 an-

nounce that the Senator from Indiana (Mr. BAYH), the Senator from Texas (Mr. BENTSEN), the Senator from Michigan (Mr. HART), the Senator from Minnesota (Mr. HUMPHREY), the Senator from Washington (Mr. JACKSON), the Senator from Massachusetts (Mr. KENNEDY), the Senator from Louisiana (Mr. LONG), the Senator from South Dakota (Mr. MCGOVERN), the Senator from Minnesota (Mr. MONDALE), the Senator from Maine (Mr. MUSKIE), the Senator from Rhode Island (Mr. PELL), and the Senator from California (Mr. TUNNEY), are necessarily absent.

I further announce that, if present and voting, the Senator from Michigan (Mr. HART), the Senator from Minnesota (Mr. HUMPHREY), the Senator from South Dakota (Mr. MCGOVERN), the Senator from California (Mr. TUNNEY), the Senator from Washington (Mr. JACKSON), the Senator from Indiana (Mr. BAYH), and the Senator from Massachusetts (Mr. KENNEDY), would each vote "yea."

Mr. SCOTT. I announce that the Senators from Ohio (Mr. SAXBE and Mr. TAFT) and the Senator from Vermont (Mr. PROUTY) are absent on official business.

The Senator from Colorado (Mr. ALLOTT), the Senator from Tennessee (Mr. BAKER), the Senator from Massachusetts (Mr. BROOKE), the Senator from New Hampshire (Mr. COTTON), the Senator from Arizona (Mr. GOLDWATER), the Senator from Michigan (Mr. GRIFFIN), the Senator from Oregon (Mr. HATFIELD), the Senator from Nebraska (Mr. HRUSKA), the Senator from Iowa (Mr. MILLER), and the Senator from Illinois (Mr. PERCY) are necessarily absent.

The Senator from South Dakota (Mr. MUNDT) is absent because of illness.

If present and voting, the Senator from Colorado (Mr. ALLOTT), the Senator from Tennessee (Mr. BAKER), the Senator from Massachusetts (Mr. BROOKE), the Senator from Oregon (Mr. HATFIELD), the Senator from Iowa (Mr. MILLER), the Senator from Illinois (Mr. PERCY), and the Senator from Ohio (Mr. TAFT) would each vote "yea."

The result was announced—yeas 72, nays 2, as follows:

[No. 184 Leg.]

YEAS—72

Aiken	Eastland	Metcalf
Allen	Ellender	Montoya
Anderson	Ervin	Moss
Beall	Fannin	Packwood
Bellmon	Fong	Pastore
Bennett	Fulbright	Pearson
Bible	Gambrell	Randolph
Boggs	Gravel	Ribicoff
Brook	Gurney	Roth
Buckley	Hansen	Schweiker
Burdick	Harris	Scott
Byrd, Va.	Hartke	Smith
Byrd, W. Va.	Hollings	Sparkman
Cannon	Hughes	Spong
Case	Inouye	Stennis
Chiles	Javits	Stevens
Church	Jordan, N.C.	Stevenson
Cook	Jordan, Idaho	Symington
Cooper	Magnuson	Talmadge
Cranston	Mansfield	Thurmond
Curtis	Mathias	Tower
Dole	McClellan	Weicker
Dominick	McGee	Williams
Eagleton	McIntyre	Young

NAYS—2

Nelson Proxmire

NOT VOTING—26

Allott	Hatfield	Mundt
Baker	Hruska	Muskie
Bayh	Humphrey	Pell
Bentsen	Jackson	Percy
Brooke	Kennedy	Prouty
Cotton	Long	Saxbe
Goldwater	McGovern	Taft
Griffin	Miller	Tunney
Hart	Mondale	

So the bill (H.R. 10090) was passed.

Mr. STENNIS. Mr. President, I move to reconsider the vote whereby the bill was passed.

Mr. MANSFIELD. Mr. President, I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. STENNIS. Mr. President, I move that the Senate insist on its amendments and request a conference with the House of Representatives on the disagreeing votes of the two Houses thereon, and that the Chair be authorized to appoint conferees on the part of the Senate.

THE PRESIDING OFFICER (Mr. GRAVEL). The question is on agreeing to the motion of the Senator from Mississippi.

The motion was agreed to; and the Presiding Officer appointed Mr. STENNIS, Mr. ELLENDER, Mr. MCCLELLAN, Mr. MAGNUSON, Mr. BIBLE, Mr. PASTORE, Mr. RANDOLPH, Mr. YOUNG, Mr. HRUSKA, Mrs. SMITH, and Mr. ALLOTT conferees on the part of the Senate.

Mr. STENNIS. Mr. President, before I leave the Chamber, and on behalf of the Public Works Appropriations Subcommittee and every member thereof, I wish especially to thank our fine staff, which did so much in the preparation of this bill. The three members of the staff on appropriations for the bill were Mr. Kenneth Bousquet, Mr. Guy McConnell, and Mr. Edmund King.

Mr. President, an unusual amount of work goes into the preparation of the hearings, the holding of the hearings, the getting out of the printed record of the hearings and the report, and the bill itself, bringing it to the floor and following it on through to conference, and then back to the floor for final consideration. There are many involved matters here that require unusual amounts of professional knowledge, understanding, and skill, and firm and sound experience, in handling these many, many projects, involving not only flood control, navigation, and rivers and harbors, but also including all the funds for the Atomic Energy Commission, funds for the Tennessee Valley Authority, and also the Bureau of Reclamation funds, a great number of the power administration authorities, and a number of other important items.

Most of these are national programs. It is impossible to fully evaluate the worth of their services and their many long hours of work on weekends and evenings, many times far into the night. The schedules that they meet are remarkable.

The chief of the staff is Mr. Kenneth Bousquet, who has been with this subcommittee for many years, and I have found him one of the most capable men

I have ever known. He is one of many outstanding men here on Capitol Hill. The other two gentlemen are also outstanding, and I want to especially thank them.

Mr. MANSFIELD. Mr. President, the distinguished Senator from Mississippi (Mr. STENNIS) consistently applies his astute judgment on difficult legislation and today was certainly no exception. The mannerful way he guides his legislative proposals through the Senate is most conducive to making this body more effective in fulfilling its responsibilities.

The Senator from North Dakota (Mr. YOUNG) as ranking minority member helped the distinguished chairman with the heavy workload. The range and diversity of problems handled by this committee demands a quick and yet accurate judgment of needs faced by diverse parts of this great country. Senator YOUNG ably fulfills this demanding role.

Ably representing their constituencies the Senator from Utah (Mr. MOSS), the Senator from Kentucky (Mr. COOPER) and the two Senators from Missouri (Mr. SYMINGTON and Mr. EAGLETON) raised various questions about particular parts of this appropriations bill. Their comments on a wide range of subjects again reflect the tremendous differences in needs that exist in this country.

We thank these Senators for their thoughtful comments today.

The Senator from Hawaii (Mr. INOUE) and the distinguished Senator from Alaska (Mr. GRAVEL) brought before this body important questions of policy. Their intelligent and focusing comments are most appreciated by the Senate.

Senator PASTORE again showed his remarkable legislative talents by gaining agreement to a potentially divisive issue. His wise shepherding of legislative proposals leads consistently to improved legislation. His contributions are most appreciated.

The distinguished and able Senator from Wisconsin (Mr. NELSON) should be thanked for his contribution concerning various aspects of ecological balance. His amendment brought up many important questions which I am sure were most informative to the Senate as a whole. The junior Senator from Florida (Mr. CHILES) also through his contributions to the Senate today provided a base of information that made this Chamber's business more easily done. I thank both of these Senators for their interesting comments.

Again, Mr. President, the Senate as a whole owes the chairman and the ranking minority member of this Appropriations Subcommittee a sincere note of thanks. Also the tremendous contributions of the various Members of the Senate today are much appreciated.

EMERGENCY LOAN GUARANTEE ACT

Mr. BEALL. Mr. President, Senate bill 2308, a bill to authorize emergency loan guarantees to major business enterprises and more commonly known as the Lockheed bill will probably be coming to a vote next week.

Several attempts have been made, through cloture petitions, to bring the debate on this matter under some time limitations. In each instance I have voted for cloture because I believe, that in fairness to all sides, the question should be put to a vote and I believe all parties to the dispute have had adequate time to present their arguments.

I have listened and read the arguments on this case with a great deal of interest and reasonable presentations have been made on each side of the question.

The bill under consideration in the Senate would establish a precedent for aiding any major corporation which, for whatever reason has suffered economic misfortune on a scale which cannot be cured at the private marketplace. This legislation does not apply exclusively to one firm. Once this precedent is established, there will be the inevitable pressures to extend such assistance to other enterprises, large and small, whatever their impact might be on the national or local economy. There may be no surer road to governmental domination of major sectors of our economy than by permitting the Federal Government to come to the aid of business firms in distress regardless of reasons for the difficulties. One might logically be led to the conclusion that firms will not survive on the basis of efficiency or if the firm is producing a product in demand, but rather on the basis of influence with those empowered to make the loan guarantees. Additionally, the country will be put in an extremely bad position as a purchaser because the business will be able to say that we do not care how we bid because the Government will always be available to bail us out.

It seems to me, therefore, that on its merits this all encompassing legislation should not receive favorable consideration at this time.

Senate bill 2308, however, emerged in reality as a cover for the original loan guarantee bill submitted applying only to Lockheed. That bill would have guaranteed loans up to \$250 million exclusively for the Lockheed Corp. However, after some weeks of hearings, the bill was in serious trouble and Senate bill 2308 emerged providing for the total guarantee authority up to \$2 billion, which had the effect of giving a cloak of respectability to the Lockheed loan guarantee proposal because it now became potentially one of many.

But had the original legislation guaranteeing the loan to Lockheed only come from the committee, I would still be opposed to such a bill. My objections go to several areas of unease.

The first is that it is simply an improper role for the Government, I believe, to aid a specific industry to survive what has amounted to an unsuccessful commercial venture—something that was, basically, a private undertaking. Lockheed entered the civilian airplane market with eyes wide opened. The taking of commercial risks is basic to the survival of the free enterprise system. Lockheed took such a risk. I do not feel that the people, through their hard earned tax money, should be required to guarantee the success of such risks. The

eventual consequence of such governmental guarantees would be only to encourage mismanagement or poor management. Lockheed after full investigation of the consequences, I would hope, entered into agreement with the Rolls-Royce Co. for engines for their L-1011 airbus—a civilian airliner. This brings me to my second objection to the guarantee.

We are to an extent, I feel, reacting to British pressure owing to recent Rolls-Royce difficulties. The Lockheed/Rolls-Royce arrangement was just that: a Lockheed/Rolls-Royce arrangement. A matter of private business. To react to British pressure brought to bear on a wholly commercial undertaking is in my view altogether unwarranted and inappropriate. The fact that Rolls-Royce has failed presents a problem that must be dealt with exclusively by the British Government and should not require reassurances in the form of loan guarantees from the American public.

In the third place, there is the question of heavy Government interference in the competitive marketplace. McDonnell Douglas has developed and is producing an airbus in direct competition with the Lockheed 1011. The implications of Government intervention on the side of one manufacturer to the expense—and obvious detriment of another is awesome. I just do not think we can let it happen. McDonnell Douglas has produced its aircraft. It is already there. It has succeeded. Why should we subsidize the unsuccessful?

My fourth objection goes not so much to the issue of whether to guarantee or not, but rather, to one of the key arguments that is being continuously made in behalf of the legislation. That argument, is essentially that if Lockheed does not get the loan, and soon, it will go bankrupt, and if it goes bankrupt, thousands of people will be out of jobs. I think the debate has shown this is unlikely. Under the bankruptcy statutes as presently written, Lockheed would simply go into a receivership under new management charged with the very objective of saving the company and saving its jobs. It is no secret that the company has had problems. The objective for the trustees in bankruptcy will be to provide the leadership and make the decisions necessary in order to make the company a viable and healthy competitor in the marketplace, and as a result, save the jobs for the people now employed and protect the investments for the stockholders. The results, therefore, do not necessarily mean that the company will go out of business.

So Mr. President, I am opposed to the Lockheed loan on its merits. As an issue standing by itself, I am opposed.

But as I said at the outset, the scope of the legislation now before the Senate goes far beyond the Lockheed question and simply renders the particulars of the Lockheed case irrelevant to an extent. We are now being asked to approve a program which would have a lasting adverse impact on the basic concept of the proper relationship between Government and business. We are now presented with a bill of broad application which

would simply institutionalize the practice of governmental guarantees and I am opposed to that.

EMERGENCY LOAN GUARANTEE ACT — UNANIMOUS - CONSENT AGREEMENT

Mr. MANSFIELD. Mr. President, I am about to propound a unanimous-consent request which has been, to the best of my knowledge, cleared all around, and I ask that the clerk read it.

The PRESIDING OFFICER. The clerk will read it.

The legislative clerk read as follows:

Ordered, that effective on Monday, August 2, 1971, at 12:00 noon, the Senate proceed to the consideration of H.R. 8432, to authorize emergency loan guarantees to major business enterprises, with time for debate thereon to be limited to two hours, to be equally divided and controlled by the Majority and Minority Leaders or their designees and time on any amendments, motion or appeal (except a motion to table) to be limited to 20 minutes to be equally divided and controlled by the mover of the amendment and the manager of the bill and

Provided further, that the vote on final passage shall occur at 3:00 p.m. on August 2, 1971, or if an amendment is pending at 3:00 p.m., immediately after the disposition of the amendment pending at 3:00 p.m.

Mr. MANSFIELD. Mr. President, I ask unanimous consent to waive rule XII.

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

Is there objection to the unanimous-consent request?

There being no objection, the unanimous-consent request was agreed to.

Mr. MANSFIELD. Mr. President, is the House bill referred to in the unanimous-consent agreement on the calendar?

The PRESIDING OFFICER. It is on the calendar.

Mr. TOWER. Mr. President, will the Senator yield?

Mr. MANSFIELD. I yield.

Mr. TOWER. Mr. President, will the Senator include or propound a unanimous-consent request relating to order for the vote on the motion for cloture?

Mr. MANSFIELD. Yes. I understand it is not necessary, but this will nail it down.

Mr. President, I ask unanimous consent that the order for a vote on the motion for cloture on Monday next be vacated.

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

Mr. SCOTT. Mr. President, if the majority leader will yield, I indicate now that I will designate as in charge of the time on this side the distinguished senior Senator from Texas (Mr. TOWER).

Mr. MANSFIELD. Mr. President, I will designate the distinguished Senator from Wisconsin (Mr. PROXMIRE).

CONSTRUCTION AT MILITARY INSTALLATIONS—UNANIMOUS-CONSENT AGREEMENT

Mr. BYRD of West Virginia. Mr. President, I am authorized by the distinguished majority leader—after having con-

sulted with the distinguished senior Senator from Missouri and the leadership on the minority side of the aisle—to propound the following unanimous-consent request:

I ask unanimous consent that debate on H.R. 9844—an act to authorize certain construction at military installations, and for other purposes—be limited to 1 hour on the bill, to be equally divided and controlled by the Senator from Missouri (Mr. SYMINGTON) and the Senator from Texas (Mr. TOWER).

Ordered further, that time on any amendment thereto be limited to one-half hour, to be equally divided between the mover of such amendment and the manager of the bill (Mr. SYMINGTON); provided further, that no amendment not germane be in order.

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

The unanimous-consent agreement reads as follows:

UNANIMOUS-CONSENT AGREEMENT

Ordered, That, during the consideration of the bill (H.R. 9844) to authorize certain construction at military installations, and for other purposes, debate on any amendment, motion, or appeal, except a motion to lay on the table, shall be limited to 30 minutes, to be equally divided and controlled by the mover of any such amendment or motion and the manager of the bill (Mr. SYMINGTON): *Provided*, That in the event the manager of the bill is in favor of any such amendment or motion, the time in opposition thereto shall be controlled by the minority leader or some Senator designated by him: *Provided further*, That no amendment that is not germane to the provisions of the said bill shall be received.

Ordered further, That on the question of the final passage of the said bill debate shall be limited to 1 hour, to be equally divided and controlled, respectively, by the manager of the bill and the Senator from Texas (Mr. TOWER): *Provided*, That the time on the passage of the said bill, may be allotted to any Senator during the consideration of any amendment, motion, or appeal.

THE CONFERENCE REPORT ON H.R. 6531, THE DRAFT EXTENSION BILL

Mr. STENNIS. Mr. President, I want Members of the Senate to know that, after a long and frustrating delay, Senate-House conferees have reached agreement on the draft bill. We expect the House will send the conference report to us in due course. I hope we will receive it before the scheduled recess, but I cannot be sure of that.

I want to take a moment, Mr. President, to acquaint Senators with a sharply disputed portion of the conference report. That is the compromise version of the so-called Mansfield amendment, which deadlocked the conference committee for about a month.

Mr. President, I have been asked by other Senators and by the press, "what is left"—what remains—of the Mansfield amendment. That question arises because House conferees, in the month-long deliberation, simply would not entertain the specific 9-month withdrawal deadline proposed by the distinguished majority leader.

I think the answer to this question is

that a good deal remains of the Mansfield amendment, of its substance and of its philosophy.

In the first place, Mr. President, there is clear language with respect to withdrawal by a date certain in this selective service bill. The House did not want it. Powerful interests opposed it, but it is there.

If approved, it will stand as the first congressional mandate with respect to winding down the tragic war in Vietnam.

In the second place, the language ties a withdrawal of U.S. troops to the release of U.S. prisoners of war. That, of course, was a central feature of Senator MANSFIELD's proposal.—Third, Mr. President, the provision for troop withdrawal and POW release is quite separate from the additionally stated goal of a cease-fire in Indochina.

Finally, Mr. President, Congress says in the revised amendment, that it wants to end the U.S. involvement in this war at "the earliest practicable date." It urges the President to negotiate withdrawal and POW release "at a date certain." That surely reflects a desire for expeditious action.

Mr. President, I need not tell the Senate, again that the extension of the draft law is vital to national security. Final congressional action is overdue.

The deadlock, which has delayed this bill reflected a situation in which the Senate advocated a course of action which had been rejected by the House. Therefore, the conference was, as I have said, very difficult.

Therefore, Mr. President, I urge all Senators to study the conference agreement very carefully. I think close examination will show that the conference report goes a long way toward expressing the position of the Senate.

I fully appreciate the position and the problems of House conferees and their work in this conference. It was an unusual and, in many ways, an extraordinary situation.

On the subject of the war in Vietnam, there was only one amendment in the Senate bill, and the House did not have an amendment of any kind in its bill. The House conferees did not have a position to defend, except the negative position of the same question having been voted on adversely in the House of Representatives more than once.

So for that reason it was hard to get off an immovable position for either group. But I want to make it very certain that the RECORD shows I fully appreciate the very fair, sincere work on the part of the conferees from the House of Representatives, and I certainly am indebted to each Member of the Senate conferees for their own work on this matter in conference.

Also, Mr. President, the other items in the bill were fully and carefully considered by the conferees, and I feel that a sound and practical bill has been agreed to in conference. Early passage is needed, and I hope we can present the conference report to the Senate and get it agreed to before the August recess.

Of course, that is uncertain, due to the short time remaining; but I urge again,

with emphasis, that there is no substitute prepared for taking care of providing the manpower that is needed for our own national security, except through the Selective Service Act, and that will be true for the next 2 years at least. Regardless of what may be the chances of the so-called volunteer services, it will take time—at least 2 years—to build them up. Unless we can get this bill passed, we will face a dire and distressing emergency for the necessary manpower to protect our own security here at home, and I am not referring to the war in Vietnam or any prospect of things in Western Europe; I am talking about our own protection, of our 50 States and our own people.

Mr. President, I yield the floor.

PRESIDENT NIXON'S PROPOSED VISIT TO MAINLAND CHINA

Mr. BYRD of Virginia. Mr. President, one of the most thoughtful appraisals of President Nixon's decision to visit mainland China was the commentary today by Columnist William S. White published in the Washington Post and many other newspapers throughout the United States. Mr. White begins his column with this paragraph:

If two weeks of random chatting with a wide assortment of people in New England may be said to form any guide, this country is aware neither of the hope nor the danger lying in President Nixon's project to visit leaders of China.

Mr. President, I might say that the assertion I just quoted from Mr. White's column bears out the reaction I have received in Virginia in the 2-week period that has elapsed since the President made his nationwide television address.

During that 2-week period, I have received only four letters on this subject. I have been around the State somewhat, but not too much, during that 2-week period. A heavy workload has kept me in Washington. But wherever I have gone, I have found, just as Mr. White found in his visit to New England, that there is little discussion and apparently little real interest in this matter on the part of the individual citizen.

Mr. White's column suggests, and I think justifiably so, that while the Presidents' proposed trip has opportunities for good, it also holds immense dangers—both for our Nation and for Mr. Nixon politically.

I ask unanimous consent to have printed in the RECORD the article written by William S. White, published in the Washington Post of July 31, entitled: "Nixon's Trip: Huge Enigma." His column is well balanced and thought provoking.

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

NIXON'S TRIP: HUGE ENIGMA

(By William S. White)

If two weeks of random chatting with a wide assortment of people in New England may be said to form any guide, this country is aware neither of the hope nor the

danger lying in President Nixon's project to visit leaders of China.

In all that fortnight not one person voluntarily mentioned the subject, despite the vast amount of publicity about it, and when it was broached by this columnist the response was almost always either tepid or, quite simply, uninterested. Barber or banker (no butchers or bakers having been encountered) it was all the same: A yawn and a turn in the talk to other matters.

All this, parenthetically, seems to have confirmed the finding of a recent Gallup poll, from a survey made immediately upon the President's dramatic announcement of his intentions, that his popularity rating showed no significant change after the fact.

In any country in Europe, a step so vast and possibly so fateful would have been universally and correctly seen as a deliberate "opening to the left," or appeal to left-wing sentiment, by the leader involved. The speculation of many observers here that Mr. Nixon had some such motive, among others, would seem to be well off the mark.

This is said because Richard Nixon, agree or disagree with him and like him or not like him, has one striking tactile quality to a degree never exhibited by any other national politician known to me. This is a capacity to sense and almost to feel, in advance, the probable public reaction to any given issue.

The assumption therefore follows that he was not surprised by the nature of the Gallup conclusions and that in this matter he was acting not so much above as simply outside domestic politics. And if any domestic political consideration was indeed involved, it was surely not any idle presidential hope that warming up toward Red China would placate or convert Mr. Nixon's liberal, and especially his ultra-liberal, adversaries. Their current softening toward him will never last until election day.

In short, even if one cannot accept the view that this business was nonpolitical in the home sense, then the most that can be made of it is that the President did hope to strengthen himself among the political centrists of the country.

This he may have done. The ultra-liberals are, for the moment, saying and writing relatively kind things about him, all this being accompanied by a good deal of instant-expert journalistic analysis to the effect that the Red Chinese are pretty good fellows after all. At the same time, the attack opened upon the President from ultra-conservatives, mainly in the Conservative Party of New York State, is going nowhere.

So much, then, for the domestic side of this huge turn in American policy toward mainland China. What is really important, anyhow is the wisdom of Mr. Nixon's audacious and extremely risky moral concession to China, whose prison camp society is even more frightful than was Russia's under Josef Stalin.

Nothing so far has come to light to indicate that the President's gesture of open arms has assisted him in any material way—in honorably settling the Vietnam war, for example—though of course not more than half a dozen men in the United States know what may be going on in deepest privacy between Washington and Peking.

What is perfectly plain, however, is that the Asian allies of the United States along with Australia and New Zealand, have been deeply shaken; and that is all to the bad. But so has the Soviet Union on its side and that is all to the good. If the President actually goes through with his China visit (and it is after all possible that future events may change his mind) he must extract genuine and substantial Chinese concessions in return.

If he does, he will be a national hero; if

he does not, he will be in profound trouble, and so will this nation. This is the immense and broadening enigma of today.

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

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

TRANSACTION OF ROUTINE MORNING BUSINESS

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent that there now be a period for the transaction of routine morning business, with statements therein limited to 3 minutes.

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

COMMUNICATIONS FROM EXECUTIVE DEPARTMENTS, ETC.

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

PUBLICATION OF FEDERAL POWER COMMISSION

A letter from the Chairman, Federal Power Commission, transmitting, for the information of the Senate, a publication entitled "All Electric Homes in the United States, 1970" (with an accompanying document); to the Committee on Commerce.

NOTICE AND STANDARD TO BE PUBLISHED IN THE FEDERAL REGISTER

A letter from the Assistant Secretary of Commerce, transmitting, for the information of the Senate, a notice and standard to be published in the Federal Register, relating to a final promulgation of a flammability standard under the Flammable Fabrics Act (with accompanying papers); to the Committee on Commerce.

REPORT ON EFFECT OF THE RAILROAD STRIKE, MAY 1971

A letter from the Secretary of the Department of Labor and the Secretary of Transportation submitting, pursuant to law, a report entitled "Effect of the May 17-18, 1971, Signalmen's Strike Against the Nation's Railroads" (with accompanying report); to the Committee on Labor and Public Welfare.

REPORTS OF COMMITTEES

The following reports of committees were submitted:

By Mr. McCOLELLAN, from the Committee on Government Operations, without amendment:

H.R. 7586. An act to amend the act of December 30, 1969, establishing the Cabinet Committee on Opportunities for Spanish-Speaking People, to authorize appropriations for 2 additional years (together with individual views) (Rept. No. 92-335).

By Mr. ERVIN, from the Committee on the Judiciary, with an amendment:

S. 215. A bill to provide procedures for calling constitutional conventions for proposing amendments to the Constitution of the United States, on application of the legislatures of two-thirds of the States, pursuant to article V of the Constitution (together with separate views) (Rept. No. 92-336).

INTRODUCTION OF BILLS AND JOINT RESOLUTIONS

The following bills and joint resolutions were introduced, read the first time and, by unanimous consent, the second time, and referred as indicated:

By Mr. INOUE:

S. 2385. A bill for the relief of Domingo Q. Garcia, Romana Q. Garcia, Rita T. Garcia, Ruben B. Garcia, Irma B. Garcia, Merlinda B. Garcia. Referred to the Committee on the Judiciary.

By Mr. BELLMON:

S. 2386. A bill to amend the National Wild and Scenic Rivers Act of 1968 (Public Law 90-542) to include certain rivers with the State of Oklahoma as potential components of the national wild and scenic rivers system. Referred to the Committee on Interior and Insular Affairs.

ADDITIONAL COSPONSORS OF BILLS

S. 1734

At the request of Mr. METCALF, the Senator from Indiana (Mr. BAYH) was added as a cosponsor of S. 1734, to provide for comprehensive management of the Nation's forest lands through application of sound forest practices, and for other purposes.

S. 2348

At the request of Mr. INOUE, the Senator from Virginia (Mr. SPONG) was added as a cosponsor of S. 2348, a bill to increase the penalties with respect to the commission of a crime of violence in the District of Columbia while armed with a firearm.

FEDERAL ELECTION CAMPAIGN ACT OF 1971—AMENDMENTS

AMENDMENTS NOS. 353 THROUGH 355

(Ordered to be printed and to lie on the table.)

Mr. PACKWOOD submitted three amendments, intended to be proposed by him, to amendment No. 308 proposed by Mr. PASTORE (for himself and other Senators) to the bill (S. 382) to promote fair practices in the conduct of election campaigns for Federal political offices, and for other purposes.

AMENDMENT NO. 356

(Ordered to be printed and to lie on the table.)

Mr. STEVENSON (for himself and Mr. HARTKE) submitted an amendment intended to be proposed by them, jointly, to amendment No. 308, supra.

ADDITIONAL COSPONSOR OF AN AMENDMENT

AMENDMENT NO. 342

At the request of Mr. SCOTT, the Senator from Tennessee (Mr. BAKER) was added as a cosponsor of amendment 342, intended to be proposed to S. 382, the Federal Election Campaign Act of 1971.

NOTICE OF HEARINGS BY THE SUBCOMMITTEE ON ALCOHOLISM AND NARCOTICS

Mr. HUGHES, Mr. President, on Monday, Wednesday, and Thursday, August 2, 4, and 5, the Subcommittee on Alcoholism and Narcotics, which I chair, will

hold hearings on several pieces of legislation relating to drug abuse. We will be considering S. 2217, which I introduced on June 30 along with Senators JAVITS, MUSKIE, and WILLIAMS, Senator HUMPHREY's bills, S. 2146 and S. 2155, and we will take testimony on two bills which will shortly be referred to the Labor and Public Welfare Committee from the Government Operations Committee, S. 2097, the administration's drug-abuse proposal, and Senator MUSKIE's S. 1945. Although these last two measures have not yet been referred to us, they relate directly to S. 2217 and we will hear statements discussing the relative merits of these three differing proposals.

On Monday, we will hear testimony from the Department of Health, Education, and Welfare, the National Institute of Mental Health, Mayor Alioto, of San Francisco, and California State Senator Moscone. On Wednesday, the President's special consultant on drug abuse, Dr. Jaffee, will be our lead witness. Following him will be the Governor of my own State of Iowa, Governor Ray, Mr. Graham Finney, New York City's narcotics commissioner, and NARCO, a Detroit-based drug abuse treatment organization. On Thursday, we will have questions for the Office of Education, the Food and Drug Administration, and the distinguished junior Senator from Minnesota, Senator HUMPHREY.

The purpose of these hearings is to prepare for passage of legislation designed to give coordination, direction, and purpose to the Federal Government's efforts to deal with drug abuse. These are elements which have too long been missing from the Federal effort. I feel strongly that they are needed, if our efforts are to succeed.

ADDITIONAL STATEMENTS

RETIREMENT OF AMBASSADOR DAVID K. E. BRUCE

Mr. MANSFIELD. Mr. President, a government like ours, that is dependent on talented citizens making a commitment to governmental service, is fortunate in having people of the caliber of David K. E. Bruce serving it. Ambassador Bruce retires this week from his post in Paris, where he has been the chief U.S. negotiator at the Vietnam peace talks. I am sure that he, like so many Americans, is disappointed that his difficult task could not end on a more complete note. But his untiring dedication to the service of this country is an example every American should take to heart.

Mr. President, I ask unanimous consent that an article published in the Los Angeles Times and an editorial appearing in the Baltimore Sun of July 30, 1971, be printed in the RECORD.

The being no objection, the articles were ordered to be printed in the RECORD, as follows:

DAVID BRUCE: A TOP DIPLOMAT, GOURMET
(By Don Cook)

PARIS.—When David K. E. Bruce arrived in Paris on his first official mission for the United States in August, 1944, he had the unhappy duty of ordering the interment of the proprietor of a famous three-star Paris restaurant who had shown excessive zeal in serving the Germans in more ways than one during the Nazi occupation.

Bruce at that time was the head of the French section of the wartime Office of Strategic Services in Europe, the forerunner of today's Central Intelligence Agency. Operating first in London, he then moved to France and entered Paris in the wake of the liberating Allied armies.

For a man who has always managed to combine serving his country with a gourmet's appreciation of food and wine, it was painful to have to lock up one of France's leading restaurateurs.

FAITH RESTORED

But Bruce's faith in French cuisine as well as French resistance was more than restored by the fact that the proprietor of a superb two-star restaurant in the heart of Paris had sheltered an Allied radio operator and his radio in his wine-cellar throughout the occupation, while Nazi officers were eating upstairs.

Bruce has never been back to the three-star restaurant, but the two-star place remains one of his favorites and the vigorous owner an old friend.

Amassador Bruce is now leaving his fifth and last productive, official assignment in Paris for his country—chief U.S. negotiator at the Vietnam peace talks. After his wartime and postwar days as OSS chief in France, he came back to serve as Marshall plan administrator for France in 1948-49; ambassador to France with ambassadorial rank during the organization and launching of the European Coal and Steel Community in 1953 and 1954.

LONG PUBLIC SERVICE

Not only that, but in a remarkable diplomatic career under six presidents, Bruce is the only man in United States public service to have served as ambassador to Germany and Great Britain as well as France. Moreover, his eight-year tenure as ambassador in London from 1961 to 1969 was the longest in that post since the legendary Walter Hines Page during the first World War.

Although Bruce ostensibly leaves the Vietnam peace talks at the age of 73 for reasons of health, there is nothing that has yet impaired either his gourmet appetite and consumption of fine food and judiciously chosen wines, or his conversational wit and analytical powers. He has a circulatory problem which needs watching, but the Vietnam peace talks have scarcely risen much above the level of boredom.

Even the pleasures of life in Paris have been restricted for Bruce in the past year—for the simple reason that he has to be accompanied round-the-clock by French security officers who follow his official car wherever it goes, wait outside restaurants while he dines, walk with him across the street from the Crillon Hotel, where he has been living, to the American Embassy, and stay up all night outside his hotel suite while he sleeps.

Going for a walk in the Bois or driving out to the country or dropping into a theater or casual calls on friends have to be turned into security production jobs under such circumstances. The tedium of weekly meetings in the non-negotiation at the Hotel Majestic has not been much relieved by easy social life, and Bruce has frequently escaped to London for long weekends at the small suite which he has kept at the Albany on Piccadilly since he retired as ambassador in 1969.

Now a full and active official life is finally over for this courtly, soft-spoken, witty, gay, wise and prudent Maryland gentleman. He could write a wonderful book but he won't for the simple reason that he enjoys talking and conversation a great deal more than the discipline of writing.

INTERESTING WOMAN

But he can switch easily from recalling his days as a young Foreign Service officer in Rome in 1926 to the personality of Harold Wilson and why Mrs. Nguyen Thi Binh of

the Viet Cong delegation at the peace talks is an "interesting woman."

Bruce and his tall, striking, energetic wife, Evangeline, have three children in schools in the United States. They own a farm in Virginia which Bruce has not seen for two years, a home in Georgetown and the London apartment, with a more than adequate wine cellar at each.

He leaves Paris after a year at the Vietnam talks, first for a few weeks in London, then a stay in Italy and then along to the Virginia farm.

But he will be back in Paris again before the winter is out, and there are dozens of restaurateurs who will be flattered to welcome him—except, of course, that three-star place where tourists always go.

AMBASSADOR BRUCE

David K. E. Bruce is retiring from the United States diplomatic service, for the second time. He had thought he had ended his career in 1969, at the conclusion of eight years as ambassador to Great Britain, but President Nixon called him back last year to serve as the chief United States representative to the Paris talks on the war in Vietnam. The past year has been a fruitless one for Mr. Bruce, in that no peace negotiations ever were held and that the progress which was made toward ending the war was taking place at other points. He has carried out his assignment with patience and, so far as known, without complaint, but anyone who has followed the course of the weekly Paris meetings can understand why, at 73, he has had enough.

President Nixon, in a letter accepting Mr. Bruce's resignation, noted that his willingness to come out of retirement last year was but the latest demonstration of the dedication and unselfishness that marked his many years of public service. He told the ambassador that "you have shown once more your giant stature as a diplomat and as a man. You have my deep appreciation and admiration."

This newspaper wishes to join the President in expressing a deep appreciation and admiration of Mr. Bruce's service. In Rome, in Bonn, in London, in Washington, in Paris—he has worked with intelligence and professional skill. We count him as a Marylander of the first rank, and wish him well, once more, as he retires.

DO EXAGGERATED NUMBERS HELP?

Mr. SCOTT. Mr. President, we Americans have a tendency to accept at face value any number or statistic presented by a responsible organization or printed in a responsible newspaper. Once printed these statistics are given wide credence and through usage soon become part of our so-called conventional wisdom.

Seldom does anyone sit down with a piece of paper and a pencil and analyze such figures. Their accuracy is accepted and public bodies use them as the basis for planning and developing new programs.

Because these figures gain importance through usage and are used as the basis for planning, it hardly seems a service to anyone when the figures are outrageously wrong.

An example of this type of inflated figure is pointed up in the summer 1971 issue of the Public Interest. The magazine examines carefully a story published in the New York Times of April 27, 1971, reporting a study done on the cost of Harlem crime attributed to drug addiction. The report states that annual cost of crime to central Harlem is about \$2

billion a year, \$1.8 billion of it in the form of thefts to support the narcotic habit.

Even a cursory examination of this statistic indicates it is hugely overstated. Such an overstatement does little to serve the poor in Harlem; nor does it do much to help develop a wise drug or crime control program for the area.

Because of these factors, I think it is important for Senators to read this short but penetrating analysis. I ask unanimous consent that it be printed in the RECORD.

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

THE PUBLIC INTEREST: SUMMER 1971

Harlem, officially one of New York City's four "poverty areas," is unquestionably a neighborhood of the poor and the very poor. According to a study reported in the April 27, 1971 issue of *The New York Times*, however, it must be the richest area in the nation. How is this possible? Well, consider the evidence from the *Times*:

A sharp increase in crimes in central Harlem during 1970—attributed primarily to a rise in narcotics addiction—raised the cost of crime to more than \$2 billion for residents and property owners there, a study by the Small Business Chamber of Commerce disclosed yesterday. . . .

The \$2 billion figure includes the costs of crimes against persons and property, gambling, narcotics and loan-sharking. Thefts to support the narcotic habit were calculated at \$1.8 billion. Property loss, not linked to narcotics, was estimated at \$92 million. Crimes against persons—such as muggings and holdups—were estimated to have totaled \$12 million, including hospital costs, loss of income, etc. . . .

Conclusions were based on interviews with 100 businessmen representing a cross section, along with data from . . . national reports. . . . The [co-author] said that by updating the data and interpolating two variables—price index and population—and by using the comparative crime rates, the Chamber had been able to come up with "pretty accurate figures" on the cost of crime in central Harlem.

Now the population of central Harlem is well under 200,000, and the total number of business establishments less than 1,000. If losses due to crime are shared equally by individuals and businessmen, it follows that, if Harlem's total loss from crime is \$2 billion, then each resident of Harlem is losing at least \$5,000 per year, and each business establishment an average of \$1 million a year. Assuming a family of four members, it turns out that average family income in Harlem is at least \$20,000 a year—because that is the amount each family loses as a result of crime. And the wealth of all those businessmen who sustain yearly losses of \$1 million must be astronomical.

Only two conclusions seem possible. Either Harlem is the wealthiest community in America—or else the \$2 billion figure is among the more grandiose of the "mythical numbers" that infest public discussion these days.

RETIREMENT OF JEROME S. ADLERMAN, CHIEF COUNSEL, PERMANENT SUBCOMMITTEE ON INVESTIGATIONS

Mr. McCLELLAN. Mr. President, the Chief Counsel of the Permanent Subcommittee on Investigations, Jerome S. Adlerman, is retiring from his active duties. A reception was held in the Caucus Room of the Senate on July 27, 1971, to observe Mr. Adlerman's retirement.

Among the guests were the Secretary of State, Hon. William P. Rogers, and Senators CARL T. CURTIS, ABRAHAM RIBICOFF, JAMES ALLEN, SAM ERVIN JR., JACOB JAVITS, STUART SYMINGTON, and EDWARD GURNEY, and I was pleased to be in attendance myself. At the reception Mr. Adlerman was presented with a resolution signed by the present members of the Permanent Subcommittee on Investigations and former members including the President of the United States, Richard M. Nixon. The resolution and the signers follow:

RESOLUTION OF THE PERMANENT SUBCOMMITTEE OF INVESTIGATIONS OF THE UNITED STATES SENATE

Whereas Jerome S. Adlerman has retired from his duties as Chief Counsel of the Senate Permanent Subcommittee on Investigations and,

Whereas Mr. Adlerman directed the staff of the Subcommittee with distinction and perseverance in some of the most significant investigations in the history of the United States Congress, and

Whereas Mr. Adlerman, through his years of dedicated public service, has established a record which merits the highest praise from the Members of the United States Senate who have observed him in the performance of his duties and responsibilities, and

Whereas Mr. Adlerman, through his skill and through his application of that skill, has helped to bring about justice where justice would not have been accomplished otherwise: Now, therefore, be it

Resolved, That the present and former Members of the Senate Permanent Subcommittee on Investigations express their appreciation and admiration to Mr. Jerome S. Adlerman for his achievements and his effectiveness in advancing justice, fairness, and compassion for those who have been or will be affected by the outcome of his efforts.

John L. McClellan, Henry M. Jackson, Sam J. Ervin, Jr., Abe Ribicoff, James B. Allen, Karl E. Mundt, Charles Percy, Jacob Javits, Edward J. Gurney, George D. Aiken, Fred Harris, Carl T. Curtis, Barry Goldwater, Margaret Chase Smith, Frank Church, Tom McIntyre, Stuart Symington, Robert P. Griffin, Lee Metcalf, Richard Nixon.

Mr. President, to the self-evident sentiments expressed in this resolution, I should like to add excerpts from brief comments I made on the occasion of the reception for Jerry Adlerman's retirement. Among other things I said:

The committee has had some very difficult and unpopular investigations, we have had many unpleasant tasks to perform and there are two people who usually get the brunt of any complaints and criticisms. They are the Chairman of the Committee and the Chief Counsel. But Jerry has escaped with the very minimum of criticism as its Chief Counsel. He has been above reproach in masterful handling of the duties of his position.

As the result of his supervision and guidance, the staff which has worked under him, has definitely been devoted to him. They have been at all times most complimentary and I have felt that he had from them a loyalty comparable to that which he has given to me and the Committee through all these years.

Jerry, in his letter of resignation, said to me "no Committee can be better than its Chairman." That is hardly as accurate as what I am about to say now and that is "no investigating committee can be better than its staff." . . . Jerry, your ability and loyalty and the ability and loyalty of those on the staff who worked with you . . . by your fidelity to duty and fairness, you have enabled this Committee to avoid any scandal

or any criticism of any consequence which had any foundation whatsoever. I attribute that to your leadership on the staff and to the fine people you have had on the staff associated with you.***

I shall always have pleasant memories of our association together, memories that I shall always cherish as we continue the work of the Committee. It has been a great comfort and has added much to the richness of my experience here, to have one of your qualifications and dedication associated with me in the work of this investigation subcommittee.

Every one of us wish you and Mrs. Adlerman in your retirement many, many years of contented happiness and enjoyment. We wish for you every blessing that can be expected of life during your retirement years.

COMMITMENT OF U.S. TROOPS IN ASIA

Mr. MANSFIELD. Mr. President, the debate over the U.S. involvement in Southeast Asia will, I am sure, continue for many years to come.

In yesterday's New York Times there was a letter to the editor from a Prof. Herbert S. Parmet of the Queensboro Community College. Mr. President, I ask unanimous consent that this letter be printed in the RECORD following my comments.

The events referred to in that letter demonstrate the great shadow that falls between the perception of reality and the action that is undertaken by government. It demonstrates the momentum of policies of the past and the difficulties in changing their course. I think it is time that we begin to admit the mistakes of the past, correct our world image of what ought to be and get this country working together again. I think Professor Parmet's comments are well taken.

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

COMMITTING U.S. TROOPS IN ASIA

Theodore Sorensen's excuse that the Pentagon papers provide the modern citizen with hindsight that was unavailable to those responsible for the Vietnamese escalation [Op-Ed July 13] is another attempt to perpetuate a pernicious myth—that American leadership was unaware of the idiocy of such involvement. The advice against committing troops on the Asian mainland that was offered by such diverse generals as Eisenhower, MacArthur and Ridgway is well known; but perhaps forgotten by Mr. Sorensen was a perceptive speech on the Senate floor made on April 6, 1954, by Senator John K. Kennedy.

Far from lacking foresight, Mr. Sorensen's future ally declared that "to pour money, materiel and men into the jungles of Indochina, without at least a remote prospect of victory, would be dangerously futile and self-destructive . . . such assumptions are not unlike similar predictions of confidence which have lulled the American people for many years and which, if continued, would present an improper basis for determining the extent of American participation."

He then added, "I am frankly of the belief that no amount of American military assistance in Indochina can conquer an enemy which is everywhere and at the same time nowhere, an enemy of the people' which has the sympathy and covert support of the people." It was, Kennedy pointed out, an analysis shared "by most American observers" and then he detailed the perniciousness of a French colonialism that was winning strength for Ho Chi Minh.

Such realities, he said, fly "in the face of

repeated assurances to the American people by our own officials that complete independence has been or will be granted." One of those responsible for such misleading was, Senator Kennedy cited, an Assistant Secretary of State in 1951 named Dean Rusk.

"The hard truth of the matter," the Senator from Massachusetts went on to say, is that without a reliable and crusading native army with a dependable officer corps, a military victory, even with American support, in that area is difficult if not impossible of achievement. . . ." His words were heartily endorsed, that same day, by such colleagues as William Knowland, John Stennis and Mike Mansfield. And that was one year after Barry Goldwater had introduced an amendment making financial aid to France contingent upon her willingness to grant independence to Indochina.

To plead at this late date that the Pentagon papers had to be read to discover the truth is as misleading as the attempt to cover up the basic reason why Mr. Kennedy, once he became President, ignored his own insights: He, like the others, lacked the wisdom and courage to cleanse the American people of the mythology that others had induced and risk during his Administration the installation of governments that did not conform to a United States view of what the world should be like.

NEWS CENSORSHIP BY THE MEDIA

Mr. GURNEY. Mr. President, the past several weeks have been filled with public discussions, congressional hearings, and court decisions with regard to the public's right to know in terms of the New York Times Pentagon papers case and the CBS filming and showing of the program "The Selling of the Pentagon." Spokesmen for the media have taken the position that any publication, any statement, should be expressed freely and without any limitation. They have exerted massive efforts to prevent any revelations concerning their method of obtaining, selecting, and portraying events. They have contended that they and they alone should judge their own performance.

One of the most interesting and very disturbing aspects of this issue is highlighted by yesterday's cavalier treatment of one of America's most widely respected community leaders, Mr. George Jessel. During an interview on the "Today Show," George Jessel, was in fact kicked off the public airwaves after critical references to certain of the media. I am not so sure that the same thing would have happened had the guest been a revolutionary attacking the United States, an activity which, judging from the kind of exposure given by some of the media, is deemed to be the height of responsible commentary.

When NBC decided they did not agree with Mr. Jessel, they also decided the public had no right to listen to his case. This has often been the attitude of the media. In effect, it might be said, the people have the right to hear criticism of Government but the people do not have the right to hear criticism of the press. This is yet another example of the medias' two approaches to the guarantee of the first amendment.

I ask unanimous consent to have printed in the RECORD an article published in the Washington Post of July 31, 1971.

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

[From the Washington Post, July 3, 1971]
NEWSPAPERS ACCUSED
(By William Greider)

Jessel: "I've read a lot of things that look like the publishers don't like the United States."

Newman: "One does not accuse newspapers of being Communist, which you have just done."

George Jessel, the Hollywood comedian, made a little joke on television yesterday equating The Washington Post and The New York Times with the Soviet newspaper Pravda, only NBC interviewer Edwin Newman wasn't laughing.

Newman, hosting the Today show, abruptly ended the interview and dismissed Jessel from the program.

"I don't think we're obliged," the TV newsman said afterwards, "to invite anyone on to malign or slander anyone he pleases."

"I meant it as a gag," Jessel complained. "I was on a show a few weeks ago and a woman damned Christianity and all the religions of the world but they didn't throw her off. So why can't I rap newspapers? God doesn't publish the newspapers."

Jessel, wearing a USO military uniform decorated with a general's three stars, appeared on the show to discuss his recent tours of U.S. bases in Europe and his upcoming visit to Vietnam, his seventh during the war there. The 73-year-old entertainer complained about "wildly exaggerated" press reports about the Army's troubles and stumbled on "Pravda" before naming The Times and The Post, a rhetorical gimmick which the late Sen. Joseph McCarthy popularized in his anti-Communist speeches.

"I am happy to report and that's why I asked your permission to get on here," Jessel told Newman, "that the moral of our men in Europe is very high and we're strong on the borders of Czechoslovakia and strong on the borders of Eastern Germany. If they start on anything there, they'll get in a real you-know, regardless of McCloskey and Muskie and Mansfield. They'll fight and they'll lick these other guys. But, of course, when you pick up Pravda—The New York Times—you generally see, oh, they're all full of dope and killing children, drunk."

Newman and his fellow interviewer, Joe Garagiola, let that pass, but Jessel tried the gag again a moment later.

"We have a habit, some strange new thing, with the communique (sic) being anti-American with everybody negative," he complained. On a recent tour of America, he was impressed by the beautiful weather—"then you pick up a paper, you know, Pravda—The Washington Post—and you see, 'Hundreds Die Of Pollution.'"

Newman was not amused.

"You are a guest here," he told Jessel, "but I don't really think very much of this talk about Pravda—excuse me, The New York Times; Pravda—excuse me, The Washington Post. I think that's silly, I do."

"Edwin, you have your opinion and I have mine," Jessel replied. "But the point that I want to make—"

Newman: "No, no, hold on a second."

Jessel: "Surely."

Newman: "I think what you're saying, if you mean it, is extremely serious. It's not the kind of thing—"

Jessel: "Surely."

Newman: "It is not the kind of thing one tosses off. One does not accuse newspapers of being Communist, which you have just done."

Jessel: "Oh, I didn't mean it that way, Edwin."

Newman: "What did you mean?"

Jessel: "Oh, I just . . ."

Newman: "What did you mean when you said it?"

Jessel: "Oh, it's a newspaper. I didn't mean it quite that way."

Newman: "You didn't mean it quite that way?"

Jessel: "I won't say it again."

Newman: "I agree that you won't say it again. Thank you very much, Mr. Jessel."

Jessel: "I just want to say one thing before I leave."

Newman: "Please don't."

At that point, Newman interrupted for a commercial, three minutes before the interview was scheduled to end. When he returned to the screen, Jessel was gone. Newman told the audience:

"Well, I'm a little sorry about that incident. I hope I did the right thing and I guess the best thing to do at the moment is to forget about it."

Newman, who was filling in for Hugh Downs as host on the program, said afterwards that, besides the derogatory references to the press, he was upset because "the interview was barely coherent, rambling, meandering."

"Certainly, it's not my intention to say anything unkind about Mr. Jessel," Newman said. "I'd never even met him before this. But if you read the transcript, you'll see that interview made very, very little sense."

Television, he said, must enforce "certain standards of conduct" in its interviewing. "It didn't seem to me we have any obligation to allow people to come on to traduce the reputation of anyone they want, to abuse people they don't like," the broadcaster explained.

Jessel said afterwards he was treated poorly, but he forgives Newman.

"He should have been a little bit kinder to a man whose only vice is that he loves his country," Jessel said. "And I don't consider that a vice."

While the comedian said he did not intend to imply that *The Post* and *The Times* are Communist, he does feel strongly that the two newspapers dwell on the bad news about America in the same way that *Pravda* would.

"If you have a delinquent child, you don't go to the window and holler to the world, 'Hey, I've got a delinquent child, do you?' Jessel asked. "In these bad times, our virtues should be emphasized, not our vices."

Jessel said that during his recent tour of Europe, "people say to me, 'Oh, your soldiers shoot children and they're full of dope.' It isn't so . . . I think somebody should stick up for our soldiers instead of knocking them all the time."

As for *The Post* and *The Times*: "I've read a lot of things that look like the publishers don't like the United States."

That negative outlook, Jessel added drolly, is also reflected in the *Paris Herald-Tribune*, which is owned jointly by *The Post* and *The Times*.

"The baseball scores look like nobody ever wins," he cracked.

Jessel said that, if his comments offended Newman, the interviewer should have switched the conversation to another subject rather than kicking him off the air.

"But I forgive him," the comedian said. "Mr. Newman is a newspaperman and he defends newspapers. I'm in show business and sometimes I defend show business."

Newman's boss, NBC News President Reuben Frank praised the interviewer.

"He acted wisely and in the best possible taste to correct a live broadcast situation which seemed to be getting out of hand."

NBC reported a flurry of telephone calls from viewers—running 3-to-1 in support of Newman's action. It was Newman's last day on the show and he left on vacation.

The *New York Times* and *The Washington Post* declined to comment on the episode.

Pravda, however, was offended by the comparison. "I can testify," said Thomas Kolesnichenko, the newspaper's *New York* correspondent, "that there is a big difference be-

tween the way you publish the news and the way we do."

THE COMPLEXITIES OF WELFARE REFORM

Mr. RIBICOFF. Mr. President, for 2 years, Congress has been struggling to reach agreement on a reform on the Nation's welfare system. Some are concerned about the proper level of benefits, others about the necessary work incentives. But most of us agree that something must be done and done now.

With this agreement, why have we not moved faster? Alice Rivlin's article, published in this morning's *Washington Post*, sheds great light on the problem.

As she notes, it is relatively easy to argue the simple question of whether or not the Federal Government should be involved in issues such as welfare, education, and health. The difficulty comes once it is decided that action is necessary and we are then faced with developing an effective program. It is here that imaginative thought and leadership are vitality needed but are all too often missing.

The problem of welfare reform presents the Senate with a great challenge. It is a complex issue that takes time and thought and promises little in the way of political gain. The poor and downtrodden do not write their Senators, or even vote, very often. In my 2 years of work on this issue, I have received fewer than 10 letters from the poor about this matter. I am sure that that is the case for other Senators, as well. Nonetheless, the 25 million Americans living in poverty need and deserve our help.

I hope we are ready to move beyond the myths and stereotypes of welfare problems and jointly devote our best efforts to developing an improved and more effective system of welfare for this country. Alice Rivlin's article helps to place this issue in perspective. I ask unanimous consent it be printed in the RECORD.

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

CONFLICTING OBJECTIVES HOBBLE THE ATTACK ON POVERTY (By Alice M. Rivlin)

On the face of it, there is no good reason for poverty to persist in the United States. Why should there be destitution in a country in which not just the few but the many can afford the luxury of a second car, a color television or a pleasure boat?

The very poor are a small portion of the population. About 26 million people or 13 per cent of the population have incomes below the government's official definition of poverty (just under \$4,000 a year for a family of four). It would take about \$11 billion or approximately 1 per cent of the Gross National Product to make up the difference between the incomes of the very poor and the official poverty level. Of course, the government level is too low, but why can't we at least get everyone up to that level and work from there?

The easiest explanation of why we do not eliminate poverty is that the majority of the population does not want to—at least not badly enough to make the necessary sacrifices. Most people do not want to give up even a fraction of their material well-being to ease someone else's misery. Moreover, the comfortable part of the population has its own theory of why poverty persists: pov-

erty is the fault of the poor. If "they" would just work and save and not have so many children, they could make it like everyone else.

This view of the haves and have-nots as opposing political forces is certainly partly right. One reason we have not eliminated poverty is that the haves enjoy more power, as well as more money, and they use the power to make sure they hang on to the money.

But there is another explanation which may go further toward explaining our current inaction; namely, that we have not eliminated poverty because we have not figured out how to do it. The problem is hard, not so much because it involves conflicts between rich and poor, but because designing solutions reveals conflicts between objectives held by rich and poor alike.

The debate over welfare reform, which has tied up the Congress for two sessions without resolution, provides an example. A better welfare system is certainly not the complete answer to poverty, but it would help. The paralysis of our legislators may reflect the unwillingness of their constituents to give aid to the poor but it also reflects the sheer difficulty of constructing a workable welfare system that meets several objectives at once.

What are the objectives? First, there is pretty general agreement that we ought to have a welfare system that assures everyone at least a minimum adequate level of income. No one ought to be destitute, certainly not children. Second, there is general agreement that a welfare system ought to encourage people to work. Everyone ought to have an incentive to better himself and be allowed to keep at least a substantial part of his earnings. Third, a good welfare system should be "fair." Equally needy people should receive equal treatment, no matter where they live or who they are.

It is obvious that our present welfare system meets none of these objectives. It fails to ensure everyone an adequate income—millions are not covered at all. Those who are covered have little incentive to work, and unequal treatment abounds. Can't we do better?

In the last several years a consensus has emerged about the general characteristics of a better welfare system. To satisfy the fairness criterion it should be a general system, not restricted to certain categories of people, as the present welfare system is, and it should be national, not subject to the whims of state legislatures. To satisfy the adequacy criterion it should guarantee every family a minimum income based on family size. To satisfy the incentives objective, families which increase their earnings should have their payment reduced by less than the amount they earn (the fruits of their labor should not be subject to a 100 per cent tax).

The basic idea is appealing—indeed it has appealed to persons as different as George Wiley, Milton Friedman and Richard Nixon—but designing such a system is tricky and moving to it from our present welfare mess is even harder. To satisfy the adequacy criterion and get everyone out of poverty it would seem necessary to set the minimum guarantee at least at the official poverty level (\$4,000 for a family of four, rather than the \$2,400 or the administration's Family Assistance Plan), although many spokesmen for the poor regard this as inadequate. Even the \$4,000 level, however, may endanger incentives to work, especially in parts of the country where wages are low. A family of four would have a hard time living on \$4,000 in Washington or Detroit and it is not likely that many would quit jobs to live on the government minimum. In Mississippi, however, a large portion of the full-time labor force earns less than \$4,000 a year and one might expect substantial defections from the labor force if the guarantee were set that high. Maybe one should recognize this fact by setting a lower guarantee in Mississippi, but would this violate the fairness criterion

and how would one decide on the appropriate differential?

One would not have to worry about incentives so much if people were allowed to keep a large fraction of their earnings. Then they would still have plenty of reason to work. How about setting the guarantee at \$4,000 a year for a family of four and reducing the payment by only 20 cents for each dollar a family earned? Then a family could keep 80 cents out of each dollar—which is about what lower-bracket income-tax payers get to keep. This solution sounds reasonable—why should the poor be subject to a higher tax rate than moderate income people?—but it turns out to be prohibitively expensive. One cannot operate the system only for the benefit of poor persons who start working for the first time. Fairness dictates that people who are already working be treated in the same way. But if one sets up a general system with a \$4,000 guarantee and reduces the payment by 20 cents for each dollar earned, one has to make payments to everyone who earns less than \$20,000 a year, which is almost everybody in the whole country. A family earning \$15,000 a year, for example, would have \$3,000 (20 per cent) deducted from its \$4,000 guarantee and still receive a payment of \$1,000. Apart from the obvious impossibility of financing such a system, one would surely question the fairness of giving public aid to families earning \$15,000 while other families with no earnings were forced, perhaps through no fault of their own to live on \$4,000.

It is for this reason that even generous welfare reform plans reduce benefits fairly rapidly as earnings rise. Under the not-so-generous Nixon Family Assistance Plan, a family would have its benefits reduced by 2 dollars for each 3 dollars earned; they would be subject to a 66½ per cent tax rate. The effective tax rate would actually be higher—more like 80 per cent—because they have to pay Social Security tax and might lose medical and other benefits as their income rose. Getting to keep 20 cents out of each dollar earned is hardly much of an incentive to take an unpleasant low-paid job.

Why not compromise and move the guarantee to \$4,000 and the "tax" rate to 50 per cent? This may well be a good solution, but it would cost at least \$30 billion more than the present welfare system and would involve payments to people with incomes up to \$8,000 or well into the middle income bracket. This may be worth it, but it should be recognized as a much more complex and expensive undertaking than appeared when we first asked, "Why can't we cure poverty?"

Other options have been suggested to help resolve these dilemmas—perhaps the rate at which earnings are taxed should increase as earnings rise to the poverty level, or perhaps there should be different arrangements for families with no employable members, whatever that means. But the point is that the problem is complicated and finding a solution that satisfactorily resolves the conflicting objective is no easy task. If Congress has not managed to do so it may not be because of a standoff between the anti-poor and the pro-poor forces, but because the average congressman is just plain confused.

The welfare problem is just one example of conflicting objectives that make it difficult to solve a social problem. Another example is population growth. One objective that seems likely to gain more adherents in the future is that of reducing the rate of over-all population growth—perhaps to zero. If people turn out to want an average of two children per family, a zero rate of growth can be accomplished without any difficulty. But suppose they want more? One way to encourage people to want fewer children is to put more of the costs of child-rearing onto parents. Parents who had to bear the full cost of educating their children instead of relying on tax-supported schools, for example, might be more reluctant to have an

additional child. At the very least one could reduce the income tax exemption for third and subsequent children. But this whole set of anti-natalist policies runs counter to another widely and strongly held objective, that of ensuring the fullest development of all children once they are born. Indeed current policy—preschool programs, child health services, compensatory education—moves in the direction of increasing the ratio of public to parental resources.

Until quite recently historical accident saved national political figures from having to face up to the difficulties of reconciling conflicting objectives in designing social programs—the accident of the constitutional reservation of almost all social concerns to the states. Until the 1930s, education, welfare, health and social services were simply not national issues. Politicians built their campaigns around trust-busting, free silver and keeping out of war. Then the necessity of coping with the great depression forced the federal government into social programs and provided liberal politicians with a simple set of issues good for 30 years of almost uninterrupted political success. The big question at the national level became: should federal resources be devoted to particular social objectives? Should there be a social security program or a welfare program or an unemployment insurance program? Should there be Medicare? Should there be federal aid to education? Should there be a "war on poverty?" The liberals said "yes" and the conservatives said "no."

Once the federal programs were enacted the liberals were for spending more money on them. The problems were great; state and local resources were inadequate and unequally distributed; it seemed reasonable that spending federal money would help. It was not necessary to worry about exactly how the money would be spent.

Now we are running out of "yes" or "no" issues. National health insurance may be the last one available. Moreover, the liberals have lost their innocence. By the end of the 1960s it was evident that just spending more federal money was not necessarily going to produce results. Money for education would not automatically teach children to read. It would be necessary to find out what was preventing children from learning, perhaps to redesign the whole education system; to attract different sorts of people to teaching and to give them different incentives, not just more pay and better buildings. More money for health might just escalate the price of health care, or put more people in hospitals who need not be there. To improve health care it would be necessary to redesign the whole health system, to introduce new incentives and new ways of reimbursing doctors and hospitals. More money for welfare would just perpetuate a badly constructed system. It would be necessary to set up a new system which did a better job of reconciling the objectives as to adequacy, incentives and equal treatment.

All these design problems are hard to think about and even harder to explain to the public. They are unsuitable for campaign oratory which almost of necessity must deal with simple questions of "yes" and "no" and more or less. This is why being a liberal leader in the 1970s is so much harder a job than it used to be. It may be why we seem to have so few real leaders.

MISTREATMENT OF JEWS IN THE SOVIET UNION

Mr. PACKWOOD. Mr. President, earlier this summer an interfaith delegation led by Seymour Graubard and Ben Epstein presented United Nations Ambassador George Bush with a "Statement of Conscience" decrying the mistreatment of Jews in the Soviet Union. The statement was signed by over

8,000 Christian clergy and church officials from every State in the Union.

The "Statement of Conscience" calls on the Soviet Union to grant permission to those Soviet Jews who desire to do so to emigrate to Israel or to any other country and to insure the unhindered exercise of this right. I earnestly hope that the Soviet Union will implement this policy. Those who wish to leave the Soviet Union should be free to do so. This is a fundamental human right.

A number of Oregon's Christian clergymen joined in this statement. Mr. President, I ask unanimous consent that the text of the "Statement of Conscience," and a list of the Oregonians who signed it be printed in the RECORD.

There being no objection, the items were ordered to be printed in the RECORD, as follows:

STATEMENT OF CONSCIENCE

Profoundly disturbed by the discriminatory treatment of Jews in the Soviet Union and the suppression of their rights under the Soviet Constitution to practice their cultural and religious heritage, and in full affirmation of the universal principles of justice and brotherhood, I hereby join with other Christian spokesmen in an urgent call to the Soviet authorities:

1. To extend to Jews in the Soviet Union the full measure of equality to which they are entitled under the Soviet Constitution.

2. To permit Jews to live in accord with their cultural and religious heritage freely and openly.

3. To eradicate every vestige of anti-Semitism and to institute a vigorous campaign against all anti-Semitic manifestations.

4. To grant permission to those Jews who desire to do so to emigrate to Israel or to any other country and to insure the unhindered exercise of this right.

The dignity, freedom and equality of all men is a basic religious and moral principle. So long as his principle is violated I cannot in good conscience remain silent. I therefore solemnly subscribe to this urgent appeal.

OREGON—STATEMENT OF CONSCIENCE

Br. Bernard J. Kerula, Mt. Angel Abbey, St. Benedict.

Very Rev. Martin Pollard, O.S.B., Prior—VIP, Mt. Angel Abbey, St. Benedict.

Rev. Joseph Wood, O.S.B., Dean—VIP, Mt. Angel Seminary, St. Benedict.

Rev. Boniface Lantz, O.S.B., President—VIP, Mt. Angel Seminary, St. Benedict.

Rev. Donald E. Kay, Mt. Angel Seminary, St. Benedict.

Rev. Bradley Kehog, Mt. Angel Seminary, St. Benedict.

Rev. Father C. K. Trehwella, Dir. of Pastoral Services, Good Samaritan Hosp. & Medical Ctr., Portland.

Rev. Joseph E. Haley, C.S.C., Director of International Students—Campus Ministry, Portland.

Father Cosmas White, O.S.B., Tillamook.
Sr. Elizabeth Beuder, S.S.M.O., Tillamook.
Sr. Mary Peter, S.S.M.O., Tillamook.

P. J. McMermy—Teacher T.C.H.S., Tillamook.

Sr. M. Caroline Ann Gimpl—Professor, Maryhurst College, Maryhurst.

Sr. Barbara Gfeller, Assoc. Prof., Maryhurst Coll., Maryhurst.

Sr. M. Claudia Foltz—Asst. Prof., Maryhurst Coll., Maryhurst.

Sr. Joseph Mary Basick—Postmaster, Maryhurst Coll., Maryhurst.

Sr. Adele Maureen Bresnahan, Registrar, Maryhurst Coll., Maryhurst.

Sr. Maneta Joan Jones—Coordinator, Maryhurst Coll., Maryhurst.
 Dr. L. Edwards—Minister, Church of the Nazarene, Canby.
 Fr. Benedict Driesemer, Trappist Abbey, Lafayette.
 Br. Fabian Brodeur, Trappist Abbey, Lafayette.
 Br. Alan Phillip James McHale, Trappist Abbey, Lafayette.
 Br. Alberie Gerard, Trappist Abbey, Lafayette.
 Br. Bernard Hefner, Trappist Abbey, Lafayette.
 Br. Phillip Wertman, Trappist Abbey, Lafayette.
 Br. John Joseph Russill, Trappist Abbey, Lafayette.
 Fr. Jerome Ebacher, Trappist Abbey, Lafayette.
 Rev. R. Feemstra—Pastor Methodist Church, Falls City.
 Marie O. Allen—S.S. Supt., Falls City Methodist Church, Falls City.
 Mrs. Ed Hewitt—Lay leader, Dallas.
 Gordon G. Frazee—Chm. Dept. Rel. Studies, Linfield Coll., McMinnville.
 John A. Day—Professor, Linfield Coll., McMinnville.
 Robert E. Jones—Professor, Linfield Coll., McMinnville.
 Wesley Caspers—Professor, Linfield Coll., McMinnville.
 Joseph D. Ban—Assoc. Professor & Chaplain, Linfield Coll., McMinnville.
 Stephen D. Beckman—Professor, Linfield Coll., McMinnville.
 John E. Hanson—Dean of the Coll.—VIP, Linfield Coll., McMinnville.
 Paul E. Howard—Professor, Linfield Coll., McMinnville.
 William A. Mahler—Professor, Linfield Coll., McMinnville.
 James A. Duke—Professor, Linfield Coll., McMinnville.
 Vincil D. Jacobs—Professor, Linfield Coll., McMinnville.
 Levi J. Carlile—Assoc. Professor, Linfield Coll., McMinnville.
 Edmund P. Geysler—Asst. Professor, Linfield Coll., McMinnville.
 Dr. Gordon C. Bjork—President—VIP, Linfield Coll., McMinnville.
 Oscar W. Payne—retired Minister, United Presbyterian Church, Portland.
 Robert C. Patten—Pastor, United Presbyterian Church, Portland.
 Don L. Henry—Minister, Disciples of Christ, Salem.
 Norman Huffman—Professor, Willamette University, Salem.
 Ruth S. Haskins—Chairman, Mission Work Area, United Methodist Church, Salem.
 Jon S. Haskins—Minister, Presbyterian, Portland.
 G. Douglas Straton—Professor of Religion, University of Oregon, Eugene.
 Alan L. Stephenson—Professor of Religion, University of Oregon, Eugene.
 Stephen C. Reynolds—Professor of Religion, University of Oregon, Eugene.
 Jack T. Sanders—Associate Professor—Religious Studies, University of Oregon, Eugene.
 Richard L. Rohrbaugh—Pastor, St. Mark Presbyterian Church—USA, Portland.
 Norman P. Allen—I & S Consultant, UPC—USA, Portland.
 Burton Alvis—Clergyman, UPC—USA, Portland.
 The Rev. Charles C. Barnes, Presbyterian Pastor Emeritus—Willamette Presbytery, Salem.
 David Ward—Pastor, Westminster Presbyterian Church, Salem.
 C. Todd Martin—Pastor, Westminster Presbyterian Church, Salem.
 Rev. Vernon A. Grooves, United Methodist, Portland.
 Rev. Alan G. Deale, First Unitarian Church, Portland.
 Rev. Karl A. Bach, First Unitarian Church, Portland.

Mary C. Rowland—Local Director, Stella Maris House, Portland.

THE CONSTITUTION

Mr. ERVIN. Mr. President, Dr. James O. Baird, president of Oklahoma Christian College, and Dr. Robert H. Rowland, director of the American Citizenship Center of Oklahoma Christian College, recently established a project which contemplates that seminars upon the Constitution of the United States will be conducted by the American Citizenship Center of Oklahoma Christian College, at some appropriate place on an annual basis for the benefit of teachers.

The distinguished columnist James J. Kilpatrick and I had the honor of attending and participating in one of these seminars which was recently held by the Citizenship Center at Dallas, Tex.

Dr. Baird and Dr. Rowland deserve the thanks of the country for originating this project which can be of incalculable value to our country.

Mr. Kilpatrick made some comments upon this project in his column "A Conservative View," some days ago. His comments merit wide dissemination. I, therefore, ask unanimous consent that the article be printed in the RECORD.

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

THE CONSTITUTION

(By James J. Kilpatrick)

DALLAS.—Summer is the seminar season for teachers. A thousand classes in intellectual calisthenics must be in session this week, and doubtless most of them merit a word of praise. A recent gathering here in Dallas, at the law school of Southern Methodist University, calls for a special salute.

Nearly a hundred high school teachers of history and social studies got together last week for two days of hard listening and lively discussion. They met to consider, of all things, the Constitution of the United States, how to teach it today. Who ever heard of such a thing?

The seminar was organized by the American Citizenship Center of Oklahoma Christian College, up in Oklahoma City. A Texas donor put up the modest sum required to finance the affair, and teachers were invited from both large and small high schools in the two states. Senator Sam Ervin of North Carolina, one of the nation's foremost constitutionalists, served as principal speaker, but with deference to Senator Sam, the teachers themselves provided the real meat and potatoes. For persons who love the Constitution—simply love it, and love to talk about it—these were two happy days.

Dr. James O. Baird, president of Oklahoma Christian College, and Dr. Robert H. Rowland, director of the Citizenship Center, were the prime movers in bringing the teachers together. Their principal concern in recent years has been the failure, as they view it, of so many young people really to learn the fundamental principles and values of their country. In a small but effective way, working first with high school students and now with their teachers, they are trying to rekindle old fires of dedication and understanding.

It is a tremendously important task. As President Nixon remarked the other day, in a brooding moment out in California, the most casual study of the decline of Rome will turn up some striking analogies with conditions in the United States in recent years. Nixon did not want to be misunderstood: He was optimistic that our old Roman virtues would reassert themselves. He was

not about to acknowledge the onset of some new barbarianism, with new Dark Ages to follow.

Others may be less optimistic. Look around. At the public level, we surely are witnessing a decline in what Gibbon used to describe as the "martial spirit." The tendency in Congress, not only as to Vietnam but in every other respect, is not to strengthen our military forces but to make them weaker. Senator Barry Goldwater says the critical moment has passed without our knowing it. The U.S. is already a second-rate power. Our welfare rolls increase; our debt piles up; inflation undermines the value of our money.

In the private sector, one marks other declines—the decline in civility, the decline of manners, the slipping of moral restraints, the faltering discipline of church and family and school. The decline that most troubles such educators as Dr. Baird and Dr. Rowland is the decline in understanding of those great concepts the Constitution was meant to preserve such as limited government, responsible freedom, due processes of law.

How does one "teach the Constitution"? To listen to the teachers as they talk among themselves, students have little interest in textual analysis. James Madison does not exactly grab them. They do not groove upon the doctrine of enumerated powers. "My students," one instructor remarked, "think of the Constitution in terms of just one word: 'rights.' They say, 'I know my rights.' But they don't know their rights. And it's not easy to talk to them of 'ordered liberty' when most of our time in the classroom has to be spent in just keeping order."

One approach suggested in the Dallas seminar is to concentrate without ignoring historical background on what the constitution means today. A student who may yawn at 18th Century prohibitions upon an "establishment of religion" may be awakened by last month's Supreme Court decision on aid to parochial schools. Is the Fourteenth Amendment dull stuff? Then talk about the Constitution in terms of the compulsory busing of students to achieve racial balance. It's a hot topic in Texas today. The point is: The Constitution lives. Effective teaching, by knowledgeable teachers, will not let it die.

EXTRADITION AND THE GENOCIDE TREATY

Mr. PROXMIER. Mr. President, the Senate Committee on Foreign Relations has just acted on the U.N. Convention on Genocide. I believe the time has come for the Senate to do likewise, and I speak today to urge this body to act as soon as possible to approve this vital document.

Some opponents of the ratification of this treaty have recently suggested that there is some danger that after we do sign the treaty, other nations will be empowered to extradite American citizens on charges of genocide. This claim has been specifically related to American soldiers in Vietnam. I wish to speak to this point today, and to demonstrate beyond a doubt that the ratification of the genocide treaty will in no way subject Americans to extradition on trumped-up charges, nor will we be forced to provide foreign governments with such power.

The genocide treaty will not by itself expand the extradition powers of any nation. In order for American citizens to be extradited on charges of genocide, there must be an extradition treaty in force between the United States and the nation requesting extradition, and that treaty must designate specifically genocide as an extraditable crime. As Mr.

George Aldrich, deputy legal adviser to the Department of State, testified in hearings before the subcommittee of the Foreign Relations Committee:

There are at present no such treaties in existence with any country.

For any American to be extradicted for genocide, then, the Congress would have to, after lengthy deliberation, pass specific amendments to existing extradition treaties, providing for the crime of genocide.

Even should we pass such specific legislation, safeguards would still exist to protect the rights of all Americans under the law. For example, in an extradition proceeding, the courts of the country of which the accused is a citizen, plus the executive of that jurisdiction, must both agree, according to Mr. Aldrich—

That the person sought would be held for trial under U.S. law if the offense had been committed here.

In addition, the accused would be guaranteed all the rights under such extradition procedures as he would be accorded in any other type of trial in an American court.

Thus, the genocide treaty will not weaken any of our constitutional guarantees. We now have the opportunity to act on the genocide treaty. I hope we will not let this opportunity pass.

A DISTORTED BEDTIME STORY

Mr. CHURCH. Mr. President, until early this month, the Department of State explained to primary school children in this country our unfortunate military involvement in Indochina as a bedtime story. No explanation was given regarding the President's withdrawal policy, nothing was noted concerning the tragic impact our participation in the war has had on American society. As the title suggests and as the Pentagon papers confirm, no indication was given that this so-called bedtime story has turned out to be a national nightmare.

After a constituent from Idaho pointed this distortion out to me, I wrote the Secretary of State. In response, it was agreed that this propaganda for children was "over-simplified to the point of factual distortion," and the paper was withdrawn from circulation.

The Intermountain—Idaho—Observer reprinted the State Department's bedtime story, together with its own reply, which is well worth reading.

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

There being no objection, the items were ordered to be printed in the RECORD, as follows:

[From the Intermountain Observer, June 5, 1971]

VIETNAM: A BED-TIME STORY—THE STATE DEPARTMENT'S EXPLANATION FOR SCHOOL CHILDREN OF WHY WE ARE THERE

(EDITOR'S NOTE.—The following is entitled "An explanation of the war in Vietnam for primary school children." It was prepared by the U.S. State Department Bureau of Public Affairs a few months ago as a response to young school children who had written to the President and State Department about Vietnam. It is reprinted here with a supplement which we recommend for any child

who might receive the State Department letter.)

Vietnam is a very old country in Asia, about 8,000 miles away from the United States. About 17 years ago, part of the Vietnamese people called Viet Minh were fighting against France which had ruled Vietnam for many years. Many of the Viet Minh wanted Vietnam to be a communist dictatorship rather than a free country. The Vietnamese communists are especially dangerous because they believe in the use of armed force and terror.

The Viet Minh finally won a big victory over the French forces. The French and officials from some other countries who were interested in Vietnam sat down to talk with the Viet Minh in the city of Geneva in Switzerland. They agreed to make peace and to divide Vietnam into two parts. The northern part is held by the communists and is called North Vietnam. South Vietnam is held by those Vietnamese who do not want to live under communist rule. It is also called the Republic of Vietnam. Many people in the North went to live in the South to get away from the communists. Many more wanted to go too but the communists broke the rules of the agreement made at Geneva and would not let them go.

A few years went by. The North Vietnamese were planning to take over all of South Vietnam by elections because there were more Northerners to vote than Southerners and because the communists would make sure, by force if necessary, that more people would vote for the North than for the South. The leaders of South Vietnam refused to take part in elections that they knew would not be fair. This made the communist leaders of the North very angry, and they decided to take over South Vietnam by force.

When the country was divided into two parts, the communists had left some men in the South who pretended to be like the Southerners. These men received orders to dig up the guns which they had hidden and to kill people in the South so the men in the South would be afraid to fight against the communists. These communists in the South, called guerrillas, would often go into villages at night and kill important people such as the mayor and the school teacher. This would make the villagers afraid to tell the South Vietnamese soldiers where the guerrillas were hiding. The guerrillas did not wear uniforms and it was easy for them to hide in the jungle or to pretend they were villagers. During this time we were sending guns and supplies to the South Vietnamese so they could fight back. We also sent some soldiers to advise them how to fight.

As time went on, the North Vietnamese sent more and more men from the North into South Vietnam. They began to send soldiers who attacked the soldiers of the army of South Vietnam and soon there was a real war going on. The soldiers from the North and the guerrillas were well trained to fight. Things were going badly for the people of the South. They wanted to be able to decide how to run their country for themselves. So they asked us to help them fight the North Vietnamese. The South Vietnamese had showed that they were brave people and we know that if the North Vietnamese were not stopped from trying to take over another country by shooting and killing, the other countries in Asia would be in danger too from the communists. So we decided to help the South Vietnamese people, and some other countries also decided to help. That way we hoped to keep the war in Vietnam from becoming a big war that might put the whole world in danger.

America promised to help the South Vietnamese and we sent soldiers, ships and airplanes to Vietnam. Five other countries also sent soldiers. Over 30 countries gave food, medical supplies and many other things to help the South Vietnamese. We have been fighting very hard for six years to help the

South Vietnamese soldiers. Together we have done well and the soldiers from the North are not winning any more. They are still trying to take over the South but they know that the South with our help is stronger than they are. The South Vietnamese are becoming such good soldiers that we are bringing some of our men back to America. In May and June last year American and South Vietnamese soldiers destroyed the communist bases in the next-door country of Cambodia. We did this because the bases gave the communists a chance to attack our men in South Vietnam and then to run and hide in Cambodia. Our action in Cambodia made it safe to go on bringing our men home. This year some South Vietnamese forces, with the help of U.S. air power, have moved into the nearby country of Laos to cut the supply lines the communists need to carry on the war in South Vietnam.

We and South Vietnam do not want to take over the North and we do not want to make the war bigger. All we want to do is to stop the communists from taking South Vietnam. President Nixon has said that if the communists go back home to the North and leave the South alone, the war will end. We are having talks with leaders from the North in the city of Paris in France. At these talks, we are telling them that if they will take all of their soldiers out of South Vietnam, we will too. But if we take all of our soldiers out of South Vietnam before peace is made or before we are sure that the South Vietnamese can take care of themselves, we would be breaking our promise to them. Other countries which are our allies would then believe that our word was no good and they would not respect us. Also, President Nixon is very concerned about our men held prisoner by the enemy. He has said that as long as North Vietnam holds a single American prisoner, we will have forces in South Vietnam.

We are sorry the North Vietnamese are not ready to pull back their soldiers, but we think they will come to see that peace is better than to go on killing President Nixon and all of us believe that a good and just peace is possible. Until the North Vietnamese agree, we must have lots of patience and grit to go on with the talks in Paris and with the fighting in Vietnam.

SOME THINGS THAT WERE LEFT OUT

DEAR CHILDREN: The story you have just heard was made up by people in the American State Department. They are part of the government, and their job is to tell the government's side of the story. In Vietnam there is a war and our government is on one side of the war. A war is like a fight between two people, only much bigger. When someone who is in a fight tells you what the fight is all about, you must remember that you are getting only his side of the story. Here are some of the important things the State Department left out of the story it just told you:

The people of Vietnam, like the people of America, want to govern themselves. That is why they fought so hard for so many years against the French, who were from a far-off country. They have many differences among themselves, just as we do, but most of them were united in their opposition to the French, just as most of us were united in opposition to the British during our own Revolutionary War. When the French were finally defeated about 17 years ago, all of Vietnam would probably have been united under their leader, Ho Chi Minh, who has often been called the George Washington of Vietnam. But the man who was then the head of our State Department, with the help of the French, persuaded Ho Chi Minh to accept a temporary division of the country into north and south. Ho's enemies then fled to the south, took control there, and tore up the agreement to hold free elections.

Naturally, the people in the north were very angry about this. And so were many people in the south. They felt that the Ameri-

cans and the French and Ho's enemies had played a trick on them. Many people in the south complained about what had happened. Most of them were put in jail, and some of them were shot. Then the people in the south took up arms, and that is how the war began. The government of South Vietnam was not very popular with the people because its leaders were rich and corrupt and friendly with the foreigners who had once controlled the country. So the people who ran the South Vietnam government had to get more and more help from the Americans.

In the early days of the fighting, a few soldiers from the north came down to help the South Vietnamese people who were fighting for a better government. But they were outnumbered 5 to 1 by troops of the South Vietnam government. Nevertheless, the South Vietnam troops were on the verge of being beaten, so America sent many, many soldiers. Two years ago we had more than 500,000 soldiers there. Plus lots and lots of artillery, tanks, planes, bombs and napalm, which is a jellied gasoline that burns everything it touches. Despite all this help, the South Vietnam government still was not able to crush all the people who were fighting it.

A very important thing to remember is that Vietnam has been badly hurt by the war. More than one third of a million people have been killed. More than one million people have lost their homes. Most of the cities and villages have been destroyed. More than one-tenth of all the farmland has been ruined by chemical spray. Vietnam has suffered more loss of life and damage (for its size) than any other country since the history of the world began. Most of this damage was done by Americans.

Most Americans thought at the time that they were doing good. But most of them now believe it was a mistake and that we should leave and let the people of Vietnam—north and south—bind up their wounds and settle their own arguments. That is why President Nixon is bringing some of the troops home. But the President has taken a long time to do this. And he says it may be a very long time before America stops fighting and killing people in Vietnam. Every day that America keeps fighting, more boys and girls and their mothers and fathers in Vietnam will continue to die. There is a way that you can help if you really care. Sit down today and write a letter to President Nixon in Washington, D.C. Tell him you are against the war, tell him why, and ask him to please stop it now!

DEPARTMENT OF STATE,
Washington, D.C., July 9, 1971.

HON. FRANK CHURCH,
U.S. Senate,
Washington, D.C.

DEAR SENATOR CHURCH: Secretary Rogers has asked me to reply to your letter dated June 21 regarding one of the papers in our *Public Information Series*, "An Explanation of the War in Viet-Nam for Primary School Children."

This paper was developed to reply to mail from elementary school children when the number of such inquiries became substantial (about 6,000 in two years). In some cases children indicated that they were writing as classwork assigned by their teachers. This paper was sent to each young writer with a brief cover letter which also enclosed adult material and suggested that the child discuss the subject with his parents.

While this paper was necessarily, in view of its purpose, a highly simplified statement, we agree that it contains statements which are over-simplified to the point of factual distortion, and have therefore withdrawn it from any further use.

Please continue to call on me whenever you believe we may be of assistance to you. Sincerely yours,

DAVID M. ABSHIRE,
Assistant Secretary for Congressional
Relations.

HON. WILLIAM P. ROGERS,
Department of State,
Washington, D.C.

DEAR MR. SECRETARY: A constituent of mine recently sent me a copy of an explanation which the State Department sends to the children of this country regarding our involvement in Indochina. Considering the President's policy of withdrawal, revelation of the McNamara Papers in the New York Times, and other recent events in regard to the results of the war such as refugees and drugs, I look at this statement as highly distorted.

I hope that you and your staff can review its contents and present a more realistic appraisal to American primary school children of our involvement in Indochina.

With best wishes,
Sincerely,

FRANK CHURCH,
BOISE, IDAHO.

HON. FRANK CHURCH,
U.S. Senate,
Washington, D.C.

DEAR SENATOR CHURCH: I obtained the enclosed document through a simple request mailed to the State Department of what I had assumed was the United States of America. After reading the returned material I find myself wondering if perhaps I wrote to the wrong address.

Senator Church, primary school students are very impressionable children. At that young age they learn quickly to absorb what is presented to them. Rarely do they question. It should therefore behoove the government to proceed with extreme caution when presenting an official "explanation" of policy to this age group.

The enclosed document, however, written expressly for these children, falls into the shadowy realm that would be condemned as "propaganda" if published by our enemies. Were this document printed earlier in German, or today in Russian or Chinese, our judgment would be swift and complete as to its "merits." I would hope that no less scrutinizing standards would be applied to our own publications.

As a citizen of this nation, with a deep respect for what I believe this nation is, I object to this printed distortion presented as "explanation of policy." I hope that you will do all within your power as a United States Senator to rectify what I feel has been a very serious error on behalf of the State Department.

Sincerely yours,

DAVID MORRISSEY.

THE PSALM OF THE ADDICT

Mr. ERVIN, Mr. President, the *Morganton, N.C., News-Herald* of May 12, 1971, contained an editorial commenting upon an article, entitled "The Psalm of the Addict," clipped by a heroin addict. The editorial was found in an automobile of the addict who committed suicide by carbon monoxide poisoning. This "Psalm" portrays in a drastic manner the tragedy of addicts, and for this reason merits wide dissemination.

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

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

SHE LEFT HER OWN SERMON

Sometimes what appears to be one of the routine life-and-death stories to be seen in newspapers daily contains a message more eloquent than a minister's sermon from his pulpit or a medical professor's lecture to an arena full of young physicians.

The other day in Rockingham County the body of a young woman was found in an

automobile parked in a rural spot with its motor still running. A hookup with the exhaust sent carbon monoxide fumes into the closed vehicle in what was ruled to have been suicide, with death due to carbon monoxide poisoning.

An investigation, the report said, revealed that the 23-year old woman had been put on probation in Greensboro last October on charge of possessing heroin.

This didn't tell the entire story, but it apparently pointed in the direction of the cause of her will to die.

Here, quoted intact, is part of a Reidsville newspaper's story of the investigation:

With her when she was found were six handwritten legal pages, one newspaper article concerning her arrest on heroin possession and one other short newspaper article called "The Psalm of the Addict." The psalm reads as follows:

"King Heroin is my shepherd, I shall always want. He maketh me to lie down in the gutters. He leadeth me beside the troubled waters. He destroyeth my soul. He leadeth me in the paths of wickedness for the effort's sake. Yea, I shall walk through the valley of poverty and will fear all evil for thou, Heroin, art with me. Thy Needle, and capsule try to comfort me. Thou strippest the table of groceries in the presence of my family. Thou robbest my head of reason. My cup of sorrow runneth over. Surely heroin addiction shall stalk me all the days of my life and I will dwell in the House of the Damned forever."

Included in the article were several lines which were underlined in pencil: "Jail didn't cure me. Nor did hospitalization help me for long. The doctor told my family it would have been better, and indeed kinder, if the person who first got me hooked on dope had taken a gun and blown my brains out. And I wish to God she had. My God how I do wish it."

Who can add anything to describe the pitiable plight of a wretched girl who could see no solution to life but death?

Who, indeed, could issue a stronger warning to young people who are inclined to think they can experiment from various drugs with impunity, confident that they can take it or leave after they have sampled whatever so-called thrills they offer?

It is a more effective message than any which could be delivered by a fuddy-duddy oldtimer.

TRIBUTE TO HILL CUMORAH PAGEANT AND MORMON PIONEERS

Mr. MOSS, Mr. President, this week more than 100,000 people are witnessing the 34th presentation of the Hill Cumorah Pageant, near Palmyra, in the beautiful Finger Lakes region of New York State.

I have had occasion to thrill to this spectacular presentation described by the New York Times as "the most elaborate religious pageant in the world."

For six evenings, with Hill Cumorah shrouded in darkness, 500 young Mormons dressed in costumes of Greek, Roman, Hebraic, Mayan, and Aztec design take their places on 25 stages on the wide western slope to present an epic drama of the rise and fall of an ancient American civilization.

The pageant tells three basic stories—the story of a band of Israelites who sailed to the New World to escape the destruction of Jerusalem 600 years before Christ; incidents in the life of Christ in America as recorded by the Book of Mormon; and the description of the founding of the Mormon Church.

This religious spectacle is based upon the Book of Mormon which Mormons

believe is a history of ancient inhabitants of the American continents. They regard the Book of Mormon as complementary to the Holy Bible. In 1823, Joseph Smith said he was led to the Hill Cumorah by a heavenly messenger named Moroni and shown the place where a history of the inhabitants of ancient America had been buried for safekeeping. Later he was allowed to take the records, in the form of thin metal pages, from their depository in the hill. Young Joseph Smith translated the engraved religious and secular writings. The resulting book is named after one of the ancient prophets who centuries ago deposited the records in the hill.

More than 20,000 spectators come each evening from all parts of the country to relive with the 500 performers the moving scenes of the pageant. The pageant is preceded by a recorded concert by the famed Mormon Tabernacle Choir. Music for the pageant is composed by Dr. Crawford Gates, and the pageant director since its inception is Dr. Harold I. Hansen of Brigham Young University. All members of the cast and technical crew pay their own expenses to participate.

On the basis of the Book of Mormon record dramatized by the Hill Cumorah Pageant and other revelations, Joseph Smith organized the Church of Jesus Christ of Latter-day Saints in 1830 in New York. The church then moved to Ohio, then to Missouri, and then to Illinois where the city of Nauvoo was founded. Persecution of the Mormons culminated in the assassination of Joseph and his brother, Hyrum Smith. Thereafter, Brigham Young became president of the church and led his followers on their historic covered wagon trek across the plains to the desert land of the Great Salt Lake Valley.

This week, 124 years ago, the Mormon pioneers entered the valley, I find Brigham Young's simple journal account of the entry of my pioneer ancestors and their industry very moving:

July 24th: I started early this morning and after crossing Emigration Canon Creek eighteen times, emerged from the canon. Encamped with the main body at 2 p.m. About noon, the five-acre potato patch was plowed, when the brethren commenced planting their seed potatoes. At five, a light shower was accompanied by thunder and stiff breeze.

Then 21 years later with the memories of the first migration still fresh, Brigham Young declared in the Salt Lake Tabernacle:

We made and broke the road from Nauvoo to this place. Some of the time we followed Indian trails; some of the time we ran by the compass; when we left the Missouri River we followed the Platte. And, we killed rattlesnakes by the cord in some places.

We made roads and built bridges till our backs ached. Where we could not build bridges across rivers we ferried our people across, until we arrived here where we found a few Indians, a few wolves and rabbits, and any amount of crickets; but as for a green tree or a fruit tree, or any green fields, we found nothing of the kind, with the exception of a few cottonwoods and willows on the edge of City Creek.

Mr. President, the creators of the inspired Hill Cumorah pageant are to be commended. And the sacrifice and per-

severance of the Mormon pioneers deserve our tribute.

ORDER FOR PERIOD FOR THE TRANSACTION OF ROUTINE MORNING BUSINESS ON MONDAY NEXT

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent that on Monday next, immediately following the recognition of the two leaders under the standing order, there be a period for the transaction of routine morning business, with statements therein limited to 3 minutes, the period not to extend beyond 12 o'clock noon.

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

QUORUM CALL

Mr. BYRD of West Virginia. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The second assistant legislative clerk proceeded to call the roll.

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

ORDER OF BUSINESS

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent that the distinguished Senator from Wisconsin (Mr. PROXMIRE) may be recognized for not to exceed 20 minutes after which the period for the transaction of routine morning business with a 3-minute limitation therein, will be resumed.

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

EMERGENCY LOAN GUARANTEE ACT

The Senate continued with the consideration of the bill (S. 2308) to authorize emergency loan guarantees to major business enterprises.

Mr. PROXMIRE. Mr. President, the Senate, on Monday next at 3 p.m. will have the opportunity, at long last, to vote on the real Lockheed issue.

We have had a provision in the bill which has cloaked the issue. It has been a bill not only for Lockheed but also for other corporations. It was a bill which, as we know, contained some \$2 billion. That bill, fortunately, has been laid aside and we now have before us the question of whether we should provide a loan guarantee to the Lockheed Corp.

GUARANTEE WILL NOT SAVE JOBS

The principal argument made in favor of this, certainly the most persuasive argument to those Senators to whom I have talked who intend to or may vote for it, is that it will save jobs.

I think we can argue convincingly that the pending bill on which we will vote next Monday at 3 p.m., if it is voted on favorably, will not save jobs.

In fact, I think we can make a strong case that it would cost jobs.

In the first place, there is a very strong case that can be made that, in the event the Lockheed Corp. does not get this

guarantee, the banks may very well provide the \$250 million it needs without Lockheed's having to go through bankruptcy.

I think there is an overwhelming argument for the banks to do this on the basis of the way the banks have testified.

Given their testimony, if I were a stockholder in any of these banks, I would be very unhappy if the bank did not provide this loan without the guarantee, and I will tell you why, Mr. President.

The banks have now invested \$400 million in Lockheed. The record is clear that if Lockheed goes into bankruptcy, it will only be able to collect, on the basis of its collateral, about \$100 million.

The top counsel in the Treasury Department who has studied this very carefully says that, in his view, that is all they would be able to get. They may be able to get the other \$300 million eventually, but they would be in a contest with other creditors and that could go on for some years. So that the banks would be in a position to lose \$300 million if they did not provide this additional \$250 million loan.

The banks have testified to the committee that once the \$250 million is made available, Lockheed will in all likelihood be over the hump, out of the woods, and in a position to proceed to make money and pay its debts.

If the bankers' testimony and the Lockheed testimony can be accepted, there is every reason to feel that the banks will go ahead and provide the funds.

In the second place, there is the possibility that London banks may provide the \$250 million, in the event the loan guarantee is not provided. I have seen this proposed, and I have talked with people in England about this by telephone within the past few days, and there is serious consideration being given on the part of the London banks. Of course, they have a stake in the Rolls-Royce Co. which would build the engines for Lockheed, and they have reason, therefore, to provide funds in the amount of \$250 million because they would lose a great deal if Lockheed went into bankruptcy.

But, Mr. President, even under bankruptcy, even if Lockheed does have to go through chapter X bankruptcy, No. 1, it should be made clear that all of Lockheed's defense operations would continue. They would lose no defense jobs. If I have said that once, I have said it a number of times on the floor. It has never been challenged—not challenged on the floor or in committee.

It was so testified by Under Secretary of Defense Packard and by the Secretary of the Treasury, the principal administration proponent of the bill, that there would be no loss of defense jobs. Defense jobs constitute 85 percent of their jobs. The only part of their operation that would be in jeopardy would be the L-1011 program.

But even the L-1011 program would survive bankruptcy, if the trustee who took over the firm should find the L-1011 is viable, if in his judgment it would bring in more money than it would cost, then he could continue the L-1011 program—and there is no reason in the world why he should not.

As a matter of fact, he would be required to, under any kind of interpretation of the responsibilities of a trustee. So, even those jobs might continue.

TRANSPORTATION DEPARTMENT STUDY NIXES
L-1011

If the plane is unviable, that is, if the plane is not going to be a success—and we have argued that it may not be and other competent people have argued that it would not be—the Department of Transportation has a study indicating that the wide-bodied jet field can support only one producer. Anyone who picks up the paper these days, or rides in an airplane, knows the trouble the airlines are in as well as the aircraft manufacturers. We know how difficult it must be, these days, to sell new airplanes. There have been cancellations of the DC-10. There has been an announcement by TWA that they intend to mothball their 747's. The demand may well not be there for the L-1011. In that event, the guarantee will do the workers very little good. As a matter of fact, what would happen is that more workers may be recalled temporarily. But soon the L-1011 would fold, so that if the L-1011 fails because of a dried up market, more people would be laid off.

LOCKHEED MISJUDGMENTS

Lockheed has a long record of making bad judgments on break-even points. We know this from the C-5A, the Cheyenne helicopter, the SRAM missile and the shipbuilding programs. On the L-1011 they have estimated that they could break even if they sold 250 airplanes, but they have orders for only 103 so that there is a real possibility some of those may be canceled. They have options for another 75. There is every reason to expect that some of them may be canceled. So they are very short of their own break-even points.

The Department of Defense a year ago estimated that in order for Lockheed to break even, they would have to sell not 103, for which they have orders now, not the 250 that Lockheed claims necessary to break even, but 390. That study was made more than a year ago. If brought up to date the break-even point would likely be 450 or more.

I think that the best break-even study we can get is the one made by McDonnell Douglas for their own plane, the DC-10. They found, for their own plane, and we all know that is an efficient operation, on an almost exactly similar plane, that their break-even point is 438 planes. A realistic break-even for Lockheed on this plane we are underwriting would probably be around 430 to 450. To expect that Lockheed would sell this number of planes is to expect the impossible. They cannot do it.

Mr. President, if they cannot do this, if they cannot break even, obviously they will have to drop out of this field.

Then far more workers will be in trouble. They will have to discharge people. There will be more unemployment under those circumstances than there would be if we did not go ahead with this.

FEWER JOBS WITH LOCKHEED THAN DOUGLAS

Furthermore, Mr. President, if we go ahead with this particular guarantee, what we do is simply provide that instead of producing and selling as many

DC-10's—a plane that is now in the field and a plane that is now being produced, the first two planes having been delivered this week—airlines might buy some L-1011 and fewer DC-10's.

Now, one might say so what? Would there then be any difference in the number of jobs? Yes, there would be. We have American workers employed on the DC-10 as we do on the L-1011. Moreover, Mr. President, it does make a difference. The difference is that the foreign labor content in the L-1011 is a whopping 40 percent if we include the foreign labor content on the engines and the spares for the engines. The reason is that the engines are built in Britain. Those would have to come from Britain. There is not any doubt that the foreign labor content is very high.

On the other hand, the foreign labor content on the DC-10 is about 10 percent. They have their wings fabricated in Canada. However, virtually everything else on the plane is built in this country.

So, I think, with the finite demand for the airplanes, we will sell about the same number of American-built airplanes either way. The question is whether we will sell a plane with a 90-percent American labor content, the Douglas DC-3, or a plane with a 60-percent American labor content, the Lockheed plane, the L-1011.

Mr. President, by defeating the House bill, by defeating the Lockheed guarantee, we would provide more jobs, because by doing that we would create a situation in which the American-built wide-body jetbus will be a plane with less foreign labor content and more American labor content employed in it.

IMMEDIATE EMPLOYMENT IMPACT

Mr. President, there have been some exaggerations on the immediate labor impact of Lockheed's going into bankruptcy. And I say that there is a good prospect that they will not, even if the bill is not passed.

According to the latest Lockheed records, there are 16,000 people altogether at the present time employed on the L-1011. That is not 30,000, but 16,000. That includes the number of people working directly for Lockheed, the number of suppliers and subcontractors, and so forth.

It is true that they had more people working earlier. However, they have cut back on the number of workers, and the number of people whose jobs are in jeopardy is 16,000. That figure has been erroneously exaggerated to 30,000 or even 60,000. Of course, what would happen is that the jobs lost there would be picked up on the DC-10, which is the competitive plane. That would take 6 or 9 months. But nevertheless in less than a year Douglas would pick up all these jobs. And because of the difference in foreign labor content, because General Electric, an American company, produces the engine for the DC-10—we would have, instead of 16,000 jobs lost, the employment on the DC-10 of 20,000 people. So more jobs would be available.

COMPETITIVE ARGUMENT DOES NOT APPLY TO
L-1011

Mr. President, one of the other arguments—frequently advanced—in favor of the Lockheed guarantee is that it would

allegedly increase competition. It has been said that if we have only one manufacturer of the wide-body jet, we would have a monopoly and that if we had two, it would create more competition. This is a superficially appealing argument.

I point out that the only analysis and the only study done on this matter was done by the Department of Transportation, and the Space Agency, NASA. It made a study that was completed last March. That study showed the limited field of wide-body jets could accommodate only one American producer. It showed that if there were two firms, they would both be weak and would both lose money. One firm can do the job well. Two firms is one too many.

From a theoretical and philosophical standpoint it might be argued that there ought to be two firms engaged and not one. How about it?

I submit that we can find no man with a stronger record in the fight against competition than Donald Turner, the former Assistant Attorney General in charge of antitrust for the previous administration. He testified before our committee. And he testified against this guarantee.

I specifically asked him whether the failure to provide this guarantee and the subsequent failure of Lockheed in the field would not result in a monopoly. He said that he had studied the matter and because of the nature of the wide-body jet industry in his judgment it could not economically support two firms. The situation would be unstable. It would be a misallocation of resources. It would be an unfortunate situation for both firms. It would not be good from the standpoint of competition or economic strength.

There were no independent experts who supported the view that competition would be better served by this guarantee which would make it possible for Lockheed Corp. to get into the wide-body jet field.

Mr. President, as I have said, the market is not big enough for two firms. As a result, the prices would have to be higher to cover cost.

Mr. President, I discussed a little earlier the break-even point in the market.

I pointed out that Lockheed would probably have to produce 430 to 450 planes to break even.

If the market is big enough, we could have two firms. If it is not, it would be difficult for both firms.

I pointed out that the Department of Transportation study found that the market would only be big enough for one manufacturer and not for two manufacturers.

The banks are very enthusiastic supporters of this guarantee, because they get a free ride and a big advantage from this guarantee. But the banks' projections of the markets are only 60 percent of the Lockheed projections.

If we accept the banks' projections, it is almost impossible to imagine that Lockheed could make money. Maybe that is why the banks categorically decided they would loan the \$250 million to Lockheed without the guarantee. If Lockheed could make money, it would mean that McDonnell Douglas would lose a bundle. It is possible that with

one firm in the field McDonnell Douglas might do a little better than break even. With both in it, they would both be losers.

Why bail out bad management?

We also ought to recognize the fact that one unfortunate fallout consequence in connection with this bill is that the guarantee would perpetuate bad management. Mr. Haughton appeared before our committee. He is a very fine man. He is a good man. He is a man who has worked hard. And undoubtedly he is a man of fine qualities as an executive and manager.

But, Mr. President, no one can look at the record of the company that has failed not once, twice, or three times, but four successive times in producing equipment for the Department of Defense.

They failed by a huge margin again and again and again. They missed over and over.

There is an old saying, "Fool me once, shame on you; fool me twice, shame on me."

The firm has failed repeatedly. It seems to me that if Congress is going to go ahead with this record and guarantee this kind of management, it is our shame and not theirs that we proceed with it.

This firm lost \$480 million on four Government contracts all at the same time.

The last time Lockheed was in the commercial field with the Lockheed Electra—which was a commercial disaster—it lost \$60 million on it. This is not exactly the kind of record that should encourage Members of Congress to feel that they are betting on the winning horse.

LOCKHEED GUARANTEE, A BAD PRECEDENT

Mr. President, above all, the most significant objection in my view to this bill is the fact that this is a bad precedent. It is true we no longer have a generic bill before us; we just have one company. But there is no way Congress can avoid the fact that if we are going to guarantee the Lockheed Corp., we are going to be asked in the future to guarantee other corporations that are in trouble. And when we turn them down, they will say, But how about Lockheed?

The essence of our free enterprise system is that if one works hard and has good judgment, and is able to hold cost down, and is able to price and sell the product well, then one can succeed and there will be a good payoff. In our system one can become wealthy; stockholders can be rewarded; and that is the way it should be. But that is only one part of this carrot and stick system of ours. That is the carrot, and it is less than half the reason our system works.

The other reason the American system is so strong—and I think the most important reason—is that if one does not produce, if one cannot come through, if one cannot cover his costs, if one is inefficient, then one faces the specter of failure and he has to pay the price. The minimum price that ought to be paid is that management ought to be removed and the stockholders who make the investment ought to bear some of the brunt of the failure. That is part of the risk the stockholder takes. That is all that bankruptcy would require—that the firm get new management, and that the

stockholders be required to bear the cost of the failure. Of course, the creditors would also have to pay for the risk which they took when they loaned their money.

SENATORS FACE A WEEKEND OF PRESSURE

Mr. President, I do hope that when this bill comes before the Senate on Monday that Members of the Senate will recognize the merits of this issue. It is not easy for a Senator to do this. There has been very great pressure on Members of the Senate from organized labor, the big banks, and organized Lockheed employees and suppliers. They brought great pressure on my State, and I know they have on many Members of the Senate. It is a very difficult decision, I am sure, for many Members to make.

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

Mr. PROXMIRE. Mr. President, I ask unanimous consent that I may be allowed to continue for 1 additional minute.

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

Mr. PROXMIRE. Mr. President, I do hope that Senators will consider these matters very, very carefully and will recognize that under the circumstances the interests of our country and of our economic system that have served us so very well would be better served by saying no on this guarantee and resisting the enormous pressure that undoubtedly is going to be brought to bear over this weekend on Members of this body.

Mr. TOWER. Mr. President, I think that the basic issue we are considering in this bill is employment, and there is no question that the United States will lose jobs if Lockheed fails.

I think the Senate will benefit from studying the testimony of the Secretary of the Treasury before the House Banking and Currency Committee on this issue. There will be further discussion on both this question and all other aspects of the bill on Monday before the vote on the House bill, but all aspects of this bill eventually yield to the importance of employment to the thousands of people affected by the bill.

Mr. President, I ask unanimous consent that the text of Secretary Connally's testimony on employment to the House Banking and Currency Committee be printed at the conclusion of my remarks.

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

TESTIMONY BY SECRETARY CONNALLY

What then are the reasons behind my decision to recommend assistance to Lockheed?

Foremost in my mind is the imperative need to protect and foster the rising confidence that will gradually restore the jobs and growth lost in recent months. There is no need to recount in detail for this committee the chain of events which led to the current economic slack—massive increases in Federal spending, without adequate tax increases in the late 1960's, as a result, an economy captured by inflation and inflationary expectations, and, finally, the firm application of strict fiscal and monetary policies to restrain the boom and restore stability.

The costs of these necessary restraints have been high—the human costs in terms of unemployment and the material costs in terms of lost output. Moreover, these costs have been even greater to our defense industry. While the overall activity was being restrained, large amounts of resources were

being withdrawn from the defense and space industries, resources which could not be immediately utilized elsewhere.

The opposite of confidence is fear. Restoration of confidence means, in effect, the elimination of fear. At this time, with the economy moving ahead and unemployment topping out, the failure of the Nation's largest defense contractor—with 72,000 employees earning \$830 million a year, 35,000 suppliers, and \$2½ billion in annual sales—would, beyond any shadow of doubt, generate deep-seated fears.

Workers throughout the aerospace industry—not just those thrown out of work by the bankruptcy—would face heightened competition for their own jobs. Thus, a new wave of anxieties would be created.

Stockholders throughout American industry—not just those of Lockheed—might well question the future values of their own investments. The result would be market repercussions that could severely dampen and perhaps even thwart the business recovery. Consequently, Mr. Chairman, the basic motivation for our recommendation is not simply a concern for a particular company or a particular industry and, I might say parenthetically, that we seem prone to forget the tremendous contributions made by the defense and aerospace industries to our security and progress. Rather, the primary motivation is a deep concern for the well-being of the American people.

Let me now turn to the specific consequences of the loss of the amounts already invested in the Lockheed L-1011 Tri-Star Airbus. At this point in time, only a few months from the date Lockheed has expected to begin delivering planes to the airlines, its investment—and that of its subcontractors—amounts to about \$1.3 billion. Only a small fraction of this investment could be salvaged if the L-1011 program is terminated. In fact, the company estimates that more than \$1 billion of this investment would have only scrap value in such circumstances.

Underlying this investment in physical inventories are outside financial commitments that would have to be largely written off. In addition to the net equity of Lockheed's 55,000 shareholders, which now amounts to about \$235 million, subcontractors are estimated to have invested \$350 million in the program, a consortium of 24 banks has loans outstanding to the company of \$400 million, airlines have made prepayments amounting to about \$240 million, and debenture holders have claims of another \$135 million.

Now it's very hard to predict each and every consequence which would attend a Lockheed failure. But one thing is certain, the L-1011 would be dead. The stockholders almost certainly would see the value of their shares wiped out. Among the company's suppliers, most, probably, would be able to survive, but perhaps others would not.

Similarly, the airline purchasers of the L-1011 could ill afford to lose the sums they have deposited with Lockheed as prepayments. These deposits, for example, amount to \$90 million for TWA, \$68 million for Eastern, and \$32 million for Delta. At a time when most airlines are beset by rising costs, shrinking revenues, and severe operating losses, this added burden should not lightly be thrust upon them.

Another loser from a Lockheed bankruptcy would be the Federal Government itself. Our own economic analysis is that the termination of the Tri-Star project may impose a social cost on the private economy of \$260 to \$380 million, depending on the duration of the adjustment period. This social cost is the result of lost disposable income of workers and the forgone gross product of idle capital. Included in this aggregate economic loss is a Federal income tax loss estimated to be \$65 to \$95 million. However, in addition to this aggregate cost, loss recognition by creditors, shareholders, and suppliers will result in

estimated shortrun Federal revenue losses of \$275 to \$340 million. Finally, additional unemployment compensation paid out to displaced workers will amount to \$50 to \$75 million, depending on the duration of the adjustment period.

So far, I have been describing the potential losses from a Lockheed bankruptcy in terms of dollars and cents. But there is an even more important consequence of the L-1011's demise, namely, the unemployment it creates. Prior to the Rolls-Royce receivership, there were approximately 17,800 workers employed by Lockheed on the L-1011 program. Since February nearly 8,000 have been temporarily furloughed. The remaining 10,000 will lose their jobs as well if the L-1011 program is scrapped.

Similarly, Lockheed's suppliers, who were estimated to have been employing some 16,000 people in 21 States directly on L-1011 work in January have had to reduce their work forces to only about 6,500 at present because of the curtailment of work following the Rolls-Royce bankruptcy.

Moreover, though it is more difficult to estimate, it is evident that for every employee directly laid off, others in communities where their income was spent will also suffer. It is estimated that counting this indirect impact, a total of 60,000 employees will end up without jobs if the L-1011 is shut down. Even on a direct basis, the cost is heavy, as the reductions that have already taken place show.

Additionally, I believe that a Lockheed failure would adversely affect other employees, both of Lockheed and its suppliers, who are now employed in the performance of Lockheed's many defense contracts. I do not mean to imply that those contracts would not be performed ultimately—for I believe they would. However, it is my judgment that an enterprise of Lockheed's magnitude, involving many thousand contractual relationships with suppliers and subcontractors, could not go into either a chapter X reorganization or a liquidation in bankruptcy without the inevitable creation of delays and dislocations. This probably would mean increased costs on those defense contracts, but more importantly, it would mean human hardships through furloughing of employees until legal and financial uncertainties were resolved.

The cost of this added unemployment has to be measured in terms of the impact on particular geographic areas where unemployment is already well above the national average and on the aerospace industry that has already suffered a disproportionate reduction in employment as a result of (1) the winding down of military orders, (2) cutbacks in the space program, and (3) the cancellation of the SST.

From a peak of over 1.4 million jobs in 1967, total aerospace employment declined to less than 1.1 million jobs at the end of last year and has been projected to be down to 943,000 by the end of this year. This would represent a cumulative decline of about one-third in 4 years. Moreover, of the major metropolitan areas with substantial unemployment, at least six are in this category primarily because of aerospace unemployment.

At a time when the Government is spending \$1½ billion annually on job training programs, and is about to initiate a new public service jobs program with a 2-year cost of \$2½ billion, it would be ironic to withhold authority for guarantees—guarantees we believe will be costless—that could preserve the jobs of fully trained aerospace workers.

ORDER OF BUSINESS

The PRESIDING OFFICER. The Senate will proceed to further considera-

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tion of routine morning business with a 3-minute limitation on speeches by Senators.

Is there further morning business to be transacted at this time?

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

The PRESIDING OFFICER. The clerk will call the roll.

The second assistant legislative clerk proceeded to call the roll.

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

ORDER FOR ADJOURNMENT TO 10 A.M. ON TUESDAY, WEDNESDAY, THURSDAY, AND FRIDAY OF NEXT WEEK

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent that when the Senate completes its business on Monday, Tuesday, Wednesday, and Thursday of next week it stand in adjournment until 10 o'clock a.m. on Tuesday, Wednesday, Thursday, and Friday, respectively.

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

PROGRAM

Mr. BYRD of West Virginia. Mr. President, I believe the final quorum call of the day has already occurred, so I shall proceed to outline the program for Monday.

The Senate will convene at 11 o'clock a.m. Following recognition of the two leaders there will be a period for the transaction of routine morning business with statements therein limited to 3 minutes, the period not to extend beyond 12 o'clock noon. At 12 o'clock noon the Senate will proceed to the consideration of H.R. 8432, the emergency loan guarantee—Lockheed—bill, with debate on the bill limited to 2 hours.

Debate on any amendment, motion, or appeal, with the exception of a motion to lay on the table, will be limited to 20 minutes.

A rollcall vote on the final passage of the bill shall occur at 3 o'clock p.m., with this caveat: If an amendment or amendments are pending at 3 o'clock p.m., the vote on the bill will occur immediately after the disposition of the amendment or amendments. The vote on the pending cloture motion is vacated.

Following the disposition of the Lockheed bill on Monday, the Senate will proceed to consider S. 382, the Federal elections campaign bill. Under the agreement previously entered, time will be limited thereon to 16 hours. Time on any amendment thereto will be limited to 30 minutes to be equally divided, with the following exceptions as to time: Three hours on an amendment by Mr. DOMINICK; 3 hours on each of two amendments by Mr. PROUTY; 2 hours on an amendment by Mr. FANNIN; and 2 hours on an amendment by Mr. STEVENS.

During consideration of the Federal election bill, the Senate may act on a dual-track system from time to time, with approval of the leadership and manager of the bill, Mr. PASTORE.

There will undoubtedly be several rollcall votes on amendments, and tabling motions, to the Federal election campaign bill.

As far as the situation can be determined at the moment, the picture is not clear with respect to the program for Tuesday, Wednesday, Thursday, and Friday of next week. However, this much can be said for the general guidance of the Members of the Senate:

The Senate will convene at 10 o'clock a.m. daily. This hour, of course, is subject to future change; but if there is any change, the change will be to an earlier hour, not to a later hour.

There are presently no orders for recognition daily of Senators, but such may be entered from day to day. There will be a period for the transaction of routine morning business daily for not to exceed 15 minutes. The Senate will resume consideration daily of S. 382, the Federal elections campaign bill, until that bill is disposed of—keeping in mind the two-track procedure where necessary and advisable.

So there is a prospect of rollcall votes on amendments to that bill—and on tabling motions—each day, and of course, there will be a rollcall vote on the final passage of that bill whenever passage comes.

Other calendar measures and conference reports may be brought up at any time from day to day with rollcall votes always possible. Such other calendar measures, for example, would be the continuing appropriations resolution, the \$1 billion employment assistance appropriations bill, the economic opportunity bill, the military construction authorization, and so on.

Conference reports which may be brought up from time to time on any day of the week next week include, but are not limited to, the following: The Transportation appropriation bill, the Interior appropriation bill, the HEW appropriation bill, the HUD appropriation bill, the State-Justice-Commerce appropriation bill, the Public Works appropriation bill, and the military selective service bill—on any of which rollcall votes may occur.

So, suffice it to say that the Senate should be prepared to stay in session into the evening daily next week.

Also, the Senators will want to be prepared for rollcall votes daily through Friday—repeat, through Friday.

The Senate has a very, very busy schedule to complete before the 1-month recess begins at the close of business next Friday. Hence, the anticipated busy schedule through Friday—repeat, through Friday next.

And there is a caveat: The railroad situation may create some additional problems which cannot now be anticipated, but, in any event, there is no question that the Senate is in for a very busy week next week—long hours, long days, and rollcall votes through Friday.

ADJOURNMENT UNTIL MONDAY,
AUGUST 2, 1971, AT 11 A.M.

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 11 a.m. on Monday.

The motion was agreed to; and (at 2 o'clock and 35 minutes p.m.) the Senate adjourned until Monday, August 2, 1971, at 11 a.m.

EXTENSIONS OF REMARKS

PATRIOTISM

HON. HARRY F. BYRD, JR.

OF VIRGINIA

IN THE SENATE OF THE UNITED STATES

Friday, July 30, 1971

Mr. BYRD of Virginia. Mr. President, the Virginia Gazette, of Williamsburg, Va., has published a fine statement on patriotism written by Mr. Richard E. Baughman, editor of the magazine "Rural Living."

The statement makes the important point that if we are to foster patriotism in the Nation, all citizens must realize that they have both rights and responsibilities. I think this is a point which needs emphasizing today.

The Ruritan Clubs of the Chesapeake District of Virginia sponsored "Salute to America" programs on the State Capitol grounds in Richmond on the 4th of July both in 1970 and 1971. These programs, which are mentioned in Mr. Baughman's statement, had the purpose of giving each citizen a chance to demonstrate his patriotism. I commend the Chesapeake District Ruritans for their splendid action.

I ask unanimous consent that the text of Mr. Baughman's statement be printed in the Extensions of Remarks.

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

[From the Virginia Gazette, Friday, July 30, 1971]

THE STRENGTH OF AMERICA

American society seems to have very few patriots in the old sense of the word. Too few people today fit the mold of Nathan Hale and John Paul Jones and even the late Audie Murphy. It seems out of fashion to be patriotic and wave the flag. We have too many critics among ourselves who make mockery of our patriotism. So, thus we stew and waste our energies against ourselves.

The reasons for our fractured society are complicated and diverse, but they all add up to one inescapable flaw. Americans today have lost that sense of unity and common purpose. We need a feeling of oneness that will bind us together.

We have settled our land and fought our wars; and we have achieved the distinction of the number one nation in the world. We have done more good for more people than any other nation in the history of the world, but in the process we have created problems which have caused an increasing number of Americans to turn their backs on our shores and migrate to new lands.

Our courts seem not to work properly under modern pressures, and our legal processes are so cumbersome that we often seem to be giving aid and comfort to our very enemies. We seem like middle-aged parents who stand and wring their hands in dismay because their teen-aged son has not lived up to expectations.

The paramount problem before America is America itself. We have lost the dream that led us through the years, and now we flounder in a sea of frustration. Our domestic

criminals assault us on our streets, while our foreign ones taunt us in every conceivable manner, and our young even fly the flag of our opponents.

America needs goals which will recapture the imagination of our people—meaningful goals that will provide a sense of hope and justice for all our citizens. Only hope and faith in the future can reunite our society.

Nothing succeeds like success. No matter if it be football, business, or government, there is pride in being number one. We are number one now, but to remain there we must be more demanding of our citizens.

We must demand that laws be fair, but that they be obeyed. We must demand that all citizens have both rights and responsibilities. We must demand that our government be responsive to the needs of our country. And finally, we must demand that each of us have the moral courage to stand up and be counted in defense of our country. As individuals we may be weak, but in unity toward a common goal there is strength.

The Ruritan Clubs of the Chesapeake District are leading the way in a renewed interest in patriotism. Last Independence Day, and again this 4th of July, the Ruritans presented a Salute to America program on the state capitol grounds in Richmond, Va. The purpose of the program was to voice support of America and to give the individual citizen a chance to demonstrate his patriotism.

To maintain the greatness of America, we individual citizens must be united in a common love for our homeland; for despite the faults and shortcomings, America stands head and shoulders above the rest of the world. United, we can make this Union live up to its potential greatness; and then respect will follow our actions as surely as night follows day.

RUSSIANS GAIN IN MEDITERRANEAN

HON. PHILIP M. CRANE

OF ILLINOIS

IN THE HOUSE OF REPRESENTATIVES

Thursday, July 29, 1971

Mr. CRANE. Mr. Speaker, while many in Washington discuss what they call a "reordering" of our priorities, by which they mean, essentially, a cut in defense spending and the transferring of defense funds to such domestic areas as pollution, housing, and education, the fact is that our strategic position in the world is rapidly deteriorating. In no part of the world is this deterioration more evident and more shocking than in the Middle East.

How we can fulfill our commitment to defend the integrity of Israel at the same time that the Russians are gaining ascendancy in the entire Mediterranean area is a question which the advocates of lower defense spending and strategic preparedness have yet to answer.

That our position in the Mediterranean is in a serious state of decline is beyond question. In an important report in the July 19, 1971, issue of Newsweek magazine, Senior Editor Arnaud de Borchgrave states that—

There is no question in my mind that the Russians see America's loss of taste for international leadership as the opportunity to become the dominant power in the Mediterranean and, ultimately, in the entire Eurasian land mass and adjacent oceans.

Looking forward to the possible "Finlandization" of all of Western Europe, Mr. de Borchgrave points out:

With the proliferation of Soviet power in the Mediterranean and along Europe's oil supply routes, Moscow hopes to discourage a separate European defense effort as futile, thereby encouraging a trend toward West European neutralism.

Looking to the future, and aware of the danger of the growing neo-isolationism in the United States, not only among the new left but even among more allegedly responsible spokesmen, Mr. de Borchgrave notes:

The combination of neo-isolationism in the U.S. and neutralism in Europe could be the mix that removes the Sixth Fleet from the Mediterranean without a shot being fired.

Because of their fear of an imminent American withdrawal from the Mediterranean, the Newsweek editor reports:

Even Franco Spain and the colonels in Greece are doing what they can to improve relations with Moscow. For by conveying the impression that over the next few years domestic affairs will enjoy priority over foreign affairs, America is, in effect, telling Moscow: "This is your round in the Mediterranean. Make the most of it."

Our Government cannot be both sincere in its commitment to Israel and our NATO allies in the Mediterranean and be equally committed to the kind of "reordering" of priorities which places defense in a lesser position. At some point, a real choice must be made.

I wish to share Mr. de Borchgrave's article with my colleagues, and insert it in the RECORD at this time:

A MEDITERRANEAN TIDE RUNS FOR THE RUSSIANS

(By Arnaud de Borchgrave)

Aboard the U.S.S. Springfield last week, a young naval intelligence officer could hardly contain his admiration for the latest Soviet warships steaming in the Mediterranean Sea. "That's a beauty," he said, pointing to a photographic blowup of a Kresta-class guided-missile cruiser. "There's nothing like it on our side." Standing nearby, Vice Admiral Isaac C. Kidd, the commander of the U.S. Sixth Fleet, readily agreed. "A humdinger," he said of the Soviet ship. "Only 3,500 tons. But it's got the punch of a pocket battleship."

Nowadays, the Soviet Union packs quite a wallop in the Mediterranean. On a typical day last week, the wall-to-wall situation room (map) at NATO's surveillance headquarters in Naples bristled with symbols for Soviet men-o'-war: 55 versus 44 in the Sixth Fleet (map). And Russian political influence in the strategically important inland sea has grown apace with its fleet. Last week, the Kremlin dispatched Ambassador Mikhail Smirnovsky to the Maltese capital of Valletta in hopes of securing an embassy in the one-