spelling and pronunciaton, and an international vocabulary. This would familiarize the student with the idea of another language besides his own while minimizing the initial difficulties. Then he could pass on to one of the national languages. He would also gain the bonus of acquiring an international language that is widespread and already has millions of users all over the globe.

A third suggestion is that the student be required to pick a foreign language and be given an initial course dealing not with the language itself, save incidentally, but with its speakers, culture and the country or countries where it is used. If he likes what he gets and wants more, he can then go on to the regular language course.

A fourth suggestion deals with all the foreign languages in the second year of their study. Remove all literary reading material, with which the second language year is now topheavy, and concentrate on current newspapers and magazines, which reflect the present-day language and carry items relevant to what goes on today.

These reforms in the presentation of foreign languages, individually or in combination, might go toward sugaring the pill of the language requirement, making the study of foreign languages both more palatable and more meaningful.

This still leaves in abeyance the question of whether the drop in language study is one of the facets of a new, growing isolationism on the part of all Americans, who may be fed up with the principle that they are responsible for the peace and prosperity of the entire world, and with the lack of cooperation of other nations that also have a stake in those matters. If this is so, time will tell.

## DISTRICT OF COLUMBIA CHIEF OF POLICE, JERRY V. WILSON, ENDORSES LOCAL CONTROL OF POLICE

### HON. CHARLES C. DIGGS, JR.

OF MICHIGAN

IN THE HOUSE OF REPRESENTATIVES

*Thursday, September 20, 1973*

Mr. DIGGS. Mr. Speaker, I am pleased to announce the endorsement of local control of law enforcement by Chief of Police, Jerry V. Wilson. The chief's statement, which is printed on page 52 of House Report 93–482 accompanying H.R. 9682, the District of Columbia self-government bill, states in part:

Personally, I feel that apprehension over local control of police power in the District is misplaced. My own sense of this community is the overwhelming majority are responsible citizens who want effective law enforcement just as much as residents do in any other city. If the City of Washington is to be treated substantially as a local community, albeit, a special one, rather than a Federal enclave, then there is no reason to deprive local citizens of control over that fundamental local service, the police force.

I fully support the suggestion of Chief Wilson that the bill include:

Some option . . . of authorizing the President to determine when special events and emergencies require temporary Federal assumption of control over the police or the deployment of Federal forces.

This is a constructive amendment which I will offer to the bill during the debate October 9 and 10. It will reinforce our intention to provide protection of the Federal interest through action by the President.

The committee report also includes strong endorsements of H.R. 9682 by Mayor Walter E. Washington and City Council Chairman John A. Nevius.

Mayor Washington states on page 51:

I strongly urge the passage by the House of Representatives of H.R. 9682, as a direct, practical and equitable way to provide District residents that basic privilege of all American citizens, the power of electing the officials of their local government.

Chairman Nevius states on page 52:

The Council has vigorously supported the adoption of legislation which would provide to the District residents the basic privilege shared by other American citizens, that is the power to elect the officials of their local government and to participate in a positive manner in the affairs of their local government.

Mr. Speaker, these experienced municipal officials have been of great help to the House Committee on the District of Columbia during our months and months of hearings and markup sessions. H.R. 9682 represents the careful product of a great deal of work on the part of the committee. I trust that the House will find favor with the bill when it comes to the floor in 2 weeks.

# SENATE—*Saturday, September 22, 1973*

The Senate met at 9 a.m. and was called to order by Hon. JAMES B. ALLEN, a Senator from the State of Alabama.

### PRAYER

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

O most holy, wise, and powerful Preserver and Governor of all Thy creatures and all their actions, keep us, we beseech Thee, in health of body and soundness of mind, in purity of heart and cheerfulness of spirit, at peace with Thee and in charity with our colleagues; and further all our undertakings with Thy blessing. In our labor strengthen us; in our pleasure purify us; in our difficulties direct us; in our perils defend us; in our trouble comfort us; and supply all our needs according to the riches of Thy grace.

Through Christ Jesus our Lord. Amen.

## APPOINTMENT OF ACTING PRESIDENT PRO TEMPORE

The PRESIDING OFFICER. The clerk will please read a communication to the Senate from the President pro tempore (Mr. EASTLAND).

The second assistant legislative clerk read the following letter:

U.S. SENATE,
PRESIDENT PRO TEMPORE,
*Washington, D.C., September 22, 1973.*

*To the Senate:*

Being temporarily absent from the Senate on official duties, I appoint Hon. JAMES B. ALLEN, a Senator from the State of Alabama, to perform the duties of the Chair during my absence.

JAMES O. EASTLAND,
*President pro tempore.*

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

## THE JOURNAL

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the reading of the Journal of the proceedings of Friday, September 21, 1973, be dispensed with.

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

## COMMITTEE MEETINGS DURING SENATE SESSION

Mr. MANSFIELD. Mr. President, I ask unanimous consent that all committees may be authorized to meet today.

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

## MRS. LUCY LOCKE

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of calendar No. 379, S. 1848.

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

The legislative clerk read as follows:

S. 1848, for the relief of Mrs. Lucy Locke.

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

There being no objection, the bill 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, for the purposes of the Immigration and Nationality Act, Mrs. Lucy Locke shall be held and considered to have been lawfully admitted to the United States for permanent residence as of November 6, 1958, and to have complied with the residence and physical presence requirements of section 316 of such Act. In this case the petition for naturalization may be filed with any court having naturalization jurisdiction.

## THE COUP IN CHILE

Mr. MANSFIELD. Mr. President, in this morning's Washington Post, under the Washington Merry-Go-Round, there is a commentary by Jack Anderson and Les Whitten entitled "No Direct U.S. Role Seen in Chile Coup."

I ask unanimous consent to have this commentary printed in the RECORD.

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

NO DIRECT U.S. ROLE SEEN IN CHILE COUP

(By Jack Anderson and Les Whitten)

We have been deluged with inquiries from all over the world about possible U.S. involvement in the overthrow of President Salvador Allende in Chile. Because we exposed the ITT–CIA plot to block Allende from assuming power in 1970, newspapers in many countries have asked us whether the CIA was also behind the military coup which left Allende dead in the presidential palace last week.

We have checked carefully with the best sources available to us in the White House, State Department, Pentagon and CIA. Here's what we have found:

For the past few months, Washington has been bombarded with intelligence reports from Chile warning of "discontent and plotting in the military services." Only the day before the takeover, a Chilean military officer informed the U.S. embassy in Santiago that a coup was imminent.

The warning, however, wasn't treated as any more significant than dozens of similar reports that have been passed on to Washington recently. We could find no evidence that Washington knew in advance what the Chilean generals were planning.

The sudden arrival in Washington of Nathaniel Davis, the American ambassador to Chile, on the weekend before the takover has been cited as evidence that the United States must have had some inkling of the plot. On the contrary, we have learned that Davis chose that weekend for his visit because he expected it to be comparatively calm in Santiago.

He was summoned to Washington by Henry Kissinger, who, in anticipation of his confirmation as Secretary of State, wanted to assess a few top diplomats for possible Washington assignments. Because of the volatile situation in Chile, Kissinger specified that Davis should choose the most quiet time to come to Washington.

Davis, of course, knew about the stirrings within the Chilean armed forces. But he had emphasized in his secret cable that "events move slowly in Chile, or perhaps better said, Chileans have great ability to rush to the brink, embrace each other and back off."

When Davis met with Kissinger, according to our sources, they spent no more than five or 10 minutes reviewing the Chilean situation. Most of their discussion was devoted to internal State Department matters.

It is possible that the CIA may have been involved in some minor project against Allende. But the CIA is forbidden to intervene in any major foreign operation without the specific approval of the hush-hush Forty Committee, which passes on under cover operations. Our sources, who have access to the secret deliberations of the Forty Committee, assure us that no project was approved to depose Allende.

The Pentagon, meanwhile, has been furnishing arms to the Chilean military establishment. After Allende came to power, the White House considered cutting off military aid to Chile. The decision was made to continue arms shipments because the Chilean generals were known to be anti-Allende.

For example, $12.4 million worth of credits were granted to the Chilean armed forces last year for the purchase of U.S. military supplies and the training of Chilean officers. The Pentagon had no direct part, however, in the plot against Allende.

## QUORUM CALL

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

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

The legislative clerk proceeded to call the roll.

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

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

## ORDER FOR TRANSACTION OF ROUTINE MORNING BUSINESS TODAY

Mr. MANSFIELD. Mr. President, I ask unanimous consent that there be a morning hour for the conduct of morning business with a time limitation not to exceed 3 minutes.

The ACTING PRESIDENT pro tempore. For what period of time?

Mr. MANSFIELD. We will leave that open.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered. Is there morning business to be conducted at this time?

## 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. McCLELLAN:

S. 2471. A bill for the relief of Mr. Yung Ping (James) Su and his wife, Susana S. Su. Referred to the Committee on the Judiciary.

## ADDITIONAL COSPONSORS OF BILLS

S. 1296

At the request of Mr. GOLDWATER, the Senator from Arkansas (Mr. McCLELLAN) was added as a cosponsor of S. 1296, to further protect the outstanding scenic, natural, and scientific values of the Grand Canyon by enlarging the Grand Canyon National Park in the State of Arizona, and for other purposes.

S. 2134

At the request of Mr. BIDEN, the Senator from Kentucky (Mr. COOK), the Senator from Texas (Mr. TOWER), the Senator from Tennessee (Mr. BROCK), and the Senator from Alaska (Mr. GRAVEL) were added as cosponsors of S. 2134, a bill to provide for annual authorization of appropriations to the U.S. Postal Service.

S. 2424

At the request of Mr. FANNIN, the Senator from Wyoming (Mr. HANSEN) and the Senator from Nevada (Mr. BIBLE) were added as cosponsors of S. 2424, to authorize the partition of the surface rights in the joint-use area of the 1882 Executive Order Hopi Reservation and the surface and subsurface rights in the 1934 Navajo Reservation between the Hopi and Navajo Tribes; to provide for allotments to certain Paiute Indians, and for other purposes.

## DEPARTMENT OF DEFENSE APPROPRIATION AUTHORIZATION ACT, 1974—AMENDMENT

AMENDMENT NO. 538

(Ordered to be printed.)

Mr. MANSFIELD proposed an amendment to amendment No. 527 offered by Mr. CRANSTON to the bill (H.R. 9286) to authorize appropriations during the fiscal year 1974 for procurement of aircraft, missiles, naval vessels, tracked combat vehicles, torpedoes, and other weapons, and research, development, test and evaluation for the Armed Forces, and to prescribe the authorized personnel strength for each active duty component and of the Selected Reserve of each Reserve component of the Armed Forces, and the military training student load, and for other purposes.

## ADDITIONAL COSPONSORS OF AMENDMENTS

AMENDMENT NO. 462

At the request of Mr. ABOUREZK, the Senator from Illinois (Mr. STEVENSON) and the Senator from California (Mr. TUNNEY) were added as cosponsors of amendment No. 462 intended to be proposed by him to the bill (S. 2335), the Foreign Economic Assistance Act of 1973.

AMENDMENT NO. 463

At the request of Mr. ABOUREZK, the Senator from Illinois (Mr. STEVENSON) was added as a cosponsor to amendment No. 463 to the bill (S. 2335), the Foreign Economic Assistance Act of 1973.

AMENDMENT NO. 476

At the request of Mr. GOLDWATER, the Senator from Tennessee (Mr. BAKER), the Senator from Hawaii (Mr. INOUYE), and the Senator from California (Mr. CRANSTON) were added as cosponsors of amendment No. 476 intended to be proposed to the bill (H.R. 9286), the Department of Defense Appropriation Authorization Act, 1974.

AMENDMENT NO. 531

At the request of Mr. EAGLETON, the Senator from Georgia (Mr. NUNN) was added as a cosponsor of amendment No. 531 intended to be proposed to the bill (H.R. 9286) the Department of Defense Appropriation Authorization Act, 1974.

## ADDITIONAL STATEMENTS

### THE ALDERSGATE MEDICAL CAMP

Mr. FULBRIGHT. Mr. President, for the past three summers the Arkansas Chapter of the American Academy of Pediatrics has operated the Aldersgate Medical Camp, a rather unique summer camp for children with medical problems.

This program and the chairman of the Arkansas chapter, Dr. Kelsey Caplinger, were recently the subjects of a feature story in News and Comment, the official publication of the American Academy of Pediatrics, and I ask unanimous consent to have this article printed in the RECORD.

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

ALDERSGATE: JUST HAVING FUN

You couldn't blame him, really. Jimmy Lee was just like most eleven-year-olds their first time at summer camp—lonely and a little afraid. His first day at Aldersgate he refused to eat and spent most of his time alone.

But the counselors and the camp director were understanding, because Jimmy had bigger problems than homesickness.

Jimmy had cystic fibrosis. He had to take medication regularly, and receive inhalation treatments three times a day. At night, he slept in a tent surrounded by a medicated mist that made his hair wet and sticky and soaked his sheets.

And playing was not easy either. He could run only about ten yards before he began coughing up a greenish fluid from his lungs, lungs that operated at only ten per cent of capacity.

What was Jimmy doing at camp in the first place? Why wasn't he home in bed, or in the hospital?

Jimmy and a dozen other kids with medical problems were at camp because the AAP's

Arkansas Chapter and its chairman, Dr. Kelsey Caplinger, thought they deserved a chance to enjoy themselves outdoors in the summer, just like other kids.

That idea led to Aldersgate Medical Camp, near Little Rock. The camp held its first week-long session in the summer of 1971, the first year Jimmy attended. Each year since then, more and more children with medical problems have been swimming, hiking, cooking outdoors, and having fun at Aldersgate.

VARIETY OF PROBLEMS

The kids at Aldersgate have a wide variety of medical problems. The 45 campers who attended the full-time camp last June 25–30 included children with asthma, allergy problems, sickle cell diseases, diabetes, cerebral palsy, seizure disorders, hyperactivity, learning disorders, emotional problems, hemophilia, and leukemia.

The 1973 summer session also saw a day camp operation for children with orthopedic problems. The 20 children—most of them in wheelchairs—were bused out to the camp each day. They were each assigned a volunteer to act as their guides and helpers, and together they went swimming, boating and fishing.

The children at Aldersgate range in age from 8 to 16, and come from all parts of Arkansas. They are referred by parents, teachers, doctors, social workers, and nurses.

Depending on what health problems the individual camper has, a program of medical supervision is worked out with the camp and the child's doctor. Nurses dispense the required medication, provided by the child's parents. Physician coverage on a 24-hour basis is provided through the cooperation of Dr. Robert Merrill, chairman of the Department of Pediatrics of the University of Arkansas Medical Center. The camp is located only 15 minutes from Arkansas Children's Hospital, which also maintains a 24-hour emergency clinic.

THE GOAL IS FUN

Despite the medical precautions, however, the emphasis at Aldersgate is on normal camping activity. "Our main goal is for the kids to have fun," Dr. Caplinger said. "We try to minimize the effect of their illnesses."

As a result, activities can include building homes in the woods, nature hikes, cooking some meals outside, fishing, swimming, ping-pong, archery, softball, boating, drama, music and crafts.

What does Dr. Caplinger hope to give the children who attend the camp? "We mostly hope they can find a chance to enjoy themselves for a week, and maybe be on their own a little bit. Sometimes they don't get a chance to develop their independence as much as they'd like because of their medical problems.

"There are other effects, of course. One of the big things we notice is the way children compare their medical problems with each other. Often they find that someone else has it worse than they do.

"I remember once when Jimmy Lee was sitting in the tent waiting for his medicine, a little diabetic girl came in and gave herself an injection of insulin. And Jimmy looked at her and said, 'Boy, I'm glad I don't have to do that.'

"The kids seem to develop a kind of unspoken rule that they must help each other when it's needed."

Dr. Caplinger said one of the camp's goals is to "graduate" its members to regular summer camps, once they have had exposure to a camping situation at Aldersgate.

"I have an asthmatic boy in my practice who requires regular medication and attention," Dr. Caplinger went on. "He came to Aldersgate the first summer, but last year and this year he's been going to a regular summer camp—with my blessing."

HELPING PARENTS

Dr. Caplinger feels the week at Aldersgate helps not only the children but their parents as well.

"The parents of many of these children are afraid and protective, because of their child's health problems. We sort of see the camp as a mechanism to help the parents and the kids overcome this kind of fear.

"It's even good for the counselors, most of whom are college students. Often they are scared about caring for these kids at first, and worried it might be too much for them to handle. They are always relieved to find that the kids are just regular folks."

The counselors are actually hired by the board of Aldersgate Camp, operated by the National Board of Missions of the United Methodist Church. Aldersgate has a variety of programs for disadvantaged children, so during the week the medical camp is taking place, other groups are using the camp at the same time.

This is also instructive for the children who attend the medical camp, Dr. Caplinger said. "For instance, this year one group of severely retarded children was using the camp space near ours," he said. "So the kids who attended our medical camp saw some other kids whose problems were more severe than theirs."

FINDING FUNDS

The Aldersgate Medical Camp—the official name for the Arkansas Chapter's program—is operated as a nonprofit organization. Cost for the week-long program is $60, and about 75 per cent of the children attending the camp are on some sort of scholarship.

Meeting costs with so many children on scholarship is not always easy, Dr. Caplinger admitted. This year more than $2,600 was donated to the program from sources including private physicians and nurses, the Arkansas Medical Society, the Arkansas Pharmaceutical Association, the Pulaski County (Little Rock) Medical Society, and others.

Such contributions can't pay all the bills, however, and Dr. Caplinger said he is presently trying to find a more permanent method of financing the program.

But no matter how much money is raised, Dr. Caplinger said the camp will be in operation as usual next year, hopefully with as many children as the staff can handle.

MAKING CONTRIBUTIONS

"We want to be able to give this experience to as many kids as we can," he said. "Camping can be an effective socializing force for children who lots of times don't have the opportunities for group interaction that their friends do.

"Sure, we have had kids who called their mothers and left camp after the first day, but for the most part we find the kids enjoy making contributions for the good of the camp as a whole."

What about Jimmy Lee? Did he finally join the group, or did he go home after that first confusing day?

"Jimmy stayed with us," Dr. Caplinger recalled. "By the second day he began to show a little interest, and by the end of the week he was one of the most involved kids in the camp. He even formed a strong attachment to one of the counselors, probably one of the few times in his life he had gotten that close to someone outside his family.

"He eventually became one of our biggest boosters. I remember the next winter I was visiting an asthmatic patient of mine in the hospital. As I walked into the room, there was Jimmy, who was also in the hospital. And he was recruiting my patient for next summer's session of the camp.

"Jimmy, of course, came back the following year, and he was looking forward to coming back again this year."

But this time Jimmy couldn't make it to camp. He died April 1 of this year.

"I think about a case like Jimmy's and I wonder if we made the quality of his life a little better, did we really give him something to look forward to, did we make him a happier boy?" Dr. Caplinger asked.

Probably only Jimmy could answer that, but for the dozens of other children who have experienced the fun at Aldersgate Medical Camp, the answer must surely be yes.

## THE MILITARY COUP IN CHILE

Mr. ABOUREZK. Mr. President, I am deeply concerned over the unfortunate events that have taken place—and are occurring at this moment—in Chile. Chile has had for many years the most advanced and stable democracy in South America. With few exceptions its republican institutions have been respected since independence.

In addition to its political stability, Chile has had a long-time tradition of granting political asylum to those persecuted for political reasons.

For these two reasons, Chile has always been recognized as a political oasis in a continent plagued with dictatorial regimes. There are between 10,000 and 13,000 exiles now in Chile. The largest number are Bolivians—4,000—followed closely by Brazilians and Uruguayans—each with 3,000. The remainder—2,000 to 3,000—are from a number of other Latin American countries.

Many of these people, including 2,000 Brazilians, came to Chile in 1964 prior to the Allende government and were warmly received by the then President Frei and the Christian Democratic government. Even before that time the country had received exiles from such countries as Haiti, Cuba, the Dominican Republic, Panama, and Peru, many of whom still reside in Chile.

The recent military coup against the constitutional Government of Chile has prompted many respected religious leaders, scholars, statesmen, and journalists from around the world to express grave concern for the well-being of these exiles and those Chilean supporters of the constitutional government who have refused to submit to the military junta.

News reports—despite military censorship—and junta communiques have provoked increasing alarm. It has been reported by a variety of news sources that killings have already exceeded 5,000 and that many thousands more are being held prisoners. Junta communiques have sought to make the political exiles the scapegoat for Chile's internal problems. To justify their coup the generals have fabricated plots supposedly hatched by the exile community. They have even stated that the political exiles face forced return to their home countries which surely would be to send them to prison, torture, and execution.

The influence of the American Government and public opinion is of utmost importance in the course of events in Chile. Many of the Chilean military have been trained by the U.S. Government. The United States has in recent years doubled aid to Chile's military while cutting off all economic aid to Chile's civilian economy. U.S. involvement in plots to block the election of Dr. Allende, in ITT maneuverings and in an all-out eco-

nomic squeeze on the Allende government are well known. Whether or not we agreed with his policies is not the issue here. We cannot disassociate ourselves from the bloodshed in Chile and especially from the plight of the foreign political exiles and Chilean nationals so urgently in need of asylum.

Whether or not we agreed with Allende's policies is now irrelevant. He was chosen by constitutional means and overthrown by unconstitutional force and violence. The military junta, like its twins in Brazil and Uruguay, blames foreigners for the trouble. These foreigners now face deportation or worse. If sent back to Bolivia, Brazil, Uruguay, Paraguay or the other dictatorships, these people face death or prison.

Let us return to a former image of American support for oppressed people, let us return to our historical conscience and offer assistance to all the political refugees, and let us protest to our own State Department and to the military junta leaders to end the repression. We have helped to cause this situation. We must now act to at least try to save as many people as possible.

## FOUR YEARS OF INFLATION

Mr. BIDEN. Mr. President, I suppose it is not really necessary to tell the workers of this country how badly they are being hurt by inflation. Neither is it necessary to tell the elderly, people on fixed incomes, food shoppers or almost anyone else. However, in its September 24, 1973, issue the U.S. News & World Report painted a graphic picture of just how serious the degradation of the dollar has been since January 1969, in spite of the most elaborate efforts to control the economy ever seen in peacetime. Certainly the results of the administration's use of the price control authority given it by Congress has not had the results that I am sure the Congress envisioned. Mr. President, I ask unanimous consent that the article entitled "It's Been 4 Bad Years of Inflation" be printed in the RECORD.

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

IT'S BEEN 4 BAD YEARS OF INFLATION

Never before has peacetime inflation been attacked with such a combination of weapons as price controls, the highest interest rates in history and stringent budget restraints, and yet—

Not in a quarter of a century, a new study by the Economic Unit of "U.S. News & World Report" shows, have prices gone up so fast for so long as in the past four and a half years.

For every $100 that the average family spent on living expenses in January, 1969, when President Nixon took office, it now costs $124.40 to live as well today.

The only time inflation raged more violently over a sustained span was in the years right after World War II, when wartime controls were removed and prices shot up by one third between 1945 and 1948.

In the latest surge, food prices have led the way, as the Pictogram on these pages indicates. To buy a typical market basket of foods, you would now have to pay $1.33 for every $1 spent in January, 1969. Meat and poultry costs, taken alone, have soared by more than 50 per cent.

The cost of buying and maintaining a home—including fuel and utilities—has risen almost as fast as food over the same span. Medical care and public transportation are among other leaders in the inflation parade.

It's no wonder then that many people, earning more than ever before, still feel pinched for money.

WHO'S LOSING OUT

If you haven't had raises of 6 or 7 per cent a year since 1969, you're probably falling behind in the race with inflation and taxes.

A married man with two children who made $10,000 in 1968 would need an income of $12,689 today just to stay even. Of the extra $2,689, nearly $2,260 would have been gobbled up by inflation, the rest by taxes.

If your income now is in the $32,000 range, you're no better off than if you made $25,000 five years ago.

Looking at the toll of inflation in another way:

Measured by how much the consumer's dollar will buy, a dollar that was worth 100 cents when Mr. Nixon took office now is worth only 80 cents.

If inflation is as bad over the next four and a half years, the dollar will be worth only 65 cents by early 1978.

## OMB STRIKES AGAIN—AT GEOTHERMAL ENERGY RESEARCH

Mr. BIBLE. Mr. President, I learned today that the Office of Management and Budget has again refused to release funds authorized and appropriated by the Congress for geothermal energy research by the Atomic Energy Commission. I understand that OMB has advised the Commission that the $4.7 million appropriated for the current fiscal year is being held in reserve pending final definition of the overall energy research and development program to be undertaken this year. I also understand that OMB has indicated that its action should not be viewed as an impoundment of these funds but merely as a temporary deferral of funding.

I hope this is true, but I am concerned nonetheless. As the Senate knows, OMB refused to release funds appropriated for geothermal research by AEC in both fiscal years 1972 and 1973. In effect, they ignored the Congress direction that an AEC geothermal research program be launched. And it will also be recalled that the administration requested no funds at all for geothermal in the AEC budget it proposed for the current fiscal year. The $4.7 million I am talking about was added to the appropriation bill by the Congress and is a reaffirmation of the Congress direction that this program get underway.

I want, of course, to see our energy research appropriations applied in an orderly way, but against this kind of background I think one is entitled to be concerned. Impoundment by any other name is still impoundment. The AEC-Geothermal program is already long overdue. Congress has spoken and expects the administration to permit the AEC to get on with its geothermal research without delay. Enormous quantities of heat energy lie locked in geothermal formations throughout the West. Geothermal's potential for clean energy production should be among the administration's highest energy research priorities. The $4.7 million now being withheld is a modest sum. Any failure to commit this money would be contrary to the administration's own commitment to energy research and would be a great disservice to the Nation.

I hope the President will see to it that this appropriation is released without further delay.

## A PEACE CORPSMAN REVISITS AN AFRICAN VILLAGE

Mr. FULBRIGHT. Mr. President, much is said on this floor about the Peace Corps and foreign aid and Radio Liberty. Most of what is said originates in the bureaucracy which survives on the money we appropriate.

In the September 9 issue of Parade magazine there appeared an article by one of the participants in the field. I recommend it to my colleagues, and ask unanimous consent to have it printed in the RECORD.

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

A PEACE CORPSMAN REVISITS AN AFRICAN VILLAGE—WAS HIS WORK A WASTE OF TIME?

(By Thomas Moore)

(EDITOR'S NOTE.—The Peace Corps came into being on March 1, 1961, by executive order of President John Kennedy. It has since sent more than 50,000 volunteers overseas at a cost of almost one billion dollars. The subject of much controversy over its 12 years, the Peace Corps has now become a part of ACTION, the recently created superagency.

The writer, Thomas Moore, served for one years between 1968 and 1969 as the sole Peace Corps volunteer in the village of Cherif Lo (pop. 500) in Senegal, West Africa, an underdeveloped country of nearly 4 million people. This summer he returned to the village for a visit.)

"Assane N'Diaye?"

An old woman was sitting at the foot of a heavy baobab tree, sifting peanuts in a reed basket. The bad peanuts, dried up from lack of water, piled high on the sand. Life in the village had never been good but the West African drought had now dragged into its fifth year.

"Assane N'Diaye. Nio n'ga legi? (You have come back)."

She called out the name given to me in Wolof, the native language, like a question, but there was no doubt she remembered me. Few "tubabs" (whites) ever came to the village.

It had been four years since I had been a Peace Corps volunteer in Cherif Lo, a thatched-hut village about 80 kilometers inland from Dakar, the capital of Senegal. For a year I had worked with the villagers building an irrigation system for a small complex of vegetable gardens. The cement for a well, a motor pump, gasoline, a water reservoir and pipes and faucets for watering basins had been paid for with $1400 from the American Embassy Self Help Fund. It wasn't much. But it was the sort of project Peace Corps volunteers had been—and still are—carrying out around the world. I had come back to see if it had amounted to anything.

In the year of Watergate, the idea of the missionary Peace Corps seemed curiously dated, a youthful fad of the sixties—something no one talks about anymore. Yet 6900 volunteers were sent abroad last year, and another 7350 are going this year.

IT'S BEEN A LONG TIME

The old woman brushed the flies from her face and fanned herself a bit to relieve the stifling heat. We went through the traditional greetings: "Asalam alikoum salam. M'ba diam n'gam? (Do you have peace?)

Diam arek anam. (Peace only.) Ana wa Amerique? (How's everybody in the States?) Nyunga fe rek. (Just fine.) Wai yo, Assane N'Diaye, git nalla gisse (Why Assane, it's been a long time since I've seen you)."

It *had* been a long time, but surprisingly the Wolof came back to me, not only the sound of the language but the gentle kidding that had first struck me as a put down, the relaxed pace as though any pressing matters were not really that important (and they weren't). The heat of the village always made sitting under the shade of a tree to talk awhile a genuine pleasure. The rest of the world may be in a hurry to get somewhere, to modernize, change, but not Cherif Lo. Things are all right just the way they are, as they have been for generations past, and no suggestion of progress (much less a village meeting to discuss problem-solving at precisely 3 o'clock) is going to interrupt a prayer class or an easy afternoon of drinking tea and holding a "wahtan" (palaver).

LURE OF ADVENTURE

Two weeks after graduating from college in the politically tumultuous spring of 1968, I was dropped off in Cherif Lo—part of the second wave of Peace Corps volunteers who came not so much out of idealism as a kind of escapist despair with the United States and hope for a little romantic adventure in an exotic land. And maybe there was an outside chance we really could do something.

I remember getting out of a bush taxi from Dakar on the paved road about a kilometer from the village. Two baobab trees marked the spot where a sand trail snaked its way leisurely through bramble bushes and anthills, under a merciless sun, to the village. But from the road, there was nothing, no visible destination for a white man. Only Africans ever got off taxis between the larger towns. As the taxi drove off, the occupants craned their necks to stare at me as though I were walking off into the bush to die.

ALONE IN AN ALIEN LAND

My first weeks had been hard. As the only Peace Corps volunteer in the village, I was alone among people whose language and culture were totally alien. Looked on as an object of curiosity, I had trouble doing the simplest tasks of survival such as boiling the water I drank and getting food. Worse and least expected was the absence of any kindred spirit to talk to, someone to whom I could confide the mix of emotions and observations of a stranger in a strange land.

I had busied myself with building a few fences for privacy, learning enough of the Wolof language to get by, and occasionally venturing around the village to make myself known. The hardest problem was to explain why I was there. The question was often asked. To tell the villagers I had come to help bring them progress seemed condescending. Second, it didn't make much sense to them. Come on, what's in it for you, they seemed to say. I soon took to making up more plausible reasons for why I was there, like saying I was paid a lot (volunteers receive about $135 a month for living expenses in Senegal, what some villagers earn in a year). Once that question was settled, I was accepted. As in the States, nobody does something for nothing.

Returning to the village this year was like going back to high school, wondering if the teachers would remember your name. This time I arrived in a rented car. Life had not changed appreciably in Cherif Lo. The incessant thump of women beating millet in large wooden urns resounded like a muffled heartbeat from inside the village. Smiling and shy, a crowd of barefoot kids ran up to shake hands with me. The focus of memory had blurred their blemishes, their eyes red, yellow or swollen from diseases like malaria or cholera, the scabs on their legs covered with flies, the runny noses.

POTATOES AND PHOTOS

I trudged through the hot sand into the family compound of Moussa N'Dir, the treasurer of the Cherif Lo cooperative with whom I had lived. Word had already spread that I was back and Moussa came out to greet me in full dress, an Arabic Kaftan and fez. I had brought a 100-kilo sack of potatoes in the car as a gift (rice, the usual staple, was almost impossible to come by in the country because of the drought) and some 8 x 10 glossy photographs of village life I had taken.

Local protocol indicated that lunch taken at each of the homes of the four "animateurs," or local leaders, with whom I had worked. After that there was a long afternoon of drinking tea.

Finally, the *animateurs* reluctantly agreed to go out to the well. As I had suspected, the pump had broken down three years earlier. The vegetable gardens had been abandoned. No one from the government's technical services took it upon himself to fix the pump. Instead, the sheetmetal water reservoir had been dismantled for no apparent reason and the pipes and faucets ripped up and taken into the prefecture, for "safekeeping." The odds were good, as is common in the country, that some low-level government *fonctionnaire* (official) either sold the material for his own profit or took it for his own use. It was out of line, certainly undiplomatic, to inquire further about such things.

I stared at the 300 meters of one-foot-deep trenches we had dug for the pipes and thought how ridiculous they looked. They ran off in odd directions from the dismantled reservoir, cutting through age-old paths and bush lines demarcating the family fields. It looked as if the pipes had been removed in a hurry. It probably took a day to undo the work of a year.

TAKES IT IN STRIDE

I wasn't particularly angry, nor did I jump up and down, or slam the car door, or drive around in circles like I was a little crazy—my routine four years ago when I would show up for work to find that half the work team had decided to take the day off. Now it just seemed kind of pointless.

The village *animateurs* looked at me and I looked at them and there was nothing more to say. It was beyond either them or me. There had been no follow-up to that project, either by the Senegalese government or the Peace Corps.

For some time now the Peace Corps has pointed with curious pride to the fact it has phased most of its programs into host-country government bureaucracies. But the problem for the volunteer was that his work, well-intentioned, often naive, but sometimes practicable and even ingenious, always seemed to be sabotaged by *fonctionnaires*. Whether incompetent, corrupt or just hostile to Americans, these government officials, under whom the volunteers worked, were never really receptive to the Peace Corps. Certainly villagers and students—the people for whom and with whom volunteers worked—came to respect some of the things we did and the people we were. But many *fonctionnaires*, at least in Senegal, resented the volunteers. If we weren't spies, they thought we were arrogant or there to embarrass them.

There as almost no material, technical or even political cooperation in the government for Peace Corps work. Volunteers spent much of their time fighting red tape—it once took me two days in a prefecture to get seven authorizations for a sack of United Nations cement to repair a well in the village. Talking over the problems with Senegalese superiors was even more frustrating.

CONVENIENT MYTH

I don't think anyone pretends any longer that the Peace Corps has even the remotest connection to real social and economic development in the Third World. At most, as many volunteers still justify their experiences, the Peace Corps is a kind of experiment in international living. But the myth that the Peace Corps is a significant contribution to the problems of underdeveloped countries is maintained as the public diplomatic posture by both host countries and Peace Corps officials. It is my feeling that the Senegalese government requests Peace Corps volunteers only because to turn down the American offer would look unfriendly and make it more difficult to get crucial loans and aid from the World Bank and the U.S. government. For its part, the Peace Corps now seems to take the line that if a country requests volunteers, that's all the justification it needs to send them.

ANONYMITY AND PERSISTENCE

After 12 years of unremarkable results, the Peace Corps seems to have given up altogether the idea of changing anything. Instead, it is content to have achieved a certain comfortable anonymity, behind which it has settled into unquestioning bureaucratic ways. No longer does it ask why it should exist—the challenge of any vital new enterprise—but only how it might persist.

## SENATOR RANDOLPH TESTIFIES ON HEARING AIDS AND THE OLDER AMERICAN

Mr. RANDOLPH. Mr. President, it was recently my privilege to testify on the subject of "Hearing Aids and the Older American" before the Special Committee on Aging, chaired by the able Senator from Idaho (Mr. CHURCH).

I discussed a critical problem confronting hearing aid users, numbering in the millions, which was first brought to my attention in a newspaper account of a speech given by Mrs. Virginia Knauer, Special Assistant to the President for Consumer Affairs. This matter—the incompatibility between hearing aid inductive pickups and the new model Trimline telephones—has been receiving my careful attention.

I applaud Senator CHURCH for his efforts through our Committee on Aging. It is my hope that the combined work of that committee and the Subcommittee on the Handicapped, which I have the responsibility of chairing, will serve as a catalyst to bring together those agencies that have a responsibility to the consumer to assist in a resolution of this unfortunate situation.

Mr. President, I ask unanimous consent that my statement, together with letters and other pertinent material, be printed in the RECORD.

There being no objection, the statement, letters, and material were ordered to be printed in the RECORD, as follows:

STATEMENT OF SENATOR RANDOLPH

Mr. Chairman, I thank you for the opportunity to present views on an extremely important area which until recently has been neglected—the problems of the hearing aid users.

In the 87th Congress, a former colleague, the late Senator Estes Kefauver, conducted hearings on Prices of Hearing Aids. Unfortunately, his untimely death brought that investigation to a halt.

As Chairman of the Subcommittee on the Handicapped of the Senate Labor and Public Welfare Committee, I read with interest that Mrs. Virginia Knauer, Special Assistant to the President for Consumer Affairs, called public attention to another problem facing the hearing aid user: the matter of incompatibility between hearing aid inductive

pickups and the new model trimline telephones.

I wrote to Mrs. Knauer, offered my assistance, and instructed my staff on the Subcommittee to pursue this subject. Subsequently, there have been meetings, which have included representatives of your committee as well as our subcommittee, with representatives of associations for retired, aging and deaf people; the telephone industry; the hearing aid industry; and Gallaudet College, the only college for the deaf in the world. These meetings were held to explore all possibilities which might lead to a prompt resolution of the incompatibility problems.

In June, I wrote to Chairman Dean Burch, Federal Communications Commission, and Chairman Lewis Engman, Federal Trade Commission. In my letters I sought answers to several questions which I felt should be considered by both of these agencies.

As is usually the case when one begins an inquiry, the response I received from Commissioner Burch was too general. In a subsequent letter, I have raised several points on which I would like to have further consideration and views from Mr. Burch. Commissioner Engman has not responded to my letter. However, I did receive a letter from Mr. Gerald Thain, Assistant Director for National Advertising for the Federal Trade Commission.

As I read it, the thrust of Mr. Thain's response to my question regarding the responsibility of the two industries (AT & T and the Hearing Aid Industry) to disclose material information regarding the potential limitations on the usefulness of equipment implies that there may be a violation of Section 15 of the Federal Trade Commission Act.

I would like at this time to ask that this correspondence be included in the record of these hearings, along with an article on hearing aids which was published in the May, 1971, issue of *Consumer Reports*. This article embodies a most important and complete discussion of what hearing-impaired persons need to know.

Mr. Chairman, I applaud your efforts to assist in helping the 2½ million Americans who use hearing aids. All of us are aware that communication is vital to a person with impaired hearing. Most of these hearing aid users are senior citizens whose reliance on communication with their doctor, pharmacist, and hospital is vital to their health and welfare. Many of them are veterans whose hearing loss is service connected, and we must concern ourselves with their needs. Of equal concern are the children for whom the hearing aid is their link to the world of development through educational experiences. Certainly a nation which has the technological expertise to communicate with people in outer space and people on the moon can develop modes of communication at reasonable cost which would be useful to those Americans who suffer from the nation's number one handicapping disability—impaired hearing.

I know I speak for my colleagues on the Subcommittee when I re-emphasize our commitment not only to the hearing impaired, but to all handicapped persons. We are committed to doing everything in our power to solve the problems facing this population.

Again, I appreciate the opportunity to express my interest in this matter.

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MARCH 1, 1973.

VIRGINIA H. KNAUER,
*White House Adviser on Consumer Affairs, New Executive Office Building, Washington, D.C.*

DEAR MRS. KNAUER: I read with genuine interest the news items which reported your activity in behalf of the three million hearing aid users in our country. It is my sincere hope that your efforts to assist the telephone and hearing aid industries in resolving this issue will be successful.

As Chairman of the Senate Subcommittee on the Handicapped, I commend your efforts to bring about a solution to the problem that exists for hearing aid users when trying to use the new telephone.

All of us are aware that communication is vital to a hearing-impaired person. As you stated, it would be a disaster if the use of the most common mode of communication, the telephone, becomes a useless instrument to the one and one half million Americans who will no longer be able to take advantage of the new model telephone. I share your concern for these one and one half million persons, most of whom are senior citizens whose reliance on the telephone is a way of life. For these people the telephone is generally their only link to their doctor, pharmacist, hospital, and other vital services.

I have asked the staff of the subcommittee to keep me apprised of this situation. If we can assist you in this worthwhile endeavor, please do not hesitate to call on us.

With very best wishes, I am,

Truly,

JENNINGS RANDOLPH.

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THE WHITE HOUSE,
*Washington, April 9, 1973.*

Hon. JENNINGS RANDOLPH,
*U.S. Senate,*
*Washington, D.C.*

DEAR SENATOR RANDOLPH: I was delighted to receive your recent letter expressing your interest in and support for efforts to resolve the problem of incompatibility between the new generation of telephones and existing hearing aid devices.

I certainly intend to look further into the efforts of the hearing aid industry and telephone companies to bring to an equitable resolution this problem which has been developing for those with severe hearing problems over the course of years. I will be pleased to keep your staff further advised of our efforts.

Thank you again for your expression of interest and support.

Sincerely,

VIRGINIA H. KNAUER,
*Special Assistant to the President for Consumer Affairs.*

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JUNE 18, 1973.

Mr. DEAN BURCH,
*Chairman, Federal Communications Commission, Washington, D.C.*

DEAR MR. BURCH: The New York Times of May 28 (copy of Story enclosed) indicates that for the last seven years the Hearing Aid Industry Conference and A.T. & T. have known about and discussed in inter-industry sessions the problem of incompatibility between the new generation of telephones (which eliminate magnetic leakage) and existing hearing aids of the very hard of hearing which are equipped to pick up such leakage.

I understand that since Mrs. Virginia Knauer, Special Assistant to the President for Consumer Affairs first made public this problem of incompatibility, A.T. & T. has proposed a solution based on the marketing to the very hard of hearing of an acoustic coupler (with an estimated cost of $5 apiece) which, when strapped to the new phones would again render them compatible. Because the new "solution" will apparently result in a further expense to the handicapped who did not create this problem, several question have occurred to me which I believe the FCC should consider.

1. When the decision of the telephone industry to move forward with the new phones was apparent to both industries, what obligation to inform their customers was imposed on both industries, and how did they discharge this obligation? During the seven year period, we were purchasers of hearing aids and telephone services told about the inevitable problem?

2. Have both industries over this seven-year period expressly or impliedly guaranteed continued service from their respective pieces of equipment?

For example, if I buy a hearing aid with special (and no doubt more expensive) equipment to pick up magnetic leakage isn't there an implied representation that it will continue to be workable (compatible with telephones) if kept in good working order? Is the withholding of information about incompatibility (should such withholding be found to be the case) a fair trade practice?

3. What, in the opinion of the FCC, is an equitable solution to the problem of those hard of hearing who have purchased equipment and service over the last seven years with reasonable expectations of continued good service?

Your consideration of the above matters will be greatly appreciated by the Subcommittee on the Handicapped. A similar letter is being sent to the FTC.

Truly,

JENNINGS RANDOLPH,
*Chairman, Subcommittee on the Handicapped.*

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NEW PHONES COMPLICATE HEARING AIDS

(By John D. Morris)

WASHINGTON, May 27.—A resolution may be near on a question of growing concern to the hard of hearing—new telephones that are incompatible with present hearing aids.

But it is still uncertain whether the problem will be resolved to the satisfaction of about one million persons with extreme hearing impairment, who are unable to use the new phones. The answer may come from soundings now under way by the Federal Office of Consumer Affairs, headed by Mrs. Virginia H. Knauer.

A new effort to end a seven-year impasse over the problem was generated by Mrs. Knauer last February. She accused the hearing aid and telephone industries of "passing the buck" to each other.

At a recent meeting arranged by the Office of Consumer Affairs, the American Telephone and Telegraph Company offered to give hearing aid manufacturers the rights to produce a portable adapter, developed by the telephone company, that could be attached to the new telephone receivers. The device, called an acoustic coupler, makes telephone pickups on present hearing aids compatible with all types of telephone receivers.

The telephone company said it was willing to produce the devices and sell them at cost, estimated at $5 apiece, if the hearing aid industry rejected its offer of production rights.

The Hearing Aid Industry Conference, the trade association of hearing aid manufacturers, has not yet responded to the offer.

James P. Ince, executive secretary of the conference, said by telephone Friday that the industry hoped for "a better solution" and expressed confidence that the telephone company's researchers could find one.

Meanwhile, Mrs. Knauer's office is trying to set up a meeting between representatives of the two industries and leaders of 13 or 14 organizations concerned with the problems of persons with impaired hearing. The purpose is to assess the telephone company's proposal and to discuss alternatives.

One option is for the telephone company to install special coils in all of the new telephones at an estimated cost of $5 million, or 5 cents for each of its 100 million customers. But the telephone company sees this as an unwarranted levy on all users to subsidize a problem for relatively few. Independent telephone companies, with more than 20 million customers, are generally in accord with the position of American Telephone and Telegraph, according to a spokesman for the independents.

About half of the three million hearing aids

now in use have a device that picks up magnetic leakage from telephone receivers to make sound from the receivers audible to the hard-of-hearing. There is no such leakage from the new phones, so the pickups do not work.

The portable device developed by American Telephone and Telegraph is housed in a disk that is slightly smaller than the telephone's earpiece and fits inside it. The device has snap-on straps and the company says it can "easily" be carried in a person's pocket or purse.

Spokesmen for the hearing aid industry contend, however, that carrying the device around and maintaining batteries to power it would prove to be inconvenient to users.

Home phones of the present type will continue to be available to the hard-of-hearing and some pay phones will continue to have special amplifiers. When away from home, however, persons with severe hearing impairment may find it increasingly hard to find the old phones to use.

More than nine million phones of the new type have been installed by American Telephone and Telegraph, and the present installation rate is two or three million a year.

It is estimated that at least 10 million phones of independent companies are incompatible with the pickup devices of present hearing aids.

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FEDERAL COMMUNICATIONS COMMISSION,
*Washington, D.C., July 9, 1973.*

Hon. JENNINGS RANDOLPH,
*Chairman, Subcommittee on the Handicapped, U.S. Senate, Washington, D.C.*

DEAR SENATOR RANDOLPH: This is in response to your letter of June 18, 1973, regarding compatibility of use of hearing aids in conjunction with telephones. You had enclosed a copy of a news article which appeared in the New York Times on May 28, 1973.

The thrust of the article in the New York Times would lead uninformed persons to believe that hearing aids will not function in conjunction with telephone instruments of newer design which do not have excess stray magnetic flux leakage. This simply is not wholly accurate.

If a hearing aid functioning in its normal acoustic pickup mode works satisfactorily for face to face conversations, it should work reasonably well with all telephone instruments. However, hearing aids using the acoustic pickup mode for telephone conversations will also acoustically pick up undesirable local ambient background sounds of the type which may annoy telephone users who have unimpaired hearing. Such undesirable background noise for hearing aid users can be eliminated through the substitution of an inductively coupled pickup mode for the normal acoustically coupled pickup mode in the hearing aid instrument. Thus, certain hearing aid instruments are capable of being selectively switched to either mode of pickup.

In the inductive coupling mode, it has been the hearing aid industry practice to electromagnetically (inductively) couple the hearing aid packup to telephone instruments through the excess stray magnetic flux leakage surrounding the receiver element in the handpiece of the telephone instrument. The older types of receivers, which have excess stray flux leakage, are relatively inefficient and are being replaced by a more efficient type resulting in great savings in cost and conservation of materials which are in short supply. Unfortunately, such replacement receivers do not have a strong stray magnetic flux field sufficient to support their effective coupling to hearing aid instruments through the inductive mode, and therein lies the dissatisfaction to which you refer.

To the best of my knowledge, we were first alerted on this matter in August of 1969 when a person, who has a hearing impediment, moved to a General Telephone Company area from a Bell Telephone Company area where older telephone receivers were in use. He experienced difficulty in attempting to inductively couple his hearing aid to the General Telephone Company instruments.

The General Telephone Company for some twenty years has purchased or manufactured and installed telephone sets with receiver units which *do not* have an excess magnetic flux leakage. This explains why the complainant could not utilize the inductive coupler in his hearing aid in the General Telephone Company territory. We understand that between 5 and 10 percent of the telephone instruments in the operating territories of the United Telephone Company do not contain an excess magnetic flux leakage and about 10 percent of the Bell Telephone System's telephone instruments do not. In Europe, most telephone instruments also *do not* have high magnetic flux leakage and thus the problem with inductive coupling appears to be quite universal. The present trend appears to be a phase-out of receivers with high magnetic flux leakage.

In reply to your question, we have not placed any obligation on the hearing aid industry, or the telephone industry with regard to requiring them to provide inductive coupling features in their instruments. We do not have regulatory jurisdiction over the hearing aid manufacturing industry and, similarly, lack primary jurisdiction over telephone sets which are a primary part of the facilities used in providing exchange telephone service. As you know, the Communications Act specifically excludes the Federal Communications Commission from any authority with respect to charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate and exchange telephone services of any telephone company; such local service matters are subject to the regulatory authority of State commissions in the various States.

At least as early as 1966, the telephone industry has been in touch with the Hearing Aid Industry Conference and the National Hearing Aid Society concerning telephone usage by persons with hearing impairment, and hearing aid suppliers such as Radioear have been instructing their customers regarding the best use of the telephone when using a hearing aid, including information regarding certain telephone instruments not being usable with inductive pickups.

In cooperating with the hearing aid industry to accommodate hearing aid users who wish to use the inductive coupling pickup mode when using a telephone without excess stray magnetic flux leakage, a number of years ago Bell Telephone Laboratories designed and manufactured a substantial number of prototype electromagnetic-acoustic coupler units which were turned over to the hearing aid industry for evaluation and manufacture on a royalty-free basis. This coupler is a small unit which the user places in contact with the receiver end of the telephone instrument; the coupler is activated by acoustic sound from the telephone earpiece and generates an electromagnetic field of flux for coupling to the inductive pickup of the hearing aid. It is estimated that such couplers could be manufactured and sold for about $5.00 apiece. There is no dispute that the couplers work satisfactorily, but the hearing aid industry has shown little interest in manufacturing such units, which could be substantially reduced in size in comparison to the prototype units. However, based on recent discussions between telephone company spokesmen and the Hearing Aid Industry Conference, it appears that HAIC is going to give further consideration to the possibility of its members manufacturing the coupler. Representatives of the Bell Telephone System have indicated that they are inclined to manufacture the coupler and sell it without profit if the hearing aid industry does not undertake its manufacture. Though we do not yet have a positive answer on this point, it appears that it is not unreasonable to expect that hearing aid users who insist on using inductive coupling to the telephone instrument be required to use their own couplers with telephones which do not have excess stray magnetic flux leakage. It is represented that the acoustic coupler will have a much longer life than a hearing aid which is said to have an average service life of 3.25 years.

Generally, the telephone industry has been cooperative in providing, upon request of persons having impaired hearing, for their homes and offices the older types of telephone sets which have high magnetic flux leakage. We believe that they intend to continue to do so.

I appreciate your giving me the opportunity of making our views known on this matter and trust that we have been of some assistance in that regard. Please be assured that we will continue our efforts to keep abreast of developments.

Sincerely,

DEAN BURCH, *Chairman.*

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SEPTEMBER 6, 1973.

Hon. DEAN BURCH,
*Chairman, Federal Communications Commission, Washington, D.C.*

DEAR MR. CHAIRMAN: Thanks for your recent reply to my letter of June 18 concerning the compatibility problem between new telephones and existing hearing aid devices. I am grateful for your detailed comments. Your response raises several points on which I would appreciate your further consideration and views.

First, you indicated in your July 9 letter that "the older types of receivers, which have excess stray flux leakage, are relatively inefficient and are being replaced by a more efficient type resulting in great savings in cost and conservation of materials which are in short supply." I would be very interested to learn in what way the older telephone receivers are inefficient; how great the savings to be achieved by conversion to the new type are; and to whom these savings would accrue.

Second, you indicated that it was unfortunate that the "replacement receivers do not have a strong magnetic flux field sufficient to support their effective coupling to hearing aid instruments through the inductive mode". I agree. Perhaps the magnitude of this unfortunate situation can be illustrated by an estimate provided by the Hearing Aid Industry Conference (also mentioned in the *New York Times* article) that approximately one-half of the three million hearing aids currently in use have these inductive pickup switches and are already or soon will be rendered useless with the new telephone. From your statement that "certain hearing aid instruments" are capable of being selectively switched to either the acoustic or inductive mode (emphasis supplied), it appears that you may not be aware of the potential impact of the changeover for the hearing impaired. I am somewhat puzzled by your statement that hearing aid suppliers have been informing their customers that certain telephone instruments are not usable with inductive pickup switches. This was not the impression of members of my staff who attended a recent briefing by representatives of the Hearing Aid Industry Conference and A T & T held by Mrs. Virginia Knauer. On the contrary, it would seem that very little public discussion or information efforts had been undertaken by members of either industry to advise their customers of these aspects of the change.

Third, I can appreciate that the FCC may lack regulatory jurisdiction over the hearing aid manufacturing industry and primary jurisdiction over the telephone sets, themselves. However, allow me to rephrase my original questions:

When these design changes were contemplated and decided, was there not an inherent obligation on the part of both industries to advise their customers of the change

and its meaning for the hard of hearing whose hearing aid telephone pickups would not be compatible with the new telephones? This seems to me directly related to the matter of whether the industries involved have expressly or inferentially guaranteed continued service from their instruments throughout this period (through advertising, sales presentations, promotional materials, etc.).

I am also troubled by your statement that it would not be unreasonable to expect that hearing aid users who *insist* on using inductive coupling to the telephone instrument be required to use their own couplers with telephones which do not have excess stray magnetic flux leakage (emphasis supplied). This, together with your earlier statement regarding "selective" switching of hearing aid devices to either mode of pickup, would appear to reflect a belief on the part of the FCC that such coupling is a matter of individual choice. I can assure you that to the hearing handicapped such switching or coupling falls much closer to necessity than to choice. Accordingly, I believe closer consideration of this matter by FCC may be in order, with particular emphasis on the responsibilities of the industries involved to their customers (who were neither consulted, nor apparently even advised in most cases) regarding the change and its potential impact.

May I have your further views on these points?

With sincere thanks for your attention to this request, I am

Truly,

JENNINGS RANDOLPH,
*Chairman, Subcommittee on the Handicapped.*

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JUNE 18, 1973.

Mr. LEWIS ENGMAN,
*Chairman, Federal Trade Commission, Washington, D. C.*

DEAR MR. ENGMAN: The New York Times of May 28 (copy of story enclosed) indicates that for the last seven years the Hearing Aid Industry Conference and A.T. & T. have known about and discussed in inter-industry sessions the problem of incompatibility between the new generation of telephones (which eliminate magnetic leakage) and existing hearing aids of the very hard of hearing aids of the very hard of hearing which are equipped to pick up such leakage.

I understand that since Mrs. Virginia Knauer, Special Assistant to the President for Consumer Affairs first made public this problem of incompatibility, A.T. & T. has proposed a solution based on the marketing to the very hard of hearing of an acoustic coupler (with an estimated cost of $5 apiece) which, when strapped to the new phones would again render them compatible. Because the new "solution" will apparently result in a further expense to the handicapped who did not create this problem, several questions have occurred to me which I believe the FTC should consider.

1. When the decision of the telephone industry to move forward with the new phones was apparent to both industries, what obligation to inform their customers was imposed on both industries, and how did they discharge this obligation? During the seven year period, were the purchasers of hearing aids and telephone services told about the inevitable problem?

2. Have both industries over this seven-year period expressly or impliedly guaranteed continued service from their respective pieces of equipment?

For example, if I buy a hearing aid with special (and no doubt more expensive) equipment to pick up magnetic leakage isn't there an implied representation that it will continue to be workable (compatible with telephones) if kept in good working order? Is the withholding of information about incompatibility (should such withholding be found to be the case) a fair trade practice?

3. What, in the opinion of the FTC, is an equitable solution to the problem of those hard of hearing who have purchased equipment and service over the last seven years with reasonable expectations of continued good service?

Your consideration of the above matters will be greatly appreciated by the Subcommittee on the Handicapped. A similar letter is being sent to the FCC.

Truly,

JENNINGS RANDOLPH,
*Chairman, Subcommittee on the Handicapped.*

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FEDERAL TRADE COMMISSION,
*Washington, D.C., September 7, 1973.*

Re corres. No. 060329.

Hon. JENNINGS RANDOLPH,
*Chairman, Subcommittee on the Handicapped, U.S. Senate, Washington, D.C.*

DEAR CHAIRMAN RANDOLPH: This is in further reply to your letter to Chairman Engman of June 18, 1973 concerning the problem of incompatibility between the new generation of telephones (which eliminate magnetic leakage) being installed by AT&T and hearing aids which have the capability of picking up magnetic leakage.

Your letter posed several questions which you felt should be considered by the Federal Trade Commission. At the outset, however, I should make it clear that the provisions of the Federal Trade Commission Act exclude common carriers such as AT&T from the jurisdiction of the Federal Trade Commission. The Federal Communications Commission has the basic regulatory function in the case of AT&T. Your first question dealt with the responsibility and efforts of both AT&T and the hearing aid industry to inform members of the handicapped public of the changes which were and are taking place in this area. While the Commission staff's investigation has not yet been completed, I understand that the efforts which have been made to inform members of the handicapped public have been minimal at best.

Your second question asked whether AT&T or the hearing aid industry have expressly or impliedly guaranteed continued service in the magnetic mode from their respective pieces of equipment. Again, my response is based on the interim report I have received from my staff. It seems to me that the potential limitations on its usefulness may be a material fact, the disclosure of which is mandated by Section 15 of the Federal Trade Commission Act.

Your third question asked the opinion of the Federal Trade Commission as to an equitable solution to the problems caused by AT&T's phasing out of the phones which produce magnetic leakage. At this stage in the Commission's investigation of this matter, it appears that this problem is capable of being satisfactorily addressed in two basic ways. The old style phones (with magnetic leakage) can be installed in the home or office upon request of the handicapped customer. In instances in which this alternative is not feasible, an acoustic coupler can be installed (permanently or temporarily) on the non-magnetic leakage phones to convert the acoustic (sound) signal to a magnetic signal. AT&T has developed such an acoustic coupler and hopes to be able to supply it to be the handicapped public at cost (between $5 and $15) sometime next spring. AT&T has provided twelve working copies of their latest model acoustic coupler to the hearing aid industry so that it can have the benefit of AT&T's research in further refining the acoustic coupler to the needs of their customers. One very important benefit of the acoustic coupler is that it will enable those wearing hearing aids with a magnetic mode capability to use that capability on all phones. As you may know, only AT&T phones emit the magnetic leakage upon which this mode relies. Thus, approximately 20% of all phones in the United States and almost all foreign telephones have never been compatible with the magnetic mode.

Unfortunately, it apppears that the handicapped public is largely unaware of the potential of the magnetic mode of using the telephone or the limitations thereof. The education of the public seems to be the most important task at hand. I believe that it is the apppropriate function of the regulatory agencies involved to do whatever they can to encourage this educational process.

Sincerely yours,

GERALD J. THAIN,
*Assistant Director for National Advertising.*

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HEARING AIDS

I. WHAT THE BUYER SHOULD KNOW

(I am just as deaf as I am blind. The problems of deafness are deeper and more complex, if not more important, than those of blindness. Deafness is a much worse misfortunate. For it means the loss of the most vital stimulus—the sound of the voice that brings language, sets thoughts astir, and keeps us in the intellectual company of man.—HELEN KELLER.)

Helen Keller was totally deaf from infancy; she could not be helped to hear. Most persons with impaired hearing are partially deaf; they often can be helped. Much of the time, however, partial deafness goes uncorrected.

A pity. Even partial deafness causes enormous problems. Children with that handicap are sometimes mistakenly marked down as slow-witted. Adults may suffer strained relations with those forced to shout or repeat themselves. People of any age risk physical danger from things that they can't hear.

Why does hearing loss so often go uncorrected? Partially deaf persons may try to conceal their condition for fear it will set them back professionally or socially, or to deny advancing years. Vanity may play a part, too, as may ignorance of the kind of help available. But certainly, one important reason many people remain unhelped is the high price of hearing aids. Those tested for the Veterans Administration by the National Bureau of Standards, and reported on in this issue, have an average list price of nearly $350. Their individual components are worth, on the average, about $30. Later, we will discuss some of the forces that push up the price of hearing aids.

*Who can be helped?*

Loss of hearing may be caused by any number of things: too much earwax, an infection, certain diseases (such as measles or meningitis), a reaction to antibiotics, a head injury or a congenital defect. Perhaps the most common cause of all is a condition called presbycusis, a natural condition of aging. Almost nobody over 65 can hear as well as he did when he was 25.

Whatever the specific cause, there are two broad categories into which all hearing loss falls—"conductive" and "sensorineural." Conductive loss results from a failure in some part of the physical linkage of tissue and bones that conducts sound impulses to the nerve centers of the ear.

A conductive hearing loss usually blocks and muffles sound uniformly, as you would by covering your ear with your hand. Sensorineural loss results from damage to the nerve centers to that portion of the brain that receives and interprets audio nerve signals. It is characterized by the inability to hear particular sound frequencies, or tones. That may lead to a great deal of difficulty in understanding certain words and letters in normal speech. For example, "s" may be confused with "l" because the tones that differentiate them are suppressed. Sensorineural loss is also frequently accompanied by increased sensitivity to loud sounds, giving discomfort or pain, and by rattling and buzzing sensations. It is not at

all uncommon for a person hard of hearing to be suffering from both kinds of loss.

Most conductive losses can be corrected by surgery. But nearly all sensorineural losses cannot be corrected surgically or medically. People with sensorineural loss usually have no other recourse than to be fitted with a hearing aid, which will be helpful in many, but not all, cases.

If you have difficulty hearing, the first thing to do is to consult a medical doctor—preferably your family physician. He may decide that the problem is beyond his training and competence, in which case he'll probably refer you to an otolaryngologist or otologist. An otolaryngologist is a physician specializing in ear, nose and throat cases. An otologist is an otolaryngologist who further specializes in ear problems only. (For the sake of simplicity, we'll use the term otologist to describe both kinds of specialists.) It is possible, of course, to go directly to an otologist; you can find the names of those practicing nearest to you by calling your local medical society. The important point is to seek competent medical help.

(More is at stake than the loss of hearing. Occasionally, oncoming deafness is due to serious pathology close to the body's path of hearing—a tumor, for instance. A medical diagnosis could be of lifesaving importance.

If the otologist determines that a hearing aid will help you, he will give you extensive hearing tests himself or refer you to an audiologist for further evaluation. Audiologists are nonmedical, university-trained specialists who are skilled in evaluative and rehabilitative services for people with speech and hearing problems. A reliable indicator of an audiologist's skill is his possession of a Certificate of Clinical Competence issued by the American Speech and Hearing Association, the professional body that governs the field of audiology. That certificate should not be confused with the designation of Certified Hearing Aid Audiologist displayed by many hearing-aid dealers and granted by the National Hearing Aid Society, the dealers' trade association. A certified member of the professional organization has had to comply with much sterner training requirements than a member of the trade association.

One hitch is that it may take time and effort to get professional help. There is a distinct shortage of otologists and certified clinical audiologists. A second hitch is that professional help may cost a sizable sum. Fees vary throughout the country, of course. In the New York City area, we were told, an otologist's examination, including hearing test, would cost from $25 to $40, with the fee on the lower side of that range if the doctor refers you to an audiologist for more testing (which probably means he does less testing himself). The audiologist's fee for tests and follow-up exam can be expected to be from $20 to $30. An otologist in a Los Angeles suburb told us that he charges $12 for an initial medical checkup and $16 for a hearing test on the second visit. (But in downtown Los Angeles, he said, otologists charge $25 for hearing tests.) The audiologist with whom he works closely then charges $30 for a hearing-aid evaluation. Although we can't claim that those examples are typical for all areas, they indicate that it's not unusual to pay $60 or more for a proper introduction to a hearing aid.

*The hearing test*

The battery of tests in an audiological examination are of two types. One type employs an electrical device called an audiometer to determine the patient's ability to detect pure tones of various pitches. The second type investigates his comprehension of certain spoken words.

Both the pure-tone and spoken-word tests are performed with varying degrees of sound intensity, usually measured in decibels (dB). The number of decibels of a sound is derived logarithmically from the number of times that sound is stronger than the weakest sound audible to the normal ear. The more decibels, the stronger the sound.

Among other things, the ear specialist tests for two important limits at frequencies deemed important for speech intelligibility: the "threshold of hearing" and the "threshold of discomfort." Your threshold of hearing is the weakest sound you can hear. Your threshold of discomfort is the loudest sound you can hear without distress. A sound slightly louder than your threshold of discomfort marks your "threshold of pain," the point at which your ear will hurt. A person with normal hearing has a threshold of hearing of 0 dB and a threshold of discomfort of about 120 dB. In tests for loss of hearing, an elevation of the threshold of hearing is generally the most significant finding. The table below shows how, as the threshold rises in the general speech frequency range, the degree of impairment becomes more severe.

*Threshold shift (dB), characterization, and effect*

0–15 (in the worse ear): Normal; no difficulties.

15–30 (in the better ear): Near normal; difficulty with faint speech.

30–45 (in the better ear): Mild impairment; difficulty with normal speech.

45–60 (in the better ear): Serious impairment; difficulty with loud speech.

60–90 (in the better ear): Severe impairment; can hear only amplified speech.

90 or more (in the better ear): Profound impairment; cannot understand even amplified speech.

The range from the threshold of hearing to the threshold of discomfort is called the "dynamic range." With some conductive hearing losses, the threshold of hearing shifts upward by the same number of decibels in all frequencies, so that the dynamic range is uniformly compressed. With others, the threshold of discomfort also shifts upward, so that one can tolerate louder sounds than previously.

Sensorineural hearing losses can be more complicated Often, the threshold of hearing shifts differently for different frequencies. Thus, you might be able to hear a bass tone normally, a mid-range tone starting at 30 dB and a high treble starting at 50 dB. To further complicate matters, the threshold of discomfort is apt to fall, narrowing the dynamic range. A person so afflicted may ask you to speak louder because he can't hear you; then when you raise your voice moderately, it seems to him you're shouting. There are still other variations in sensorineural loss—for example, "holes" or gaps in the audible frequency range that prevent certain isolated tones from being heard normally. Complex and patternless sensorineural losses make the audiological specification of a hearing aid extremely difficult.

Adding to the difficulty are as yet unresolved questions in hearing-aid techonlogy: Should an aid be designed to give the wearer tonally even sound, by strongly amplifying only those tones heard most poorly? Or will an aid work just as well if it provides equal amplification of all frequencies or perhaps a moderate emphasis in the treble tones? On the answers to those questions, there is not complete agreement among hearing specialists.

*The hearing aid*

The important components of a hearing aid are a microphone to pick up sound, an amplifier to boost the loudness of the sound, a receiver (or earphone) to deliver the sound and a battery as a power source. Nearly all aids in use are air-conduction types, which put the sound directly into the ear canal through a molded ear piece. Bone conduction aids, which direct the sound against the skull, usually the mastoid bone behind the ear, have limited applications.

Four styles of air-condition aids are in common use (see photos on the facing page). The smallest is worn *in* the ear. Because it is so tiny, it can't provide powerful amplification and is used only in cases of mild hearing loss. The largest and most powerful aids are worn on the body, usually in a front pocket, with only the receiver extending by wire to the ear. Drawbacks of the body aid are that the microphone picks up rustling noises from the user's clothing and may be blocked by heavy overclothing.

But 80 percent of the hearing aids in use are of moderate size and intermediate power. They fall into two types: behind-the-ear (or over-the-ear) aids, the familiar half-moon shaped apparatus worn between the ear and head; and eyeglass aids, contained in the temple of the eyeglass frame.

The useful amplification of a hearing aid is referred to as "average gain," measured in decibels over normal voice frequencies. An aid with an average gain of 50, which would put it in the moderate-power class, can amplify sound 50 dB. The VA classifies hearing aids in three overlapping power categories: strong (as high as 65 dB), moderate, and mild (as low as 30 dB). Because of the overlap, some aids appear twice—and are given different performance scores in each case—in the VA ratings.

To prevent pain and damage to the ear, aids have a limit to the loudness they can produce. That limit is called the "maximum power output," also measured in decibels. It's usually set around the threshold of discomfort. Thus, if an aid with an average gain of 60 dB and a maximum power output of 120 dB receives a sound of 80 dB, it won't boost that sound to 140 dB, but rather cut it off at 120 dB. The average gain and maximum power output needed by any one person is determined in the audiological evaluation, although even those averages will not fully describe a hearing loss that is different for different frequencies.

Even when an aid is well fitted and working properly, most first-time users go through a period of adjustment. The quality of the sound, especially nonspeech sounds, is more "brassy" than would normally be experienced. That's due in part to the hearing aid's limited frequency range. It takes close to the full range of normal hearing, about 50 Hertz (Hz) to 10,000 Hz, to provide reasonably accurate timbre (the quality given to a sound by its overtones). Most hearing aids work in a narrower range of about 500 to 4000 Hz, which is sufficient to make speech sound intelligible but not entirely natural. Then, too, hearing aids don't handle all tones evenly, further distorting sounds. Finally many wearers of hearing aids find themselves unable to "tune out" distracting noises, as a person with normal hearing does; everything, from a slamming door to a jet flying overhead, sounds unnaturally loud and jarring. With patience, however, and perhaps rehabilitative therapy under the direction of a qualified audiologist, most people can adjust to the imperfections of hearing aids. Most often they're glad to, in return for the simple blessing of being able to understand what other people say.

But the blessing of being able to communicate easily is not conferred on a lot of people who are hard of hearing. The reasons are various, and they build up in a progression of medical, technical and economic realities.

First, the degree and quality of hearing loss can be difficult to determine precisely, even by medical specialists or trained audiologists. Judgments based on responses from patients are more subjective than the experts would like.

Second, no single model of hearing aid can come close to compensating completely for any type of hearing loss.

Third, the hearing specialist is severely handicapped in referring patients to a hearing-aid dealer by the bewildering profusion of aids on the market (500 or more) and by the shortage of unbiased technical information about them.

Fourth, the hearing specialist lacks a reliable means of prescribing a hearing aid with performance characteristics similar to the ones he wants for his patient. He may specify the patient's needs in such characteristics as frequency-response curves, gain, maximum power output and freedom from distortion. But a hearing-aid dealer has little way of relating those specifications to his own wares. It's likely that if 10 people were sent to 10 different dealers with the same specifications, they would come back with 10 different hearing aids. CU wishes that there were a universal performance-specification prescription method, akin to the method used in prescribing eyeglasses. For the present, though, it seems that the most practical way for otologists and audiologists to prescribe hearing aids is to name them by *brand* and *model*. We don't presume that we can supply all the answers needed to prescribe directly by brand and model, but we do hope that the VA ratings and accompanying text * * * will provide useful preliminary information for hearing experts.

Fifth, there's a seemingly insoluble economic problem.

In terms of technical complexity, a hearing aid is not much different from the audio-amplifier section of a transistor radio, with a microphone added. But the average price of the aids in the VA ratings is nearly $350. You could buy at least 10 complete transistor radios for that price. Why do hearing aids cost so much?

That very question was the subject of a 1962 investigation by the Senate Subcommittee on Antitrust and Monopoly. Testimony before the subcommittee brought out the fact that hearing aids are not particularly expensive to manufacture. To verify and update some of the Senate findings, CU asked a small manufacturer of hearing aids if he would be willing to tell us how much the parts cost to build his aid. The manufacturer wrote:

Our cost for component parts in our . . . hearing aid is as follows:

One Knowles magnetic microphone @ $6.10
One Knowles magnetic receiver @ $6.10
Three Siemens transistors @ 44¢ each
Seven Siegert resistors @ 10¢ each
Six Component, Inc. capacitors @ 35¢ each

We make the volume control, battery compartment and plastic shell. A few cents worth of wire, electrical and mechanical insulation goes into each hearing aid.

The itemized parts—the same parts widely used by other hearing-aid manufacturers—cost $16.32. The remaining parts cost perhaps $8, bringing the total for all parts to well under $30. Labor and all other costs, including substantial advertising and promotion, would bring the total manufacturing cost today, by generous estimate, to about $75 for the average hearing aid. The manufacturer sells the typical aid to the dealer—at near as can be reckoned from the information we have—for slightly less than twice his costs. That's about $140 for an aid retailing for $350.

It takes some agility of reasoning to justify a retail price of two and a half times the wholesale price. Dealers defend their disproportionately large markups by pointing to low-volume sales. And maybe they have a case—but only because the present marketing system has encouraged it. About 5000 dealers in the U.S. must divide up annual sales of about 500,000 hearing aids. That's an average of 100 sales apiece—not much to keep a business going unless one charges fancy prices. Perhaps one reason for the low sales is that dealers tend to push only one brand.

Fewer dealers carrying and promoting a wider variety of brands—running hearing-aid supermarkets, so to speak—would undoubtedly force prices down. How far down is hard to say. One New York City dealer who sells a multiple line of aids, without favoring a particular brand, estimates that high-volume sales would make a 30 per cent price reduction both possible and profitable. And there exists solid evidence that the price could be reduced much further than that. In fact, we report separately (above) on two models that list for no more than $90. Regrettably, neither would have scored very well in the VA tests, we think. But, then again, neither fell so far behind some of the VA test models in performance as to explain a price differential of $200.

Hearing-aid dealers contend that they have to devote an inordinately large amount of time to testing, fitting and following the progress of their customers. Maybe so, but except for repairs to defective models, CU believes, any unprofitable time expended is largely time wasted. Testing is a job for otologists and audiologists—not for a dealer with sales in mind. The patient's difficulties in adjusting to a hearing aid should be eased by *professional* advice, not advice from a dealer. As for fitting the earpiece, dealers customarily charge for that.

Dealers also argue that hearing aids would be cheaper if there weren't such widespread customer resistance. It's quite true that many who are hard of hearing—millions by almost any count—haven't availed themselves of an aid. Even an executive of the American Hearing and Speech Association, a group generally critical of dealers, has conceded, "The hearing aid industry is faced with the task of trying to sell hearing aids to individuals who need them but don't want them." But CU believes that at least some of the resistance would disappear if prices came down.

Finally, there is the common misconception that quality necessarily equates with price. Take, for example, the experience of a Salt Lake City dealer who tried to sell his hearing aids for nearly $100 less than competitors with the same brand and model. He said his potential customers told him, "Well, if you sell this for $210 and your competitor sells it for $309, there is something wrong with your product." His aids were identical, of course, to his competitors, but how were people to know?

*Wheeling and dealing*

Ignore wild advertising—ads promoting aids that operate on a new scientific principle, that can be worn invisibly, that can cure any hearing problem whatsover. If such claims were valid, the medical fraternity would long since have beaten a path to the manufacturer's warehouse door. The Hearing Aid Industry Conference (the manufacturers' association), the National Hearing Aid Society (the dealers' association) and the Federal Trade Commission all prohibit unethical advertising. No reputable dealer will make promises of efficacy.

Actually, no one is in a position to promise you sure relief from a hearing loss. But you're best off seeking medical and audiological advice first. Yet 70 per cent of the 500,000 people who bought hearing aids last year went directly to a dealer. One of the many possible consequences of buying a hearing aid without proper medical consultation is related in a letter from a CU reader.

She writes: ". . . in February 1968, I had been pressured into buying a [hearing aid] directly from a . . . salesman. He tested my ears in a hotel room and made the suggestion that seeing an ear specialist would be a waste of money. The aid was then fitted to the wrong ear and proved totally confusing and ineffective. After a visit to an ear doctor, I found I had Ménière's disease. . ." Ménière's disease is an affliction of the inner ear marked by intermittent episodes of vertigo, hearing loss and buzzing effects. In some instances, a hearing aid can aggravate the condition. In many instances, medical treatment can help.

Otologists with whom we consulted in preparing this report commented that gross misfittings by dealers occur regularly. One doctor recalls a lady who came to him four years after buying a hearing aid straight from a dealer. She at last realized that it wasn't helping her. The reason became apparent from the results of a hearing test. She was totally, irrevocably deaf in one ear, beyond the help of an aid. For four years, at the behest of a slick salesman, she had worn an expensive and entirely useless contraption. (When the patient confronted the dealer with the doctor's diagnosis, he refunded the money.)

Certainly, not all hearing-aid dealers are guilty of overstepping the bounds of their knowledge in the quest for a sale. Many, it should be acknowledged, have extensive practical experience with hearing problems. And many more are sincerely interested in helping people hear better. For what it's worth, some deplorable practices ascribed to dealers in the past are said to have been curbed through efforts of the manufacturers' and dealers' trade associations, as well as through licensing laws enacted by 24 states. CU believes that the prospective purchaser of a hearing aid would be wise to view dealers as tradesmen who can be helpful in explaining the workings of, and problems associated with, hearing aids—but not as professionals competent to diagnose and solve a hearing difficulty.

So you walk into a hearing-aid dealer's store purely as a customer—not as a patient or an examinee. If you've followed the steps CU has outlined, you'll bring specific instructions from your otologist or audiologist (although, as we've explained, the instructions may not be readily interpretable into the name of a specific model). You don't need any further evaluations or a sales pitch. But you probably could use a price break. Larger dealers can sometimes be persuaded to give a discount, so ask for one. Also, some dealers give price reductions to retired persons.

The dealer will probably take an impression of your ear canal to make the earpiece; a charge of $10 or $15 extra is common for that. And he can be quite helpful in showing you how to operate and take care of the aid you order.

You should insist that the aid be bought on a trial basis only. Most reputable dealers will rent you the aid for $1 a day for a month. If you aren't satisfied, they'll take it back. If you buy the aid, they'll deduct the rental fee from the price. During the trial period, you should return to your otologist or audiologist so that he can check whether the aid is working properly. Unless something is

obviously wrong, try a new aid the full month to give yourself a fair chance in getting accustomed to it. Failing that, you may decide that you need rehabilitative help.

*Little help with the bill*

Financial assistance from the Government is limited. The Medicaid program in 19 states and Guam offers assistance to certain categories of people who cannot afford to buy a hearing aid. The program covers diagnosis of the hearing problem and purchase of the aid. But the criteria for determining economic need are fairly restrictive.

The Medicare program for the elderly provides aid only for diagnosis leading to ear surgery—not for diagnosis calling for the purchase of an aid or for the aid itself.

The Federal Rehabilitation Services Administration, working through state departments of vocational rehabilitation, assists people whose hearing problems handicap employment. (Homemaking is often viewed as an eligible form of employment.) Information can be obtained from your state vocational rehabilitation agency. A pamphlet about the program, "Opportunities for the Hard of Hearing and the Deaf," which lists all the state agencies, can be obtained from the Community Disorders Branch, Rehabilitation Services Administration, Department of Health, Education and Welfare, Washington, D.C. 20201.

Help for children is provided through the Federal Maternal and Child Health Service. The program is administered through state health departments or state crippled children's services, which should be contacted for information. The children's service arranges for diagnostic work and hearing aids at no cost or at reduced prices, depending on family needs. A family need not be indigent to qualify.

Veterans can obtain free diagnostic services and hearing aids from the Veterans Administration. Assistance is usually limited to veterans whose hearing losses are service-connected or to patients in VA hospitals.

A national list of speech and hearing centers staffed by ASHA-certified audiologists, is contained in the National Bureau of Standards Monograph 117, "Hearing Aids," available for 35 cents from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The monograph, which is ordered by specifying SD Catalog No. 13.44:117, also contains an interesting and helpful discussion on hearing losses and their remedies.

II. WHAT AUDIOLOGISTS AND OTOLOGISTS SHOULD KNOW

In our report on hearing aids five years ago, CU published Ratings based on our own tests. Here we're reporting the results of the Veterans Administration tests of hearing aids. The VA has far more brands and models tested every year than CU could afford to test even at long intervals.

The publication of the following ratings is a result of CU's lengthy battle to force the VA to disclose to the public, data developed at public expense. Regular readers of CONSUMERS REPORTS are no doubt familiar with the CU-VA hearing-aid controversy, a summary of which we published last month. But although we believe that the public is well served by this adherence to the Freedom of Information Act, the information presented here is not primarily for general public consumption. It is meant for otologists and audiologists. CU endorses the VA's view that the selection of a hearing aid cannot be made solely by studying its ratings, but rather requires professional guidance. As the VA put it: "There is no 'best' hearing aid for all individuals. Aids that test well for one person may not test well for someone else . . . VA's general advice to a person with a hearing disability is to seek professional guidance in obtaining the aid best suited to his particular problem."

*How the VA selects aids*

The hearing aids in the VA ratings represent only 15 per cent to 20 per cent of the hearing aids commercially available. The VA first invites manufacturers to enter aids of their choice for the testing program. Last year, 19 manufacturers submitted names of 81 hearing aids. VA representatives randomly selected, from the manufacturer's stock, three samples of each model, which were subsequently tested by the Sound Section of the Institute of Basic Standards of the National Bureau of Standards. The raw data from those tests was turned over to the VA's Auditory Research Laboratory for evaluation and conversion into a performance score. Aids that scored lower than average were immediately excluded from the VA's purchasing plans. For the qualifying aids, a price factor was introduced by dividing the performance score into the quantity price quoted by the manufacturer. (The VA pays less than list, being such a good customer; it issues about 7000 hearing aids a year.) The resulting "cost-per-point-of-quality" was the basis for awarding contracts. Thus, the VA might not buy some aids with relatively high performance scores, because they cost too much.

CU is publishing the ratings for almost all of the hearing aids rated by the VA, not just for the models the VA bought. We have excluded only a few models—those that CU's market research has shown to be discontinued and those for which CU could not obtain current technical information.

*How the VA tests*

Our discussion here is only a summary of the VA tests. Audiologists can obtain the complete report, "Hearing Aid Performance Measurement Data and Hearing Aid Selection Procedures, Contract Year 1971," from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, for $2.50.

The VA scoring scheme is intended to provide a relative ranking of the hearing aids, not an absolute one. A hearing aid with a performance score of 100 is average within its power category. A higher score is proportionately better than average; a lower score is proportionately worse.

The National Bureau of Standards test methods are similar in substance to those of the Hearing Aid Industry Conference and American National Standards Institute, though the methods differ in some details. The tests include measurements of frequency response, absolute gain, harmonic distortion, maximum power output, signal-to-noise ratio and battery-current drain. The VA also checked to insure that the hearing aids were clinically acceptable—that they were not oddly shaped so as to be difficult to fit and that they would not require difficult maintenance or operational procedures.

The measurements of each electronic characteristic were converted into subscores weighted according to their relative importance by VA standards. Then the subscores were totalled to produce an overall performance score. Most of the test data can be read directly from the Government report. But the Index of Effectiveness, which received the highest weighting, cannot be read directly from the complete report. It must be extrapolated from various subdata, a job beyond the resources of most audiologists. Therefore, CU has computed the Index of Effectiveness and has presented it with the other measurements and scores in the VA ratings.

To arrive at the Index of Effectiveness—a concept developed by Dr. Raymond Carhart and the subject of a to-be-published paper—one assumes that the audio frequency spectrum can be divided into separate "critical" frequency bands, each of which contributes equally to speech intelligibility. In the middle of the audio spectrum, the bands are narrow, signifying that frequencies within those bands contribute importantly to speech intelligibility. At the ends of the audio spectrum, the bands are wide, signifying that the frequencies they encompass contribute little to speech intelligibility.

The Index of Effectiveness is derived by measuring the absolute gain of a hearing aid in each of 20 critical frequency bands and determining whether the absolute gain exceeds the minimum required gain set by the VA for each of three categories—strong, medium and mild amplification. The amount by which the absolute gain exceeds the minimum required gain in each band is recorded, and the sum of that desirable excess gain is the Index of Effectiveness. There are limits however, to the amount of gain desired. The VA believes that no more than 30 dB excess gain per band is useful. Thus the highest Index of Effectiveness score possible is 30 (dB) times 20 (frequency bands), or 600. In our rendering of the VA ratings, the raw Index of Effectiveness score has been converted so that the average of the models tested is 100.

The VA further assumes that a hearing aid with a rising frequency response of 6 dB per octave (treble emphasized over bass) represents the best choice for the hard-of-hearing veterans population (which, as far as anyone knows, differs little from the hard-of-hearing general population). Not all audiologists agree that a rising frequency response is a satisfactory measure of effectiveness. Those who disagree argue that a uniform gain in all frequencies is just as effective as a rising response. They won't take much stock in the Index of Effectiveness figures but they should still be able to glean useful information from the VA ratings. The Index of Effectiveness is only one of 12 weighted scores. It's given a weight of 1.9. (By way of comparison, lack of harmonic distortion is weighted 1.2 for eight separate measurements; uniformity of slope is weighed 1.0.)

Whatever the prevailing theories, the Index of Effectiveness does, in CU's opinion, provide a handy and reasonable first approximation to guide the trained audiologist in the choice of a hearing aid. The information therein contained can be adapted to suit other frequency-response slopes, yielding other indexes of effectiveness more in accord with a given audiologist's ideas.

*Veterans Administration ratings of hearing aids*

Listed by power categories; strong, moderate and mild. Described by type: body, behind-the-ear (called over-the-ear by the VA), eyeglass and in-the-ear. Average gain is the amplification in decibels averaged over frequencies considered by the VA important to improved hearing. Maximum power output (the amplification cut-off point) is in decibels averaged over a similar frequency range. Performance score is the VA's overall evaluation, with 100 the average. Index of Effectiveness is a score computed by CU, again with 100 the average, from selected VA subtests (see accompanying text). Some aids are listed in more than one power category; their performance and Index of Effectiveness scores vary because VA standards concerning average gain and maximum power output vary from category to category. Performance and Index of Effectiveness are rounded to nearest whole number. Prices are listed to the nearest dollar.

| | Price | Type | Average gain | Average maximum power output | Performance | Index of effectiveness |
|---|---|---|---|---|---|---|
| **STRONG POWER** | | | | | | |
| Telex 69 (Telex Communications Division, Minneapolis) | $342 | Body | 64 | 135 | 140 | 129 |
| Norelco HP8122, (North American Philips Corp., N.Y.C.) | 310 | do | 65 | 136 | 122 | 113 |
| Fidelity F360 (Fidelity Electronics, Ltd., Chicago) | 290 | do | 64 | 135 | 118 | 118 |
| Lehr Omnitone 12 Power Chief (Lehr Instrument Corp., Huntington Station, N.Y.) | 379 | do | 69 | 141 | 113 | 141 |
| Acousticon A770G (Acousticon Systems Corp., Danbury, Conn.) | 389 | do | 58 | 130 | 107 | 93 |
| Oticon 370PP Super Power (Oticon Corp., Union, N.J.) | 372 | do | 59 | 131 | 107 | 98 |
| Sonotone 600 (Sonotone Corp., Elmsford, N.Y.) | 375 | do | 63 | 133 | 107 | 100 |
| (The following strong-power models, with below-average performance scores, were not considered in the VA's purchasing plans) | | | | | | |
| Lehr Omnitone 11F (Lehr Instrument Corp.) | 350 | do | 61 | 132 | 97 | 98 |
| Auditone Kingman II C401 (Audiotone Division, Royal Ind., Phoenix, Ariz.) | 395 | do | 61 | 129 | 87 | 79 |
| Norelco HP8130 (North American Philips Corp.) | 310 | do | 57 | 128 | 65 | 61 |
| Audiovox 107 Powerhouse (Audiovox, Inc., Newton, Mass.) | 356 | do | 59 | 129 | 36 | 71 |
| **MODERATE POWER** | | | | | | |
| Acousticon A770G (Acousticon Systems Corp.) | 389 | do | 58 | 130 | 156 | 149 |
| Audiotone Kingman II C401 (Audiotone Div., Royal Ind.) | 395 | do | 58 | 129 | 142 | 135 |
| Oticon 370PP (Oticon Corp.) | 372 | do | 59 | 131 | 142 | 142 |
| Acousticon A770 Silver (Acousticon Systems Corp.) | 359 | do | 51 | 123 | 129 | 113 |
| Zenith Super Ext. Range II (Zenith Hearing Aid Sales Corp., Chicago) | 250 | do | 52 | 126 | 125 | 118 |
| Siemens Euroton Ultra 394 (Siemens Corp., Iselin, N.J.) | 369 | do | 50 | 122 | 124 | 106 |
| Siemens 384SL Auriculina (Siemens Corp.) | 369 | Over ear | 55 | 127 | 115 | 114 |
| Zenith Pacemaker XRT (Zenith Hearing Aid Sales Corp.) | 325 | do | 49 | 124 | 113 | 103 |
| Norelco KL6730 (North American Philips Corp.) | 349 | do | 50 | 122 | 112 | 95 |
| Telex 33 (Telex Communications Div.) | 380 | do | 49 | 126 | 110 | 107 |
| Fidelity F362 (Fidelity Electronics, Ltd.) | 290 | Body | 54 | 126 | 109 | 123 |
| Norelco HP8130 (North American Philips Corp.) | 310 | do | 57 | 128 | 108 | 121 |
| Radioear 990 (Radioear Corp., Canonsburg, Pa.) | 339 | Over ear | 50 | 124 | 105 | 108 |
| Sonotone 35 (Sonotone Corp.) | 299 | Eyeglass | 49 | 123 | 104 | 97 |
| Fidelity F11 (Fidelity Electronics, Ltd.) | 270 | Over ear | 48 | 121 | 104 | 99 |
| Beltone Cantata White Dot (Beltone Electronics Corp., Chicago, Ill.) | 360 | do | 53 | 124 | 104 | 101 |
| Sonotone 72 (Sonotone Corp.) | 365 | do | 52 | 124 | 101 | 101 |
| (The following moderate-power models, with below-average performance scores, were not considered in the VA's purchasing plans) | | | | | | |
| Fidelity OF483 (Fidelity Electronics, Ltd. | 300 | Eyeglass | 52 | 124 | 99 | 101 |
| Qualitone Super X (Qualitone Division, The Seeburg Corp., Minneapolis) | 350 | do | 45 | 123 | 96 | 78 |
| Oticon 370 Super Power (Oticon Corp.) | 297 | do | 53 | 126 | 94 | 103 |
| Audivox 107 Powerhouse (Audivox, Inc.) | 356 | Body | 59 | 129 | 93 | 124 |
| Vicon OE123 (The Vicon Instrument Co., Colorado Springs) | 369 | Over ear | 47 | 120 | 93 | 84 |
| Norelco KL6710 (North American Philips Corp.) | 319 | do | 45 | 119 | 89 | 74 |
| Qualitone Supreme Super X (Qualitone Division, The Seeburg Corp.) | 350 | do | 44 | 122 | 82 | 75 |
| Oticon 560PP Super Power (Oticon Corp.) | 373 | do | 51 | 124 | 73 | 86 |
| Norelco HP8220 (North American Philips Corp.) | 289 | do | 45 | 120 | 69 | 67 |
| Oticon 580S Power (Oticon Corp.) | 339 | do | 44 | 118 | 61 | 58 |
| Beltone Tondo White Dot (Beltone Electronics Corp.) | 360 | Eyeglass | 48 | 122 | 59 | 76 |
| Telex 131 (Telex Communications Division) | 359 | Over ear | 43 | 119 | 55 | 43 |
| **MILD POWER** | | | | | | |
| Audiotone A20 Inspiration (Audiotone Division, Royal Ind.) | 380 | do | 43 | 117 | 155 | 139 |
| Fidelity F11 (Fidelity Electronics, Ltd.) | 270 | do | 48 | 121 | 144 | 144 |
| Nore co KL6710 (North American Philips Corp.) | 319 | do | 45 | 119 | 140 | 132 |
| Audiotone Pride A12 (Audiotone Division, Royal, Ind.) | 365 | do | 41 | 116 | 137 | 120 |
| Vicon OE124 (The Vicon Instrument Co.) | 369 | do | 42 | 117 | 132 | 122 |
| Vicon OE123 (The Vicon Instrument Co.) | 369 | do | 47 | 120 | 131 | 136 |
| Siemens 389HF Auriculina (Siemens Corp.) | 369 | do | 45 | 117 | 129 | 124 |
| Oticon 835S Power (Oticon Corp.) | 365 | Eyeglass | 45 | 116 | 128 | 121 |
| Danavox 695S Supreme Deluxe (Danavox North America, Inc., Wayzata, Minn.) | 360 | Over ear | 43 | 117 | 126 | 113 |
| Danavox 690S Supreme Deluxe (Danavox North America, Inc.) | 370 | Eyeglass | 43 | 116 | 125 | 112 |
| Otarion RX99 (Otarion Electronics, Inc., Ossining, N.Y.) | 370 | do | 42 | 115 | 117 | 124 |
| Sonotone 37 (Sonotone Corp.) | 375 | Over ear | 44 | 116 | 112 | 108 |
| Qualitone USF (Qualitone Division, The Seeburg Corp.) | 345 | do | 39 | 113 | 111 | 92 |
| Norelco HP8220 (North American Philips Corp.) | 289 | do | 45 | 120 | 110 | 121 |
| Audivox 110 Cutie (Audivox, Inc.) | 349 | do | 42 | 114 | 107 | 117 |
| Radioear 1000 (Radioear Corp.) | 339 | do | 36 | 115 | 107 | 91 |
| Beltone Andante Red Dot (Beltone Electronics Corp.) | 355 | do | 42 | 113 | 107 | 98 |
| Zenith Moderator A (Zenith Hearing Aid Sales Corp.) | 325 | do | 34 | 108 | 104 | 76 |
| Telex 131 (Telex Communications Division) | 359 | do | 43 | 119 | 103 | 101 |
| Audiotone Sedona A18SST (Audiotone Division, Royal Ind.) | 380 | do | 39 | 115 | 102 | 116 |
| Qualitone Hidden Ear III Deluxe (Qualitone Division, The Seeburg Corp.) | 325 | do | 38 | 115 | 101 | 106 |
| Danavox 685S Super Dynamic (Danavox North America, Inc.) | 340 | do | 39 | 115 | 110 | 103 |
| Oticon 580S Power (Oticon Corp.) | 339 | do | 44 | 118 | 100 | 115 |
| (The following mild-power models, with below-average performance scores, were not considered in the VA'S purchasing plans.) | | | | | | |
| Telex 25 Electron Ear III (Telex Communications Division) | 359 | In ear | 43 | 115 | 99 | 105 |
| Audivoc 101 Cycloramic II (Audivox, Inc.) | 341 | Over ear | 40 | 113 | 93 | 94 |
| Beltone Prelude Green Dot (Beltone Electronics Corp.) | 360 | do | 41 | 114 | 93 | 97 |
| Otarion X101 (Otarion Electronics, Inc.) | 360 | Eyeglass | 45 | 117 | 88 | 113 |
| Beltone Andante Blue Dot (Beltone Electronics Corp.) | 355 | Over ear | 37 | 107 | 88 | 70 |
| Siemens 383CA Auriculina (Siemens Corp.) | 359 | do | 38 | 115 | 88 | 93 |
| Danavox 685U Universal (Danavox North America, Inc.) | 350 | do | 36 | 111 | 86 | 79 |
| Otarion X102 (Otarion Electronics, Inc.) | 380 | Eyeglass | 45 | 116 | 85 | 98 |
| Acousticon A645 HP (Acousticon Systems Corp.) | 399 | Over ear | 36 | 113 | 85 | 88 |
| Audivox 103 Rivera (Audivox, Inc.) | 349 | Eyeglass | 42 | 116 | 81 | 95 |
| Otarion X102F (Otarion Electronics, Inc.) | 380 | do | 46 | 117 | 81 | 96 |
| Acousticon A465SS (Acousticon Systems Corp.) | 399 | In ear | 29 | 110 | 68 | 57 |
| Danavox 695U Universal (Danavox North America, Inc.) | 370 | Over ear | 34 | 107 | 64 | 51 |
| Sonotone 75-2 Thinline II (Sonotone Corp.) | 359 | Eyeglass | 35 | 115 | 64 | 64 |
| Otarion Listenette (Otarion Electronics, Inc.) | 350 | In ear | 34 | 111 | 64 | 62 |
| Goldentone C100 CA Computer (Goldentone Electronics Inc., Minneapolis) | 388 | Over ear | 34 | 105 | 58 | 53 |
| Lehr Top Star (Lehr Instrument Corp.) | 350 | In ear | 38 | 113 | 51 | 87 |
| Goldentone Montclair (Goldentone Electronics Ind.) | 291 | Eyeglass | 37 | 116 | 36 | 67 |

*Two specialty aids*

The VA did not test two kinds of hearing aids that may have special applications. One is a relatively new development, the CROS aid (the acronym stands for Contralateral Routing of Signals). The other is an older variant, the binaural fitting (one aid on ear).

The CROS aid was originally developed for persons who are deaf in one ear but who have normal or nearly normal hearing in the other ear. Such persons must continually swivel their heads in conversation to pick up sounds on the deaf side. To fill in the deaf-side gap, the CROS aid has the microphone positioned on the deaf ear and the receiver on the good ear. The sound is channeled through a wire around the head to the good ear.

The CROS ear mold is atypical in that it's vented, allowing air to pass through. (Conventional ear molds completely block the ear canal.) Some CROS aids don't even have an ear mold, but rather just a small plastic tube that rests loosely in the canal. One advantage of keeping the ear canal open to air, audiologists have discovered, is a marked reduction in low-frequency sound amplification. And since most background sounds are of a low frequency, the CROS aid diminishes extraneous noise that would otherwise interfere with the understanding of speech. Because it discriminates against low frequencies—which can be heard normally anyway in many cases of sensorineural loss—the CROS aid has proved beneficial to persons who have sensorineural loss in *both* ears.

Why don't they just leave the ear canal open with conventional aids, where the microphone and receiver are on the same ear? Because, when the microphone and receiver are close together, the hearing aid produces feedback, a whistle caused by the microphone rechanneling noise from the receiver. With regular hearing aids, the feedback is blocked by a solid ear mold. With CROS aids, the bulk of the head blocks feedback. But even the barrier of the human head will not prevent feedback at gains of more than 45 dB. Thus, the helpfulness of CROS aids is limited to cases of mild or moderate hearing loss.

These benefits of binaural fittings are the subject of much debate. Some claim that having an aid on each ear greatly improves the ability to distinguish speech from surrounding noise, improves the naturalness of sound and reduces fatigue after long use. Objective tests have not as yet demonstrated a significant improvement in understanding speech when two aids are used instead of one. The benefits, if any, appear to be entirely subjective on the part of the user, not a factor to be summarily discounted. But since two hearing aids cost twice as much as one, CU advises that binaural fittings should be considered cautiously—and only on the strength of professional opinion.

*In search of a cheaper hearing aid*

The average list price of the hearing aids the VA tested last year was about $350. (The manufacturers choose which models to submit for VA testing; often, they're the more-expensive models.) But there are models on the market that sell for much, much less. And, we can note in the accompanying report, there's no reason in terms of manufacturing costs why all aids shouldn't cost much, much less. To find out how low-priced aids compare with the VA test field, CU independently tested the Zenith Award (Zenith Hearing Aid Sales Corp., Chicago), $85, and the Sears Cat. No. 8015 (Sears, Roebuck), $90 plus shipping.

CU put both hearing aids through a test procedure closely paralleling that used by the VA. Although we were able to obtain all raw scores and measurements for each hearing aid, the only adjusted score we computed was the Index of Effectiveness. For various technical and statistical reasons, it would have been extremely difficult to grade each aid according to the VA's overall performance scoring system. Nonetheless, we think we have a good idea where the Zenith and the Sears would have stood in the VA ratings.

The Zenith, a body type, had an adjusted Index of Effectiveness of 119 as a moderate-power aid, somewhat above average. Other statistics of interest to the hearing specialist: average gain 54 dB, average maximum power output 126 dB and signal-to-noise ratio 42 dB. But the Zenith showed rather high distortion of frequencies of 500 and 700 Hertz with an input sound-pressure level of 70 dB. Adherence to the VA specification of 6 dB per octave slope was fairly good. We judge that the Zenith's rank in the VA ratings would have been about average.

The Sears, an over-the-ear type, had an Index of Effectiveness of 69 as a mild-power aid. Average gain was 35.5 dB; average maximum power output was 113.5 dB; signal-to-noise ratio was 38.6 dB; and total harmonic distortion was low. Adherence to the VA's 6 dB per octave slope was poor. We judge that the Sears would have been near the bottom of the VA ratings.

All in all, not a spectacular performance by our inexpensive aids—but not a humiliating one, either, especially by the Zenith. Even if those aids weren't top contenders, they were at least in the same league. We just wonder how much more money it would take to turn a $90 hearing aid into a real winner. Certainly it would not take enough to justify a charge of a couple of hundred dollars more.

## EXECUTIVE DEPARTMENT ABUSES POWER IN MILITARY PROMOTIONS

Mr. PROXMIRE. Mr. President, political pressures are playing an even more important part of military life. The latest example involves the use of White House authority to overrule military promotion boards and promote officers that have not received a favorable selection.

I am greatly concerned that young officers will perceive the road to a successful career lies along a path of politics. This would run counter to military tradition but there is evidence that this is beginning to happen.

Earlier this year it was discovered that Army Lt. Col. Dana G. Mead was promoted one rank on White House orders even though the official Army selection board had failed to make that recommendation. Colonel Mead's particular responsibilities in the White House involve domestic affairs, in particular District of Columbia matters.

He was promoted not by his peers but by the political power of the White House.

Another example recently came before the Senate. Maj. John V. Brennan of the Marine Corps has been promoted by the President over the objections of the Marine Corps selection board. Major Brennan has served the President as an aide since 1968. He is responsible for arranging travel and communications at the White House.

Because the White House intervened in his case, Major Brennan has been promoted over the heads of 1,100 more senior officers. According to one press report, the Marine selection boards were bypassed by Presidential direction. The Marine Corps Commandant opposed the promotion as did the Deputy Commandant.

Mr. President this should not be allowed to go on. We all know the President is entitled to the best staff assistance possible and as Commander in Chief has the power to promote these military men around him.

But it should also be recognized that this is bad for morale in the military service and gives the appearance of favoritism.

I do not deny that Major Brennan is a capable officer. But I do object to the President going over the heads of the selection board established to provide a fair promotion schedule.

I wish to emphasize that I did not give my vote of consent on this promotion list carrying Major Brennan's name. Although I had notified the leadership of my intent, there was a small breakdown in communications, to no one's fault, and the promotion list received unanimous consent in my absence.

In my opinion it would have been better to have returned Major Brennan's name to the Armed Services Committee for investigation into the manner in which he was promoted.

## HEATING OIL HEARINGS SHOW REGIONAL SHORTAGES; NEED FOR MANDATORY ALLOCATIONS

Mr. HUMPHREY. Mr. President, I would like to report to the Senate on our hearings of this week on the outlook for oil supplies for the coming winter. The hearings were held before the Subcommittee on Consumer Economics of the Joint Economic Committee and were completed on September 20, and followed up on our earlier hearings of May 1, 2, and June 2, 1973.

The subcommittee heard testimony from both administration and private witnesses. All agreed that the prospects for winter are very ominous and that a high probability of shortages exists. This corresponds to the results of an analysis by the Joint Economic Committee staff released Monday, September 17.

On the basis of considerable study, I would say that serious regional shortages this winter are close to certain unless we get mandatory government allocation of oil supplies. There is probably a 50 percent chance of a significant national shortage, in which mandatory allocation will be essential to mitigate hardships but for which no amount of reallocation will solve the problem completely. In this case mandatory conservation and/or rationing may be required. A very critical shortage that could hobble the U.S. economy and disrupt the conduct of normal life is a distinct possibility.

These facts were brought home by the testimony of Duke Ligon, the Director of the Office of Oil and Gas, Department of the Interior, who said, in part:

In order to gain a perspective on the distillate situation, we have to set up a supply-demand ledger. We predicted the increase in demand of 10.4 percent which would occur assuming a normal winter; estimated

the production of distillate oil while assuming refineries would run at maximum throughput; allowed distillate inventories to be pulled down to 100 million barrels by the end of the heating season; and filled the remaining supply-demand gap with imports.

The assumed refinery capacity utilization for the base case was 91.7 percent, with gasoline demand being met. The imports of distillate fuel oil needed for the base case to balance supply with demand was 650 thousand barrels per day. Our previous high rate of imports sustained for any length of time was an average of 530 thousand barrels per day for one quarter last winter. We estimate a potential distillate fuel oil import supply from various foreign export centers of 550 thousand barrels per day assuming normal weather conditions in Europe. We are not sure that the imports will be able to meet all environmental standards. They probably would have last year but some standards have been tightened. Quantities much larger than 550 thousand barrels per day can be made available by relaxing standards.

In other words, from our base case, which assumes normal temperatures both in the U.S., Canada, and Europe; refineries running full; no adverse influences such as the oil exporting countries limiting crude oil production or foreign refining centers limiting exports, and no inhibition towards importing crude oil or products due to Phase IV guidelines, etc. We predict that we may have a deficit of about 100 thousand barrels per day of distillate fuel oil this winter. Several variables may work for or against us. Some of the more significant are:

1. Refinery capacity utilization.—We have estimated a utilization of 91.7 percent for crude oil throughput which corresponds to about 98 percent of overall refinery use. If an additional 2 percent could be realized there would be a corresponding reduction in import demand of 200 thousand barrels per day. Conversely a reduction in capacity utilization of 2 percent would result in an increased need of imported petroleum products of 200 thousand barrels per day.

2. Average temperature in the U.S.—A colder than average winter, such as we might experience one year in five would increase distillate fuel oil demand by 130 thousand barrels per day for traditional fuel oil uses. Moreover, additional demands would be placed on distillate due to curtailments of natural gas. This amount has not been quantified.

3. Average temperature in Europe.—If the temperature in Europe were colder than average, the potential quantity of oil available for import into the U.S. might be reduced by 300 to 400 thousand barrels per day.

Even in winters when there are large inventories and spare refinery capacity, shortages can occur in localized areas due to extreme weather conditions, lost refinery capacity, transportation tie-ups, etc.

Our projected balance of the supply/demand situation for distillate fuels can be invalidated by one of many items, such as an embargo on exports of crude oil by an oil producing nation; colder than normal weather in Canada, U.S., or Europe; a fire or explosion in a large refinery; a labor strike by either refinery workers or dock workers.

A national determination to conserve fuels could quickly eradicate the potential shortfall of fuel. There are various conservation measures that should be conveyed to the general public in every way possible. Some estimations demonstrate the potentials for energy conservation.

If all heating oil customers reduced indoor temperatures only two degrees during the heating season the resultant fuel saving would approximate 210 thousand barrels a day. Savings of the same order of magnitude could be achieved if storm windows and doors were added to all heated structures now lacking them. Further savings are possible through improved thermal insulation. Equivalent measures in gas space heating would reduce levels of gas curtailments, thereby reducing the call upon heating oils to replace gas.

A serious fuel conservation effort, enlisting the participation of all citizens, could greatly reduce the threat of fuel shortages, except under extreme conditions, for 1974. Patently, such a volunteer effort cannot be expected to be fully effective, but conservation nonetheless has an obvious and important contribution to make in any national energy program.

The testimony of Larry G. Rawl, executive vice president of the Exxon Corp., confirmed the main features of this prognostication, and so, as I mentioned, does the analysis by the Joint Economic Committee staff. Therefore, we have a rare degree of agreement between Congress, the executive branch, and private industry on the existence and approximate magnitude of the problem facing us.

Both of the witnesses mentioned above stated their convictions that the relaxation of sulfur emission standards in the secondary clean-air regulations of certain States would be necessary to make possible adequate importation of fuel oil to meet the winter's demand under the best of circumstances. John R. Quarles, Deputy Administrator of the Environmental Protection Agency, agreed in his testimony that environmental authorities must adopt a flexible and reasoned approach to the clear threat of shortages but stated that relaxation of standards must not be done in a wholesale fashion but on an intelligent and selective basis.

Mr. Quarles stated in part:

The root cause of the problem is the presence of sulfur in our principal fuels, coal and oil. When those fuels are burned, sulfur is transformed into sulfur dioxide, a dangerous and sometimes deadly pollutant in the air. We know it causes respiratory disease and can cause death in those already infirm. It is a pollutant which the law, the Clean Air Act, necessarily subjects to control in the interest of our national health and welfare.

The pattern of regulations provided by the law distinguishes two sets of standards, those necessary to protect the public health—the so-called primary standards—and those necessary to protect welfare or non-health-related concerns such as crop damage—the so-called secondary standards. It must also be remembered that the law provides for the achievement of the primary standards by 1975 and the secondary standards within a "reasonable time."

Legal responsibility for achieving the standards is placed on the States which have devised implementation plans, that is, strategies of regulation to achieve the standards. To date, these plans have evinced two characteristics of extreme importance. First, many have chosen 1975 as a "reasonable time" to meet the more stringent secondary standards in addition to the primary standards. Secondly, States have imposed Statewide omission regulations that ignore differences in air quality between regions. This means that scarce low sulfur fuels may be used indiscriminately throughout a State rather than in areas of greatest need. Consequently, the ambitious State implementation of an already far-reaching statute has served to make much of the high sulfur coal and oil unacceptable under existing State regulations. It has further served to place a premium on obtaining "clean fuels" such as low sulfur coal, low sulfur oil, and natural gas which can meet the standards. In some cases it has led to mixing high sulfur residual oils, used in power plants, and low sulfur distillate oils, used for home heating, to create a product for use at power plants meeting State sulfur regulations.

Some of the misinformed would lay the blame for this shortage at the door of environmental protection. While the precise part played by environmental regulations is still unclear, it has certainly been exaggerated. Many factors have contributed to the problem:

Lack of refining capacity in this country, especially desulfurization facilities;

Unpredictability of mid-Eastern sources of low sulfur crude;

A natural gas shortage;

Power plant and refinery siting opposition; and

The residual effects of the import quota program.

Much could be said about each of these causes. But I would simply say here that the causes are numerous and complex, and that the foremost cause is not the imposition of environmental regulations.

But, while Federal environmental regulations have not been the principal villain in creating the dilemma, the manner of their application is a crucial ingredient in fashioning a solution.

We believe it behooves policy makers at all levels to act with reason and constraint. Now is not the time for indiscriminately and inflexibly applying all our present environmental regulations without regard for the larger public interest. Rather, we must focus our efforts on fashioning policies that will serve both the environment and other factors vital to our total society.

Clean fuels that are employed to meet State-wide secondary standards would be effectively denied to those areas which may need them to meet the primary standards. Accordingly, high priority areas desperately needing low sulfur fuels to meet primary standards could find themselves unable to procure these clean fuels since they will be siphoned off to meet secondary standards elsewhere. Our objective is to allow for the concentration of clean fuels in areas of highest need by discouraging the use of low sulfur fuels unless such steps are needed to meet primary standards. To carry out this policy we have requested States to: (1) focus on achieving the primary standards first and then phase in implementation of the secondary standards, and (2) initiate a State-wide review of their implementation plans on a region-by-region basis to ensure that clean fuels are only required in high priority regions within the State.

Changes in regulations needed to implement this policy are currently under consideration in Ohio, Tennessee, Alabama, Michigan, and Illinois.

The second component of the fuel shortage concerns oil, and more specifically, low sulfur distillate heating oil this winter. Here we are not talking of a projected 1975 deficit from State implementation requirements but rather the temporary convergence of a host of factors to create a shortage this winter. Because of the immediacy of the problem and its seasonal confinement to the winter months—we adopted a "variance" policy for last winter's shortages. This involved an ad hoc procedure under which the Environmental Protection Agency approved State-granted variances to State sulfur regulations of fuel oils in emergency situations. Of thirteen requests last year, we approved eight. Although successful, this policy had the drawback that such spur of the moment variances are effective only when we are talking of small isolated shortages.

In contrast, this year we have some advanced warning of an impending shortage that may well be greater than last year's. Furthermore, we will be relying to a greater extent on high sulfur foreign imports. Given

the increased magnitude of the problem, we have undertaken to fashion a more systematic variance policy that will allow us, as in the case for coal, to save low sulfur oils for those areas of greatest need, that is, for home heating and where the primary health standards are involved. It is this more comprehensive and orderly approach which was the subject of the President's September 8 statement and Mr. Train's press conference on September 13.

Although this expanded variance policy has many of the same objectives as our "clean fuels" for coal policy, such as directing "clean fuels" to points of greatest need, there are some distinct differences worth noting. The first is timing. We expect the coal problem to come to a head in 1975 when many State coal regulations come into effect. In contrast, the oil problem is already on us. Sulfur regulations for oil are already in effect in many States. In the case of coal, we need a delay in implementing the secondary standards, while for oil we need variances to existing State sulfur regulations. The second is duration. Our coal policy represents a longer term effort to shift clean fuels to priority areas, while our oil variances are a temporary seasonal effort to account for fluctuations in the availability of low sulfur fuels during the heating season.

An important aspect of our variance policy that must be woven into any policy dealing with energy is conservation. Although sulfur removal technologies and emerging energy sources such as atomic energy offer long-term solutions, their potential contributions are being offset by our seemingly insatiable appetite for energy. We must begin now to adopt vigorous conservation measures in order to bring our energy demands in line with supply.

As a step towards establishing these needed conservation measures, a consideration in granting variances this winter will be the adoption of conservation measures by the Governors.

As we see it the fuels shortage is an immediate and serious problem but not inherently a long-term problem. Because fuel desulfurization equipment is not as available as is needed, we are obliged to seek some delay and to grant some temporary variances. We intend to do this carefully and prudently and only to the extent we are convinced it is required by broad public policy.

Most important, however, is the fact that we can have the technology we need to remove sulfur from fuel.

For oil, such technology already exists in the form of desulfurization facilities. It is simply a matter of capacity, a matter which private industry is capable of solving. For coal, the immediate hope is in stack gas scrubbers. Further down the road for coal are two technologies which appear to offer even more promise. The first is the conversion of coal to "clean" liquid or gaseous fuels prior to combustion, leaving sulfur constituents in the residues. Included here are mechanical cleaning, solvent refining, low BTU gasification and liquefication. The second involves redesign of the combustion process such as the use of fluidized beds or molten iron baths that remove the sulfur.

I am optimistic that we may enjoy both an adequate fuel supply and a clean environment. We are not confronted with an irreconcilable conflict. Rather, we are faced with a challenge to adapt and apply American ingenuity and technology to the problem while we hold fast to the ideal of a clean and healthy environment. We must meet with some flexibility the immediate problems which arise from the fact that we have not yet applied technology on a broad scale to control sulfur oxides pollution. Simultaneously, we must push ahead aggressively to install the needed equipment so that we will not be forced in the future to modify our enforcement of requirements established to protect the public health.

At the hearing of September 20, we heard testimony from several witnesses, among others, representing areas of the country most severely affected by the prospective fuel shortages. I have reported the testimony of Gov. Wendell Anderson of Minnesota to the Senate separately. Governor Anderson described in graphic terms what winter in Minnesota is like and what difficulties were encountered last winter in making the available fuel go around. Those difficulties were just a foretaste of what may await Minnesota and other cold weather States this winter and form the basis for Governor Anderson's urgent plea for mandatory fuel allocation.

Governor Anderson's testimony was augmented by that of Mayor Lawrence D. Cohen of St. Paul, Minn., and Mr. Patrick J. Roedler, St. Paul city councilman and chairman of the St. Paul Energy and Environmental Conservation Committee.

Mr. President, I ask unanimous consent that the statements of these two witnesses be printed in the RECORD in full. I commend especially to the attention of Senators the very specific and practical suggestions for energy conservation made by Mr. Roedler, who speaks from his background as a steamfitter and pipefitter with many years' experience in home and industrial construction.

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

STATEMENT OF MAYOR LAWRENCE D. COHEN

Mr. Chairman and members of the subcommittee, I am Lawrence Cohen, Mayor of the city of Saint Paul. I appreciate the opportunity to testify here today in order to acquaint you with some of the critical problems we expect to face this winter in a city that is part of what is probably the coldest, largest metropolitan area in the country.

I will outline some of the problems for you and City Councilman Patrick Roedler, who is with me today as chairman of a special committee on energy, will detail some of the steps we plan in response to the problems.

As our Governor Anderson told this committee earlier, there is a desperate need for a national energy policy. It should include a planned effort to *increase* and allocate our energy supplies and simultaneously conserve fuel and power through legislation and the educational process.

But as a mayor concerned with the immediate health, welfare and safety of more than 300,000 citizens, I cannot wait until the federal bureaucrats spend weeks and months developing flow charts, columns of figures and multiplier formulas in consultation with suppliers and big industries that will devour all that we, as public officials, allow it.

Already major fuel suppliers refuse to bid on our city and county contracts . . . Oh, yes, we did receive one offer: for 5,000 gallons daily for a specified period of time—provided we pick it up ourselves in some town in Wyoming.

We had to exert extreme pressure on the contractor for gasoline, who wanted to cut off our supply for squad cars:

There is no winter supply of heating fuel for thousands of elderly in our public-housing apartments, or for the children who will be attending the Saint Paul public schools.

We have government agencies and industrial customers on so-called interruptible gas service—where the customer is cut off when the temperature drops below a certain level. Our main electricity supplier, Northern States Power Company, obviously anticipates an energy problem because it has indicated that temperature will be raised above the current cutoff level of zero.

I don't know how many of you have been to Saint Paul-Minneapolis in January or February, but there are a lot of days when the temperature is below zero. This means that those with standby oil burners will switch over, thus contributing to the oil shortage.

In short, I recognize the economics behind all of this. The fuel suppliers didn't bid because they expect a higher price this month or next. We're willing to pay the higher price, but right now we can't even do that.

We're not talking about the price of beef here. My people can substitute for beef if the price is beyond their means or there is a shortage. But the simple fact is there is no way anybody can live in Minnesota this winter with insufficient heat.

I also recognize that we are only a small part of the whole picture, but in a sense, Saint Paul, Minnesota, can be looked upon as a microcosm of what's going to happen around this nation . . . We need your help.

Meanwhile, I'd like to call on Councilman Roedler now to tell you about what we are doing to help ourselves in the meantime.

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STATEMENT OF CITY COUNCILMAN PATRICK J. ROEDLER

Mr. Chairman and Committee Members:

I am Patrick J. Roedler, City Councilman from Saint Paul, Minnesota, and chairman of the Saint Paul Energy and Environmental Conservation Committee.

Thank you for inviting me here this afternoon. I would like to commend you for holding these hearings on the energy crisis. There is no doubt in my mind that the energy crisis is upon us. And the next few months could be comparable to World War II. The only difference is that we fought those battles somewhere else—and we're fighting this one here.

Before I begin talking about what we're doing in St. Paul—and what needs to be done—I'd like to briefly explain my background. I am a licensed steamfitter and pipefitter and a member of the United Association, Journeymen and Apprentices, Plumbing and Pipefitting Industries of the United States and Canada, and a member of Saint Paul Pipefitters Local No. 455. I spent twenty years in the steamfitting industry, including a five year apprenticeship. I've worked on refineries and pipelines, on big and small heating systems, in homes and industrial plants.

Because of my technical background and experience, I'm probably sensitive to aspects of the energy crisis that may escape the average layman.

You have just heard Mayor Cohen outline the energy problems in St. Paul. If I may capsulize what he said, the biggest problem is waste. Waste of fuel and energy, in schools, in factories, in homes, in big industry. Waste from the time our fuel comes out of the ground until the time it is consumed.

The St. Paul Energy Committee is now in the process of gathering information on fuel supplies and projected shortages, including data on fuel systems and the use of energy sources. The information we have gathered shows an incredible amount of waste by well-meaning and well-intentioned people.

Our schools do not have enough fuel. School officials are considering closing during January and February and staying open in June and July. Even worse, they are at a loss to better utilize the fuel they have because nineteen of their buildings are one-thermostat buildings with no zone control. Waste.

We have found the same thing applies to average homeowners. Proper insulation of

the average home, which is not adequately covered in the new state building code, could save as much as 35% fuel consumption per home. The same applies to home heating equipment. Technical staff people at the local vocational schools have informed my committee that relatively simple steps such as having furnaces and oil burners cleaned yearly could save the average homeowner as much as 25% on his fuel bill. Change that sentence around and it means one fourth of the fuel Mr. Smith will use to heat his home this winter is wasted.

We are planning a massive public education effort, including seminar sessions for homeowners and businessmen, to disseminate this information and encourage them to take steps to reduce their wasted energy.

But the waste in homes and schools and hospitals is minute compared to the waste that occurs in industry and the devastating effects of that waste. We have found that industry is the largest waster of energy and the petroleum industry is the worst of all.

Let me give you some specific examples.

(1) I'm sure you've all seen the flare stacks at oil refineries that mark the refinery locations and signal all is well, often on a 24-hour basis. St. Paul has two such refineries. This is done for very necessary safety purposes but it is wasted energy because the refineries are burning gas without recapturing the heat. The flame from these flare stacks could be atomized, mixed with air, induced into hydronic storage, and treated like any other fuel. This heat recovery would reduce the refineries' massive consumption of other fuel.

(2) Waste from cross country pipelines, both gas and oil, that rupture due to malfunctioning for various reasons and cause great spills. In the last three weeks, 1.1 million gallons of crude oil spilled in northern Minnesota because of two pipeline ruptures. Both occurred with the same firm, and both happened in the same area near the small community of Stephen and the Tamarac River.

The State's pollution Control Agency described the situation as "incredibly lucky" because there was minimal environmental damage to the river and farm land, and 90% of the oil was recovered. I don't know how incredibly lucky we'll be next time. Think how many St. Paul homes could be without oil if these spillages continue.

I state categorically that these spills were unnecessary and could have been prevented. There are devices available which can effectively detect weaknesses in pipelines before ruptures occur, which do not take the pipeline out of service, and which are less expensive in the overall than the existing detection methods. It is simply a matter of applying existing technology. I don't think we have any choice but to require the petroleum industry to take these steps.

(3) The local power company has 428 industrial users in St. Paul that are interruptible customers. That means that when the temperature drops to a certain point, these industrial users are notified to stop all gas consumption and go on standby or alternate fuel. Very often, their standby is the same Number One and Two fuel oil that is used to heat the average home with an oil burner. The net result is artificial competition between industry and private homeowners in an already scarce market.

In past years this interruptible system was put into effect when temperatures were considerably below the zero level. In recent years, it went into effect at zero degrees, about seventy days out of the winter. This year, the local power company predicts between 135 to 150 days when interruptible customers will be competing with homeowners for Number One and Two oil. This would indicate that the interruptible temperature level might be raised and could mean a very serious situation in St. Paul.

These industrial users *can* use other standby fuel such as Number Five and Six oil which cannot be used to heat the average home. All that is required is the installation of equipment to change the viscosity or weight of the fuel oil.

(4) Waste of natural gas. The Federal Power Commission has put us on notice that there will no longer be natural gas available for industrial use after 1980. There is no reason why industries that will have to switch within the next seven years cannot make the change immediately. This would eliminate their consumption of our dwindling natural gas supplies as soon as they have the new equipment installed.

(5) Waste of energy by industries using equipment that has a high energy demand in terms of start-up time. There is a general movement today toward four-day work weeks with longer hours each day. The popular reasons are more leisure time for the hard-working men and women, but a much better reason is the energy saved by starting up this equipment four days a week instead of five, and running it longer. The highest energy usage comes from the incredible amount of fuel required to get the equipment started. Extending the actual running time would be minimal if you compare use of energy sources

I have described to you five situations which can be remedied but the remedies are far beyond the scope and authority of my energy committee and the St. Paul City government.

I would like to make several recommendations for action at the congressional level:

(1) Require oil refineries to utilize the energy now being wasted in their flare stacks and cut down on their massive consumption of other fuel.

(2) Require the petroleum industry to install in-service pipeline inspection equipment which could detect pipeline weakness and prevent ruptures that lead to gas and oil spill waste.

(3) Require industries using Number One and Two fuel oil to install equipment that would allow them to use Number Five and Six fuel oil and take them out of competition with the average homeowner.

(4) Require industries to convert immediately from natural gas to other fuel sources, preferably coal, allowing reasonable time for the changeover.

(5) Require industries with equipment having a high energy usage for start-ups to adopt a four-day, extended-hour work week during months when energy levels are lowest, and ask for the collective cooperation of their bargaining agents, namely, the unions representing their employees.

The key is mobilization and full utilization of all our resources, similar to our World War II effort. That means the city, the State and the national level. That means big industry and small industry and the private homeowner.

There is a lot of talk today about new sources of energy. In fact, I'm chairman of a special task force which is presently studying a system that would utilize solid waste as fuel in an energy recovery program to generate steam, electricity and refrigeration.

But the development of new sources of energy takes time, too much time. It would take an extremely long time to convert all the homes in the United States to solar energy. And we haven't even developed solar energy to the point where it could be used in private homes.

The point is that petroleum and other existing fuels are here to stay. Our whole emphasis must be on conservation and elimination of waste. And by emphasis I mean Federal legislation, if necessary, for mandatory fuel allocation for our immediate problems, in addition to the recommendations I've outlined earlier. We don't have any other alternative.

I sincerely thank you for inviting me to appear.

Mr. HUMPHREY. Mr. President, another region facing critical shortages of fuel was represented by Mr. William F. Kenny III, of the Oil Heat Institute of Long Island, and I ask unanimous consent to print his testimony in full.

In addition to describing the very threatening heating oil situation in his area, Mr. Kenny offers some specific and cogent proposals for the conduct of any Federal oil allocation program and for other policies to help improve the demand-supply outlook for heating oil for the near future.

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

STATEMENT OF WILLIAM F. KENNY III

Mr. Chairman:

I appreciate the opportunity to testify before this committee regarding the outlook for #2 heating oil from the point of view of the retailer. I especially commend the committee for recognizing the need to deal effectively with this very critical situation now while it is still warm not later when time may have run out.

By way of brief introduction, I represent the Oil Heat Institute of Long Island as Chairman of its Energy Crisis Committee. Long Island consists of the two counties of Nassau and Suffolk, with a population of some 2.7 million people where over 80% of the 670,000 homes are oil heated. Consumption of #2 home heating oil on Long Island in 1972 exceeded one billion gallons. To the extent that there are serious problems regarding home heating oil, Long Island is about as good a place as any to focus on because of the high percentage of oil heated homes.

I am also President of Meenan Oil Company, an independent retail heating oil company operating on Long Island and also in Pennsylvania and New Jersey. I have been in the business for 15 years, following in the footsteps of my father and late grandfather, who founded the company 40 years ago.

Before discussing the problems, I'd like briefly to explain the structure of our industry. Nationally, 75% of the home heating oil is delivered by independent retailers while on Long Island the figure is 90%. Independent retailers buy either from independent wholesalers or major oil companies. Nationally, these retailers depend on independent wholesalers for 25% of their supply and on the majors for 75% while on Long Island, the independent wholesaler accounts for over 50% of oil supplied to retailers. You see that any area depending heavily on independent retailers who in turn depend heavily on independent wholesalers is particularly vulnerable to problems that adversely affect the independent segment of our industry. Long Island is, of course, such an area as is the rest of the Northeast.

On Long Island, we have 375 retailers who deliver an *average* of about two and a half million gallons per year to an average number of 1500 customers each and who employ, on the average, 9 or 10 people including the owner. In addition to delivering the oil, the retailer provides complete heating system service 24 hours a day, 7 days a week.

We in the home heating oil business in the Northeast, and I assume elsewhere, have two potentially disastrous problems. One is supply and the other is Phase IV. I will treat each separately although they are closely related in many ways.

From the point of view of supply, reliable evidence points to the fact that there will be a critical shortage of #2 home heating oil on Long Island and in the entire Northeast this winter.

The evidence is clear. Firstly, a study by the Petroleum Industry Research Foundation, Inc., dated July 1973, entitled "The Outlook for Distillate Heating Oil in the Winter of 1973–74" states, in part, "If the winter is even slightly colder than normal, if the substitution of distillate fuel oil for curtailed gas supplies is significantly larger than last year, if refinery runs cannot be sustained at an average rate of 92 percent of capacity over the next 9 months or if the level of imports falls 3–4 percent below our projected average volume of 500,000 b/d during the heating season, a shortage could be expected to develop". In addition, recent studies by the staff of this committee and by the Interior Department are even more ominous in their projections and imports since July have not met projected quantities.

While most parts of the nation will feel these shortages, Long Island will be among the hardest hit areas in the country. This is because over 50 percent of the dealers who supply 90 percent of the Island's heating oil are in turn supplied by independent wholesalers who have been severely cut back on supply by the major oil companies.

Secondly, in an attempt to determine the true extent of the shortage Long Island can expect, the Oil Heat Institute of Long Island recently launched its second survey of independent heating oil retailers in early August. So far, 144 companies have responded. These dealers indicate they will need a minimum of 473,232,000 gallons of #2 oil to serve their customers through the 1973–74 heating season. However, only 61 of these dealers have been given any idea at all by their suppliers of the number of gallons to expect this year. These 61 dealer have been told that of their needs of 236,121,000 gallons, they can expect to get only 139,860,000 gallons creating a 96,261,000 shortfall which is 40 percent. The remaining 83 dealers who responded are simply not sure at this point what their supplies will be.

Thirdly, due to the shortage of natural gas, utilities have cut off supplies to large governmental, industrial and institutional users with the entire burden now being placed on home heating oil. For example, the Long Island Lighting Company has cut off all of its interruptable customers which include state and county buildings, hospitals, etc. from November 1, 1973 through March 31, 1974. This significantly increases the shortfall of home heating oil in our area—and—incidentally, Petroleum Research study referred to before did not include increased demand from shutoff interruptable gas customers.

The point of this information is this: Unlike the closing of thousands of independent gasoline stations recently in the news, if the independent fuel oil dealers on Long Island or anywhere go out of business because of inability to obtain heating oil, there is no other available means of supply for the consumer. A homeowner finding his friendly neighborhood independent gasoline station closed due to lack of gasoline can simply drive his car around the corner to a station operated by a major oil company. However, a homeowner who finds his friendly independent heating oil dealer out of business due to lack of heating oil has no other alternative. He will go cold. The distribution system is not flexible enough to handle even minor product dislocations and shortages.

In order to deal with the expected shortages, Oil Heat Institute of Long Island has a position which I would like to present and which we believe is both feasible and necessary not only for Long Island and the Northeast, but for the whole country.

MANDATORY ALLOCATION OF NO. 2 HEATING OIL

Within ten days, all major oil companies must be required to submit to the Energy Policy Office a list of all 1972 customers including independent wholesalers and retailers showing the amount of home heating oil supplied these customers during the base period July 1, 1972 through June 30, 1973. Major oil companies must then be mandated to supply these customers with at least 100 percent of their base period supply during the period July 1, 1973 through June 30, 1974. We feel the dates are important first because you have to have an exact and specific period and secondly, because this particular period coincides with a seasonal delivery period rather than with a less practical calendar period. We believe the proposed mandatory allocation program issued by Governor Love's office on August 9 would, as it pertains to home heating oil, be completely unworkable and would in fact, by reason of the imposition of completely impractical demands on a complex distribution system, result in chaos and much less oil in the overall system. In that respect, I'd like to read excerpts from the brief OHILI position on Governor Love's proposed plan of August 9. It is OHILI's position that the proposal would be of absolutely no overall benefit due to the following:

(a) It does not assure additional and/or adequate heating oils for any marketing area.

(b) It simply provides for distribution of the shortages, which will result in the same net number of cold homes, cold public institutions and interrupted commercial activities.

(c) It potentially interferes with pre-existing supplier purchaser commitments and/or contracts upon which many retailers have confidently relied to supply their customers for the 1973–74 heating season.

(d) The 10% set aside for state governments imposes an unworkable allocation which would have states competing with each other and us for their considered priorities. These priorities have always been and still can be met through normal distribution channels.

Basically, OHILI cannot subscribe to any plan which does not assure sufficient supply of heating oil to satisfy the historical and growth requirements of the Long Island area and/or takes fuel committed to one purchaser and re-allocates it to another purchaser.

The solution is to place more oil in the market for heating consumption. Therefore, rather than offering extensive comment on specifics of the proposal, OHILI is respectfully submitting the substances of an alternative plan which would allow the retailers of No. 2 home heating oil on Long Island to adequately serve the basic needs of approximately 550,000 oil heated homes.

ALTERNATIVE MANDATORY ALLOCATION PLAN FOR SUPPLIES OF NO. 2 HOME HEATING OIL FOR 1973–47 HEATING YEAR

All major oil companies and wholesale suppliers should be required to supply all customers, including independent wholesalers and retailers of the base period, July 1, 1972 through June 30, 1973 (hereafter to be referred as base period) at least 100% of the home heating oil supplied to these customers during the base period.

No supplier may use the reason that he has new customers or increased commitments to customers of the base period as a reason for not supplying each customer with at least 100% of his base supply.

If the major oil companies cannot produce enough #2 oil domestically, they should be required to import in sufficient quantities to make up the difference between domestic supplies and the aforementioned 100%.

Should imports be required, the Energy Policy Office should take immediate measures in conjunction with the CLC to permit the *complete* passthrough, from supplier through retailer, of *all* increased costs if imports on a weighted average basis.

It appears as though this was done last week by the CLC although we are not completely certain.

OHILI's endorsement of our above described 100% mandatory allocation plan should in no way be contrued as our endorsement of any other form of mandatory allocation, namely, the proposed plan of August 9, 1973.

OHILI further requests the Energy Policy Office take immediate measures to enjoin exporting of domestically refined products. We have received reports indicating that, in the midst of this crisis situation refiners have been circumventing price controls by means of foreign sales.

Basically what we're saying about mandatory is keep it simple and workable and be sure to call on the expertise of those people connected with the major oil companies and the independents who can compose a plan which would be as compatible as possible with the existing home heating oil distribution system. In all due respect, we just don't believe people from outside the industry can write a workable program.

Further on our mandatory allocation program, we agree with all reports, including the ones by the Petroleum Research Foundation and the Department of the Interior, that access to the necessary amounts of foreign #2 oil requires a temporary modification of sulfur standards to a maximum of one half of one percent for #2 oil and 1 percent for residual. This would do two necessary things. It would free up #2 oil which is presently being used to blend with high sulfur residual. Secondly, since well in excess of 50% of foreign #2 oil is in excess of 3 tenths percent sulfur content, this would contribute to the orderly access of product without which there simply wouldn't be enough foreign #2 oil available.

UTILITIES MUST BE STOPPED FROM BURNING MORE AND MORE OIL TO GENERATE ELECTRICITY

Public utilities are draining shrinking oil supplies by burning more heating oil than ever before. In 1972, they consumed two billion, eight hundred fifty million gallons of home heating oil as compared to one hundred twelve million gallons in 1967. Better than ⅔ of the oil used goes up the stack as unharnessed, wasted energy. Electricity used in home heating is the most wasteful consumer of this natural resource and its expansion must be stopped. Unfortunately, the worst example of waste of natural resources occurs right on Long Island where the Long Island Lighting Company is actively promoting electric heat with heavy advertising, large cash subsidies to builders and high-powered untrue public relations. Why should utilities, who have for all of the years of environmental concern refused to spend money on available technology such as stack scrubbers, be allowed to literally rob the home heating oil industry of its clean burning product to satisfy increasingly strict sulfur standards. If the utilities need more #2 oil, they must be required to import.

The cost impact would be far less to the consumer since the base of customers over which the cost would be spread is much larger than any other. It might mean 8 or 10 dollars a year instead of 30 or 40.

All U.S. refineries must be made to switch immediately from maximum gasoline production to maximum home heating oil production and not return to gasoline production until this winter's crisis is over and next winter's prevented. Priorities must be considered. National health is paramount. Remember, a shortage of gasoline is at worst an inconvenience but a shortage of home heating oil is potentially a dangerous health hazard and it can close schools, hospitals, office buildings. It is a catastrophe that must be prevented. If oil is going to be short, the government has to bite the bullet and act to curtail less essential uses.

FEDERAL, STATE, COUNTY AND LOCAL GOVERNMENTS MUST GET INVOLVED

Fuel conservation needs leadership on all levels. From towns, cities, counties, state and

from the federal government, we need more voices to be heard. These governments must promote conservation of fuel by setting specific examples and by promoting special fuel saving measures such as re-insulation, installation of storm windows and doors, decreased use of gasoline, etc.

For example, if 25% of the homes in the country were brought up to proper insulation standards, we wouldn't have an energy crisis. We need imagination and leadership in this area. How about Federal and state tax deductions—now—for all homeowners costs of re-insulating their homes up to present FHA standards?

On the subject of supply, that's our basic program—a simple, workable mandatory allocation program supplying a minimum of 100% of the 1972–73 base period or no program, severe restrictions on utility use of domestic home heating oil, priority to maximum production of #2 heating oil by U.S. refineries and, finally, strong governmental leadership and action in the area of fuel conservation.

Before leaving the supply problem, I must state categorically that if heating oil rationing to the consumer is contemplated as a last resort or as a fallback instead of action now, it simply cannot be done. Gasoline yes—but there is no way the home heating oil distribution system could work under rationing.

Potentially more disastrous to the consumers oil supply this winter are the Phase IV CLC regulations as they apply to the home heating oil retailers. If major changes are not made, many of the retail heating oil dealers who supply 90% of the oil on Long Island will be forced out of business and the thousands of homes which depend on them will go cold.

Apparently, the CLC decided that the home heating oil dealer gouged the public during the January through May, 1973 period just prior to the June freeze. Based on this totally erroneous premise, these CLC people devised a punishment which would destroy the retail segment of the oil industry.

Before examining the discriminary regulations, let's look at the retail prices which have prevailed on Long Island over the past two and a half years and at the retail margins during the five months prior to the freeze.

Based on a survey of a cross section of 30 typical dealers on Long Island, the retail price of home heating oil increased 1.97% during the calendar year 1971, 2.32% during the calendar year 1972 and 9.4% during the five months January through May, 1973 during which time there was a 13.6% increase in product costs to the retailers not to mention substantial increases in labor and other operating costs. Also, during this period, the retailers' gross margin as a percent of cost or in other words, his percentage markup actually decreased by 6.2%. These figures were checked against those in New England and are virtually the same. These figures and any others desired by this committee, the CLC or any government agency, are available at any time. The point is, the CLC never once checked our industry figures in coming up with the preposterous statement made by Dr. Dunlop that the price of petroleum products, in which he included home heating oil, had increased 89%. To us it is outrageous and frightening that a totally uninformed government agency can impose potentially fatal punishment on an industry without any hearings or, what's worse, any meaningful investigation.

I suppose that since the premise upon which the regulations is based is fallacious, it follows that the regulations must be ruinous and discriminatory—and they are—incredibly and unbelievably so.

They are ruinous because it doesn't take an economics MBA to figure out that if product costs and other costs increase, as they are increasing, and they exceed the profit margin before taxes of the business involved, it will not be long before the business will be out of business. We're not talking about what might happen, we're talking about what has happened and is happening! Major oil companies and independent wholesalers have already increased prices to retailers in amounts up to 1.7 cents a gallon since Phase IV started just a month ago. When you make about a penny a gallon before taxes, how can you absorb 1 to 1½ cents per gallon and stay in business?

Phase IV is grossly discriminatory for the following three reasons:

1. All segments of the petroleum industry can pass through all increased product costs. The retailer is forced to absorb all these costs except increased costs resulting from imported #2 heating oil. So far, the cost increases from the majors to us have not been from imported heating oil but from increased domestic and foreign crude costs.

2. The rollback of the heating oil markups for the retailer is to January 10, 1973. The majors are allowed a May 15, 1973 markup date. The heating oil retailer is thus forced to absorb all operating cost increases since January 10. There was a big bulge in costs between January 10 and May 15 and the majors have been allowed to pass these increased costs on but not so the retailer.

3. The small independent heating oil retailer is not exempt from controls whereas in all but the petroleum industry, firms having fewer than 60 employees are exempt.

Immediate relief must be given in the following manner. We're not asking for anything more or less than anyone else—just equitable and reasonable regulations.

1. The independent heating oil retailer must be permitted to raise retail prices to reflect any foreign and domestic product cost increases on a dollar-for-dollar basis, and to institute each retail raise on the date that the cost increases are experienced.

2. The August 19, 1973 ceiling price should be the average cost of inventory on August 1, 1973 plus the actual markup on June 1–8 (when the freeze began.) The 7 cent provision presently in the Phase IV petroleum program may be feasible for gasoline retailers, but is inadequate for the heating oil retailer who must buy and maintain fleets of trucks, wait for his money, provide 24 hour service, etc.

3. The independent heating oil retailer should be permitted to raise prices to reflect all other cost increases such as labor, truck maintenance, and other related operating expenses, on a dollar-for-dollar basis.

4. The independent heating oil retailer should be eligible for the small business exemption which appears in Part 150.60 of the main body of Phase IV price stabilization regulations.

Summarizing the Phase IV problem, we just cannot understand why the independent retailer should be forced to *solve*, at the risk of his business, the inflationary problems of the international petroleum industry which are dealt with in board rooms of major companies, caucuses of OPEC petroleum ministers and in policy meetings at the highest levels of government. We don't want anything special or different, we'll be happy to live with all the regulations imposed on all other retailers—we just don't want to be punished for something we didn't do and have no control over.

In conclusion ladies and gentlemen, unless immediate action is taken to see to it that more heating oil is put into the system, severe shortages will occur. Unless Phase IV is immediately modified, there will be few heating oil dealers around to deliver the oil even if it *is* made available.

Thank you very much for the privilege of appearing before you today, and I will be pleased to answer any questions that you may have.

Mr. HUMPHREY. Mr. President, our hearings have made firmly clear that the establishment of a mandatory allocation system for fuel is necessary.

Once again I appeal to the administration, to establish such a system immediately or to back immediate action by the House of Representatives on S. 1570, the bill which the Senate passed months ago to establish mandatory allocation.

No Member of Congress wants to have Government interference in the allocation of fuel unnecessarily, but the conclusion is forced by the facts. Given that conclusion, the administration's delay is indeed unfortunate. It almost guarantees that when mandatory allocation is put into practice it will not be carried out as effectively as possible.

In other words, if the administration had acted when the Senate made very clear the urgent need for mandatory allocation several months ago, the system could have been well planned, clearly explained and effectively implemented.

But this is clearly a case of "better late than never," and I plead for action now.

## CONCLUSION OF MORNING BUSINESS

Mr. MANSFIELD. Mr. President, is there further morning business?

The ACTING PRESIDENT pro tempore. If there is no further morning business, morning business is concluded.

## ORDER OF BUSINESS ON MONDAY

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that on Monday, following the disposition of the school lunch bill, and upon the resumption of the unfinished business, the Senate proceed to the consideration of the McGovern amendment on economic conversion.

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

## DEPARTMENT OF DEFENSE APPROPRIATION AUTHORIZATION ACT, 1974

The ACTING PRESIDENT pro tempore. At this time, under the previous order, the Senate will resume consideration of the unfinished business, H.R. 9286, which the clerk will state.

The legislative clerk read as follows:

H.R. 9286, to authorize appropriations during the fiscal year 1974 for procurement of aircraft, missiles, naval vessels, tracked combat vehicles, torpedoes, and other weapons, and research, development, test and evaluation, for the Armed Forces, and to prescribe the authorized personnel strength for each active duty component and of the Selected Reserve of each reserve component of the Armed Forces, and the military training student loads, and for other purposes.

The Senate resumed the consideration of the bill.

The ACTING PRESIDENT pro tempore. The pending question is on agreeing to the amendment of the Senator from Missouri (Mr. EAGLETON), No. 520, on which there will be 2 hours of debate.

The clerk will state the amendment.

The legislative clerk read as follows:

On page 18, line 12, strike out "$2,964,635,000" and insert in lieu thereof "$2,952,935,000".

On page 19, line 14, strike out "$2,958,200,000" and insert in lieu thereof "$2,938,800,000".

On page 19, between lines 17 and 18, insert the following:

"SEC. 202. None of the funds authorized to be appropriated by this or any other Act may be obligated or expended for the purpose of obtaining any aircraft for use in connection with the airborne warning and control system (AWACS) unless funds for such aircraft are specifically authorized by legislation enacted after the date of enactment of this Act.".

The ACTING PRESIDENT pro tempore. Who yields time?

Mr. EAGLETON. Mr. President, I suggest the absence of a quorum, the time for the quorum call to be charged to me.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered. The clerk will please call the roll.

The legislative clerk proceeded to call the roll.

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

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

Mr. ROBERT C. BYRD. Mr. President, will the distinguished Senator from Missouri yield me 1 minute?

Mr. EAGLETON. I am pleased to yield to the Senator from West Virginia.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that my staff assistant, Mr. J. Brian Atwood, have the privilege of the floor during the pendency of this bill.

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

Mr. EAGLETON. Mr. President, I offer a substitute for the pending amendment.

The ACTING PRESIDENT pro tempore. The Chair will state that inasmuch as there is a definite time limitation on the amendment, unanimous consent will be required to offer the substitute.

Mr. EAGLETON. Mr. President, I ask unanimous consent that I may be permitted to offer the substitute for the pending amendment.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered. The clerk will please state the substitute amendment.

The legislative clerk read the amendment in the nature of a substitute, as follows:

On page 30, between lines 2 and 3, it is proposed to insert the following:

SEC. 703. Notwithstanding any other provision of law, none of the funds appropriated pursuant to this or any other Act may be expended after the date of enactment of this Act for the procurement of any production funded long-lead items in connection with the airborne warning and control systems (AWACS) until the Comptroller General of the United States has (1) reviewed the cost-effectiveness studies conducted by the Department of Defense on such system and (2) submitted to the Committee on Appropriations and the Committee on Armed Services of the Senate and of the House of Representatives a report containing a summary of his review of the cost-effectiveness studies on such system and a certification that data sufficient to enable him to make an adequate review of such studies was made available to him by the Secretary of Defense. The Comptroller General of the United States shall submit his report to such committees on or before December 31, 1973, unless he is unable to certify that sufficient data was made available to him for an adequate review of such studies.

On page 30, line 3, strike out "Sec. 703" and insert in lieu thereof "Sec. 704".

Mr. EAGLETON. Mr. President, last year, in a letter to Senator STENNIS, I informed the Armed Services Committee of my concern that the Air Force was circumventing its own "fly-before-buy" program by requesting procurement funds for AWACS before the initial test results were in. This concern arose out of correspondence I had with the Air Force over several technical points. In almost every case, the Air Force indicated that answers could not be provided until test evaluations were made. I informed the committee, therefore, that I did not believe that Congress should appropriate procurement funds when there was no indication as to whether the system was technically sound. The committee agreed and eliminated the $309.9 million requested by the Air Force for AWACS procurement in fiscal 1973.

AWACS does fly today. Frankly, it appears to be a technically sound system.

But there is more to weapons procurement in this age of the tight dollar than technical achievement. A system that costs $2.6 billion also requires a mission that is worthy of that great expense.

At least one of the missions proposed for AWACS—air defense—is vastly inappropriate in this era of mutual vulnerability. The Air Force decision to continue to push AWACS as part of a modernized air defense system directly contradicts our current thinking on nuclear strategy. It seems to imply that a first-strike against the United States would be spearheaded by a bomber attack, rather than by missiles.

But in the ABM treaty, our country agreed to a policy of deterrence based on the mutual vulnerability of each power to the threat of a destructive missile attack. If we are willing to limit antimissile defense to two sites, then we would be equally justified in remaining open to the less likely threat of a bomber attack.

This week the Secretary of Defense decided that AWACS would no longer be a part of the Air Defense Command. It would instead be assigned to the General Purpose Forces Command. It was a cryptic decision, apparently the result of a fundamental policy change. But there is no forthcoming explanation from the Air Force.

Is the air defense mission being abandoned? Will the 42-plane fleet be reduced to reflect the lesser requirement of the tactical mission? Despite the technical achievement of the over-the-horizon and look-down radar capability, these are questions that must be answered before Congress authorizes production of AWACS.

The amendment I offer today is intended to assure that Congress has every bit of information available on AWACS prior to making a production decision during the consideration of the fiscal year 1975 budget. The Air Force and the Office of the Secretary of Defense have conducted a number of studies on the feasibility of the AWACS program from a number of perspectives. The studies requested by my amendment are the major cost effectiveness analyses made on AWACS by the Defense Department. The independent review of these studies is essential before Congress makes the important production decision next year.

Of primary interest in these studies is an analysis of the threat AWACS is designed to counter in the air defense mission. The means used to predict this threat into the 1980's would be of special interest considering the present state of the Soviet bomber fleet.

The Soviet manned bomber threat has diminished significantly over the past decade. According to the Pentagon, in 1960 the Soviet Union had a total of 1,260 medium- and long-range bombers and tankers; in 1965 that number had declined to 1,040; and today that figure stands at approximately 900.

More important, the Soviet long-range bomber capacity has declined from 215 in 1965 to 195 in 1973. In his March posture statement, then-Secretary of Defense Richardson said the following about the Soviet long-range bomber force:

> The Soviet intercontinental heavy bomber force remains, as it has for the last few years, at approximately 195 aircraft, including about 50 tankers and several reconnaissance aircraft.

At present, the Soviets have from 125–145 Bear and Bison long-range bombers and about 50 long-range Bison tankers. These bombers were in service in 1956 so today they are approximately 17 years old. Neither the Bear nor the Bison has the range, speed, or maximum weapons load that their American counterpart, the B–52, has. According to the Defense Department, there is no evidence that the Soviets intend to deploy a heavy bomber, such as our B–52 or the proposed B–1, in the near future.

The Soviets have continued testing a new swing-wing, medium-range bomber code-named "Backfire." During his tenure as Secretary of Defense, Elliot Richardson was publicly skeptical about the threat posed by Backfire.

Mr. Richardson conceded that Backfire's capability to bomb the United States "cannot be ruled out." But in testimony before the Armed Services Committee he stated that "the weight of evidence favors the view that it is best suited for peripheral attacks" in areas adjoining the Soviet Union, not against the United States.

Backfire does have a refueling capacity and, according to Admiral Moorer, "could prove to be an effective intercontinental bomber." But this "worst case" supposition stretches the credulity of the Pentagon's argument. It can be countered by one simple question: If the Soviets desire to improve their long-range strategic bombing capacity why do they not build a long-range bomber?

I believe that the evidence on Backfire indicates that it was built to provide the Soviets with a medium-range attack

bomber to be used against the Chinese threat. I therefore contend that the Soviet bomber threat remains in its diminished state. Neither the Soviets nor the Chinese are concentrating on the development of a new long-range bomber program.

In 1965, former Secretary of Defense Robert McNamara testified before this committee and stated:

> Our present system for defense against manned bomber attack was designed a decade ago when it was estimated that the Soviets would build a force capable of attacking the United States with many hundreds of long-range aircraft. This threat did not develop as estimated. Instead, the major threat confronting the United States consists of the Soviet ICBM and submarine-launched ballistic missile forces.

I believe Mr. McNamara's analysis continues to hold true today. Why, then, are we about to embark on a costly new air defense program?

It is not the intention of my amendment to ask GAO to answer this policy question. This is a policy question which should be answered initially by the Committee on Armed Services and ultimately by the Senate as a whole. But it is of central importance that data and projections which have led the Air Force to its conclusions about AWACS be analyzed and assessed for accuracy and objectivity.

My amendment contains one unique aspect: It calls for the Comptroller General to certify that his organization has been provided with data sufficient to enable it to make an adequate review. This provision is not intended as a putative measure; it is instead an attempt to assure that the GAO review is of the highest professional standard—a standard that cannot be reached without access to all pertinent information.

The words "data sufficient" are obviously the key to this provision and should be accurately explained as a part of the legislative history of this amendment. A number of reports and memorandums obviously impact on the cost-effectiveness studies. In addition, other in-house analyses of these studies by independent elements of the Defense Department undoubtedly exist. I would like the RECORD to show that this certification by the Comptroller General should not be forthcoming unless all this pertinent data is made available to GAO.

According to the committee report, a decision has apparently been made to urge a significant reduction in the 42-plane AWACS request. No doubt this decision is based on a growing skepticism about the air defense justification. I also understand that next year's Department of Defense request for AWACS will reflect a significant decrease in the quantity requirement. These are positive indications that the Pentagon is taking a hard look at AWACS—a look that can logically only lead to a more realistic assessment of the requirement.

Mr. President, it is my distinct impression that AWACS is another of the Pentagon's technical marvels without a mission. There is a year to go before Congress must make a production decision on the system. I intend to insure that there is a real need for this marvel before the taxpayers invest $2.6 billion in the program.

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

The ACTING PRESIDENT pro tempore. On the time of the Senator?

Mr. EAGLETON. Charge it to my time, Mr. President.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

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

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

Mr. SYMINGTON. Mr. President, I have discussed this matter with the distinguished ranking minority member of the committee. It is my understanding the distinguished chairman of the Tactical Air Subcommittee of the Committee on Armed Services will be here shortly. After looking over the amendment the ranking minority member and I are willing to accept it. The Air Force says it is satisfactory to them.

Mr. President, the distinguished Senator from Nevada is now here and has several questions he would like to ask. I yield to him.

The ACTING PRESIDENT pro tempore. The Senator from Nevada is recognized.

Mr. CANNON. Mr. President, I wish to begin my remarks by giving a brief synopsis of my longer speech last Thursday, September 20, which was printed in the RECORD starting on page 30655 and which presented a comprehensive review of the AWACS aircraft program. In that speech, I discussed how the AWACS program currently is bettering its technical performance milestones, is running ahead of schedule, and is underrunning on costs. Also I pointed out that the R. & D. program to date has eliminated the technical risk in the AWACS program because the prototype brassboard radar in its flight testing has demonstrated the overland look-down capability to pick out low flying airplanes which are hidden in ground clutter from current airborne warning radar planes.

The AWACS, when deployed with our Air Force, will greatly increase the bomber defense effectiveness of our present Air Defense Command intercepters and also will greatly improve the defensive and offensive capabilities of our tactical combat forces by providing a quantum improvement in airplane early warning and battlefield command and control. The operational potential of AWACS in both of these uses, the strategic bomber defense and the tactical warfare application, already has been demonstrated with initial operational test and evaluation flights in Air Force exercises.

SUBSTITUTE EAGLETON AMENDMENT

I understand that the distinguished Senator from Missouri (Mr. EAGLETON) has withdrawn his original amendment which would have cut back the R. & D. airplanes in the AWACS program and has substituted an amendment which would require a review by the GAO of cost-effectiveness studies done on AWACS in connection with the upcoming Defense Systems Acquisition Review Council meeting scheduled for next week. Let me say that this substitute amendment appears acceptable to the committee, but I would like to ask the Senator several questions in order that the intent of his amendment is explained and clarified in the record.

First, as I understand the Senator's amendment it would not have any effect in withholding R. & D. funds on the AWACS program.

Mr. EAGLETON. That is correct.

Mr. CANNON. Could the Senator verify that this is the case and that the R. & D. funds are not intended to be affected by the terms and conditions specified in his amendment?

Mr. EAGLETON. The Senator is absolutely correct. Only $11.7 million in procurement funds is affected.

Mr. CANNON. Second, the amendment states that the Comptroller General has until December 31, 1973, to submit his report on his review of the cost-effectiveness studies done on the AWACS. Now a question could arise as to what would happen if the Defense Department turned over the studies to the GAO, but the GAO did not complete its report by December 31, 1973. Could the Senator explain what would happen in that event and is it his intent with this amendment that the Air Force could release the long lead procurement funds if the GAO did not complete its report by the specified date of December 31, 1973?

Mr. EAGLETON. If under the wording of this amendment DOD turns over to GAO the requisite studies and reports in the DOD files and pursuant thereto GAO does not complete its report by December 31, 1973, the answer is that DOD could go ahead with the long lead procurement funds. But that is conditioned on the fact that DOD turned over studies and reports in its files and that the Comptroller certify to that fact prior to December 31, 1973.

Mr. CANNON. I understand that.

Third, when the amendment restricts the expenditure of funds "for the procurement of any production-funded long lead item in connection with the AWACS," it is my understanding that these words are meant to refer specifically to the $11.7 million in long lead procurement funds in the fiscal year 1974 bill. Is that a correct interpretation?

Mr. EAGLETON. That is the correct interpretation.

Mr. CANNON. Mr. President, with these understandings then let me say that I am informed that the Air Force does not object to the amendment as it now is modified and also the committee certainly does not object to and indeed is pleased to have the GAO review the cost-effectiveness studies on AWACS, provided that it does not have any impact on the AWACS program schedule.

The ACTING PRESIDENT pro tempore. Who yields time?

Mr. THURMOND. Mr. President, I yield myself such time as may be required.

The ACTING PRESIDENT pro tem-

pore. The Senator from South Carolina is recognized.

Mr. THURMOND. Mr. President, I just want to say that the AWACS program, in my judgment, is a very important program to our national defense

AWACS represents a big technical step forward in battlefield control as it puts in the air, over 100 miles from the battle scene, a plane which:

Spots approaching enemy fighters or bombers, even at very low altitude where hidden from current radar units;

Radios information to Army ground anti-air units and Air Force interceptors; and

Serves as airborne command post for air commander and possibly Army ground defense commander.

At present we have three planes that are performing this task, one carrying a radar, another carrying communications equipment to talk with air and ground units, and a third being the command post. Current planes used in this work are the EC–121 for the radar, the C–130 for the command post, and the C–135 for communications. AWACS does all three jobs, and its radar can do it significantly better than in our present planes because of the new low-level look-down capability.

Spotting enemy planes at such great distances enables our Hawk batteries on the ground to do the job better as they know the direction and speed of the target and whether it is enemy or friendly long before it gets into range.

Also, when F–15's or other planes are sent into enemy territory they will be told exactly where the enemy is long before point of contact comes. This gives our pilots a big advantage.

AWACS has shown unusual resistance to expected jamming countermeasures which may be used against the radar or communications system.

Thus, AWACS optimizes the capabilities of our ground and air defensive units through its technical advances. It would have saved many planes and pilots on offensive strikes over North Vietnam if we had had AWACS at that time.

Mr. President, we should continue orderly development as called for by committee action which cut $43 million from the request for R. & D. and approved $11.7 million in production long lead funds.

Mr. President, the way this amendment was originally drawn was objectionable, and we would have opposed it, but the distinguished Senator from Missouri has modified his amendment; and in considering the way it is now modified, we are willing to accept this amendment and take it to conference.

The ACTING PRESIDENT pro tempore. Is all time yielded back?

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

Mr. THURMOND. Mr. President, I yield back the remainder of my time.

The ACTING PRESIDENT pro tempore. All time on the amendment has been yielded back.

The question is on agreeing to amendment No. 520 by the distinguished Senator from Missouri (Mr. EAGLETON), as amended by the substitute offered by the distinguished Senator from Missouri (Mr. EAGLETON). [Putting the question.]

The amendment, as amended, was agreed to.

AMENDMENT NO. 531

The ACTING PRESIDENT pro tempore. At this time, in accordance with the previous order, the Senate will proceed to the consideration of amendments No. 531 by the distinguished Senator from Missouri (Mr. EAGLETON), which the clerk will please read.

The legislative clerk read the amendments (No. 531) as follows:

On page 30, between lines 2 and 3, insert a new section as follows:

"SEC. 703. The National Industrial Reserve Act of 1948 (62 Stat. 1225; 50 U.S.C. 451) is amended to read as follows:

" 'That this Act may be cited as the "Defense Industrial Reserve Act".

" 'CONGRESSIONAL DECLARATION OF PURPOSE AND POLICY

" 'SEC. 2. In enacting this Act, it is the intent of Congress (1) to provide a comprehensive and continuous program for the future safety and for the defense of the United States by providing adequate measures whereby an essential nucleus of Government-owned industrial plants and an industrial reserve of machine tools and other industrial manufacturing equipment may be assured for immediate use to supply the needs of the Armed Forces in time of national emergency or in anticipation thereof; (2) that such Government-owned plants and such reserve shall not exceed in number or kind the minimum requirements for immediate use in time of national emergency, and that any such items which shall become excess to such requirements shall be disposed of as expeditiously as possible; (3) that to the maximum extent practicable, reliance will be placed upon private industry for support of defense production; and (4) that machine tools and other industrial manufacturing equipment may be held in plant equipment packages or in a general reserve to maintain a high state of readiness for production of critical items of defense materiel, to provide production capacity not available in private industry for defense materiel, or to assist private industry in time of national disaster.

" 'DEFINITIONS

" 'SEC. 3. As used in this Act—

" '(1) The term "Secretary" means Secretary of Defense.

" '(2) The term "Defenes Industrial Reserve" means (A) a general reserve of industrial manufacturing equipment, including machine tools, selected by the Secretary of Defense for retention for national defense or for other emergency use; (B) those industrial plants and installations held by and under the control of the Department of Defense in active or inactive status, including Government-owned / Government-operated plants and installations and Government-owned/contractor-operated plants and installations which are retained for use in their entirety, or in part, for production of military weapons systems, munitions, components or supplies; (C) those industrial plants and installations under the control of the Secretary which are not required for the immediate need of any department or agency of the Government and which should be sold, leased, or otherwise disposed of.

" '(3) The term "plant equipment package" means a complement of active and idle machine tools and other industrial manufacturing equipment held by and under the control of the Department of Defense and approved by the Secretary for retention to produce particular defense materiel or defense supporting items at a specific level of output in the event of emergency.

" 'DUTIES OF THE SECRETARY

" 'SEC. 4. To execute the policy set forth in this Act, the Secretary is authorized and directed to—

" '(1) determine which industrial plants and installations (including machine tools and other industrial manufacturing equipment) should become a part of the defense industrial reserve;

" '(2) designate what excess industrial property shall be disposed of;

" '(3) establish general policies and provide for the transportation, handling, care, storage, protection, maintenance, repair, rebuilding, utilization, recording, leasing and security of such property;

" '(4) direct the transfer without reimbursement of such property to other Government agencies with the consent of such agencies;

" '(5) direct the leasing of any of such property that shall be disposed of;

" '(6) authorize the disposition in accordance with existing law of any of such property when in the opinion of the Secretary such property is no longer needed by the Department of Defense; and

" '(7) authorize and regulate the lending of any such property to any nonprofit educational institution or training school whenever (A) the program proposed by such institution or school for the use of such property will contribute materially to national defense, and (B) such institution or school shall by agreement make such provision as the Secretary shall deem satisfactory for the proper maintenance and care of such property and for its return, without expense to the Government, upon request of the Secretary.

" 'REPORTS TO CONGRESS

" 'SEC. 5. The Secretary shall submit to the Congress on or before April 1 of each year a report detailing the action taken under this Act and containing such other pertinent information regarding the status of the defense industrial reserve as will enable the Congress to evaluate the administration of such reserve and the necessity or desirability for any legislative action regarding such reserve.

" 'AUTHORIZATION FOR APPROPRIATIONS

" 'SEC. 6. There are authorized to be appropriated such sums as the Congress may from time to time determine to be necessary to enable the Secretary to carry out the provisions of this Act.'."

On page 30, line 3, strike out "SEC. 703" and insert in lieu thereof "SEC. 704".

The ACTING PRESIDENT pro tempore. Debate on this amendment is limited to 2 hours, to be equally divided.

Who yields time?

Mr. EAGLETON. Mr. President, the National Industrial Reserve Act of 1948 established a reserve of machine tools and industrial manufacturing equipment for immediate use to supply the needs of the Armed Forces in a time of national emergency. The act authorizes the Secretary of Defense to determine which excess industrial properties should become part of the reserve and which should be disposed of. The Secretary is also authorized to lend property to nonprofit educational institutions or training schools when he determines that the programs proposed by these organizations would contribute to national defense and the equipment would be properly maintained and returned if required without expense to the Government.

While it would appear that the Secretary of Defense has absolute control over this program—called the National Industrial Equipment Reserve—NIER—according to the 1948 legislation, the actual administration of NIER has been performed by the General Services Administration. Since December 31, 1972, however, no Government agency has administered the NIER program, and the equipment in the reserve has been literally rusting away in two storage depots. How could it happen that such an expensive investment could be allowed to deteriorate?

The answer to that question leads us back to an issue which has haunted the legislative process in the past few years—impoundment. Last year as a part of the supplemental appropriations bill, $1.8 million was appropriated so that GSA could resume its maintenance of the industrial reserve equipment and resume its school loan program; $950,000 of that money was expended by the administration for funeral expenses—to pay for the interment of the NIER program. This money was spent on closing costs—personnel payments and terminated leases; $850,000 of that money remains controlled by the Office of Management and Budget, held hostage to an impoundment policy which is replete with false economies such as this one.

Instead of spending the $850,000 appropriated to maintain these tools, the administration has allowed $46 million worth of industrial equipment to begin rusting away in unattended warehouses.

The administration has apparently based its decision to abolish the NIER program on an assertion that the program seems to emphasize the vocational training aspects more than the defense requirements. I take strong exception to this assertion. The loaning of industrial equipment to vocational schools assures that our Nation will have an adequate supply of skilled industrial labor in case of a national emergency.

I agree with then Deputy Secretary of Defense Kenneth Rush's statement that the termination of the NIER program would be "detrimental to our national security interest." As Secretary Rush has said, the "tools for schools" program is beneficial because some 35,000 youths and disadvantaged persons "are taught skills which are critical to defense emergency production" and because "the Government has obtained free storage and maintenance of NIER equipment" on loan to schools.

To justify its impoundment of NIER funds, the administration says that the NIER program should be administered by the Defense Department and that NIER funding should come under the Department of Defense rather than the GSA appropriation. But when the administration talks about "redirecting" the NIER program, they really mean that it should die.

The amendment I propose today is designed to revitalize the concept created by the 1948 NIER Act. Although the amendment is some four pages long, its intent is quite simple and the vast bulk of its language is patterned after the original act.

The Defense Department has been maintaining a general reserve of industrial tools quite separate from the NIER reserve previously maintained by GSA.

There are two reserves, one maintained by DOD. This general reserve is much larger than NIER—the total value being approximately $333,000,000 worth of equipment as contrasted to $84,000,000 in the NIER reserve. The personnel who currently maintain the general reserve could absorb the NIER equipment and administer the loan program at no additional cost to the Government. In addition, the school loan program could be expanded to include more sophisticated equipment for vocational schools which badly need to modernize their training techniques.

It is important to emphasize that my amendment would not add one penny to this authorization bill. In fact, I expect it to result in an overall savings in the administration of the industrial reserve program.

When savings are measured in Government spending we must not forget those sectors of the economy which derive direct benefits from Government programs such as NIER which would otherwise have to spend local tax dollars on equipment the NIER program provides.

The experience of my own State of Missouri, for instance, indicates a considerable savings of equipment and money for vocational schools. The Special School District of St. Louis alone has received machine shop and electronics equipment valued at over $700,000. At Rolla, Mo., the area vocational school has acquired equipment worth over $100,000.

Currently on file with the Missouri State Department of Education are requests for NIER equipment totaling $600,000. If these schools are not able to receive free equipment on loan from NIER, they will have to make these large expenditures out of their own budgets.

Finally, Mr. President, I would like to address the administration's justification for impounding the $850,000. According to a letter from the Office of Management and Budget to the Comptroller General, the administration has based its impoundment on a desire 'to achieve the most effective and economical use of funds available." In addition, the administration asserts that the NIER program no longer serves a defense need. In a letter to me the Comptroller General countered these assertions by stating:

> In our judgment, neither of the reasons cited by the OMB provides any legal basis for the current impoundment of the NIER appropriations.

Mr. President, I ask unanimous consent that the letter from Comptroller General Staats to me dated September 11, 1973, be inserted in the RECORD at the completion of my remarks. In addition, Mr. President, I ask that a list of "tools for schools" loan agreements dated September 30, 1972, be inserted in the RECORD following Mr. Staats' letter.

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

(See exhibits 1 and 2.)

Mr. EAGLETON. Mr. President, 27 States are currently participating in the NIER program. If my amendment—and it is a joint amendment offered by myself and the distinguished Senator from Vermont (Mr. AIKEN)—is adopted the "tools for schools" loan program can be expanded to include every one of the 50 States and a much greater number of vocational schools. I urge my colleagues to support this revitalization of the NIER concept to provide for a more efficient and less costly program as well as to provide for a continuing supply of people in the vital industrial-skill area.

EXHIBIT 1

COMPTROLLER GENERAL OF THE UNITED STATES,
*Washington, D.C., September 11, 1973.*

Hon. THOMAS F. EAGLETON,
*U.S. Senate.*

DEAR SENATOR EAGLETON: Your letter of June 13, 1973, reads in part:

"In 1948 Congress passed the National Industrial Equipment Reserve Act which created a pool of reserve machine tools to be used in case of an emergency. The Act also established a program of loaning these tools to schools for vocational training purposes. Last year the Congress did not fund the NIER because of a difference between the Administration and Congress as to whether it should be retained under the GSA budget or shifted to the Defense Department. However, Congress did include $1.8 million in the first Supplemental Appropriations Act of 1973 to reactivate NIER to continue the school loan program. The Office of Management and Budget has announced that the $1.8 million will not be spent because 'The NIER program today does not serve as critical a defense need as it did in 1948.'

"The original NIER Act requires that a National Industrial Reserve Review Committee be established to conduct a review of the program in relation to changing defense needs. The same act requires that the Secretary of Defense, on the basis of the findings of the review committee, determine which machinery is no longer essential to our defense needs. Nothing in the original act permits the delegation of this responsibility to other government officials.

"I would appreciate it if your office would make a complete review of the NIER and action by the Administration pursuant to the appropriation passed by Congress for fiscal 1973. It would appear that the OMB decision represents an item veto of the funds appropriated last year. I would like your comment on this possibility."

On June 22, 1973, members of our staff discussed your request with representatives of your office, and provided them with information from previous General Accounting Office reviews of the NIER program. It was agreed that this briefing and a response to the legal issues raised in your letter—which follows—would satisfy your request.

House Joint Resolution 496, 93d Congress, approved April 26, 1973, Pub. L. 93–25, 87 Stat. 25, 26, appropriated to the Property Management and Disposal Service, General Services Administration (GSA):

"For an additional amount for 'Operating expenses' for the national reserve established by the National Industrial Reserve Act of 1948 (50 U.S.C. 451–462), $1,800,000, to remain available until expended."

This appropriation for NIER originated from a floor amendment submitted by Congressman Anderson, of Illinois, during House consideration of H.J. Res. 496. The Senate Appropriations Committee report on H.J. Res. 496 commented upon the NIER program, in part, as follows:

"NIER was previously funded under the GSA appropriation. In fiscal year 1973, the administration attempted to transfer funding to DOD. However, the Congress did not include NIER funds in either the GSA or

DOD appropriations, and NIER officially expired on December 31, 1972. Testimony before the committee revealed that the discontinuance of the NIER program would have a detrimental effect on the general condition of the equipment in warehouses. The committee's recommendation will salvage the NIER program and retain it in GSA." (S. Rept. No. 93–120 at 5.)

It appears that the Office of Management and Budget (OMB) had determined prior to enactment of Pub. L. 93–25 to "redirect" the NIER program and not to apply any appropriations for its continuation. This determination is the subject of an exchange of correspondence between Congressman Anderson and OMB which appears in the Congressional RECORD for June 1, 1973, at pages 17806–17807 Congressman Anderson's letter of April 30, 1973, to the Director of OMB reads in part:

"I had been informed that OMB had decided not to expend any of the NIER funds contained in the supplemental, and instead had decided to abolish NIER, terminate the popular and successful 'tools for schools' loan program, and dispose of all NIER tools currently held in reserve by declaring them surplus. I greatly appreciate the fact that my request was honored not to make any reference to this decision in the supplemental signing statement.

"I would like to request that a decision as to the final disposition of NIER be suspended pending a more thorough, in-depth review and evaluation of NIER by the Department of Defense and the Congress. I am especially concerned that terminating NIER at this time might be interpreted as a 'line-item veto' and a 'policy impoundment' specifically provides for the appointment of a National Industrial Reserve Review Committee in DOD to annually review the justification for the retention of property in NIER and to make recommendations to the Secretary for its disposal if it is no longer essential to the national security. The same Act also provides for and requires an annual report by DOD to the Congress on NIER. The most recent report, dated April 4, 1973, contains very favorable references to the NIER school loan program and no suggestion that NIER is either wasteful or no longer necessary, and certainly no recommendation to the Congress that NIER be abolished.

"If OMB has detailed information or a report indicating that NIER machinery is no longer essential to our defense needs, I would appreciate receiving a copy of that report. But on December 29, 1972, in a letter to Chairman George Mahon on NIER, then Deputy Defense Secretary Kenneth Rush wrote:

" 'Based on a recent survey of defense requirements, we believe that it is necessary that all or substantially all of these tools be available for Defense production requirements when needed.'

"He was referring to the 4,100 tools in the GSA NIER storage facilities which had been closed down on December 31, 1972, and have since that time been left unattended and are now in imminent danger of substantial damage.

"I would therefore suggest that funds for NIER appropriated in the fiscal 1973 urgent supplemental appropriations act be immediately released for the protection and maintenance of the tools being stored in the Terre Haute, Ind., and Burlington, N.J., facilities, and that the 'tools for schools' loan program also be continued, all pending the final outcome of a further study into the value of NIER."

The Deputy Director of OMB replied by letter dated May 24, 1973, reading in part:

"* * * Thank you for your letter of April 30 concerning the 'National Industrial Equipment Reserve (NIER).' We have carefully reviewed the points made in your letter, but still feel that program redirection is necessary. We do not consider this to be a 'policy impoundment' since our decision recognizes the vocational educational benefits of the program and also the concern expressed by others that tools in the NIER be kept available for Defense production requirements when needed. In reaching our decision, we consulted with both the Department of Defense and the General Services Administration.

"As you know, Congressman Mahon has expressed the view that the NIER program appears to be based more on vocational training objectives than on defense requirements. Further, most of the concern expressed in Congress over the NIER relates to the training aspects of the program. We feel that the educational objectives of the NIER can best be served by donating the tools to educational institutions and under GSA/HEW's existing donation program. Such action would not place a significant additional burden on the donation program and would not require additional Federal funds. This would not be a one time action but would allow a continual flow of machine tools no longer needed for Defense contracts to be donated, rather than loaned, to the many schools which can use such tools for vocational training.

"With regard to the concern that the tools in the NIER be available for Defense production requirements when needed, we feel that such mobilization needs can be met by putting a national security clause on the tools channeled through GSA's disposal program. Such a clause could require that the tools be kept in good operating condition and made available for Defense production requirements when needed for national security reasons. In an emergency situation, the mobilization of NIER tools would augment tools made available by the President's authority under Title I of the Defense Production Act to take tools off production lines if a shortage should jeopardize defense production priorities."

In remarks concerning subsequent developments with respect to NIER, appearing in the Congressional Record for July 11, 1973, at pages 23405–23407, Congressman Anderson noted that a portion of the $1.8 million appropriation had been released by OMB to reimburse GSA for its operation of NIER during the first half of fiscal year 1973. However, the amount released apparently has not and will not be used for continued maintenance of NIER stores or continuation of the school loan program. In this connection, a letter from the Assistant Administrator of GSA, appended to Congressman Anderson's remarks of July 11, reads in part:

"Implementation of the Office of Management and Budget (OMB) plan for termination of the NIER program, would require, first, that the NIER tools be declared excess to the needs of the Department of Defense (DoD). They would then be screened among the Federal agencies for possible Federal utilization. If no further Federal need for the tools were determined, the equipment would be declared surplus and be made available for donation by the General Services Administration (GSA) through the Department of Health, Education and Welfare (DHEW).

"Under existing DHEW procedures the tools would be allocated to State Agencies for Surplus Property, not directly to schools. The distribution to schools or other eligible donees within each State would be accomplished by the State Agency. Tools located in depots would normally be offered nationally, not simply to the States in which the depots were located.

"Approximately 25% of the NIER tools in storage are of a type which could be used by schools for vocational traininug. Although the tools in storage at Terre Haute and Burlington are showing signs of rust they can be restored. Most schools would be capable of having the proper restoration and repair work done.

"The OMB plan for disinvestment of the NIER tools does not appear to envision that restoration or repair work will be accomplished before the tools are donated. In any event we have not received an apportionment of funds for this purpose from OMB.

"Additional funds would not be required by GSA to handle the normal offering of these tools for further Federal use or for donation. However, to the extent the tools now stored in depots were transferred or donated, funds would be required for out-handling from these depots. These amounts could be recovered from the recipients. In addition, out-handling funds would be needed should any of these tools, not required for Federal use or donation, be sold by GSA.

"The cost of operating the NIER program through December 31, 1972, was $701,000. Since that date additional disbursements have been made to cover severance pay and allowances, bringing expenditures for FY 1973 up to a total of $817,500 as of April 30, 1973. The DoD did not reimburse GSA for these expenditures. Funds to conduct the program during FY 1973 were made available by a reprogramming of our operating expense appropriation. OMB has apportioned $830,000 of funds appropriated by the first supplemental (Public Law 93–25) to reimburse our operating expense account for FY 1973." (*Id.* at E4652–53.)

The $1.8 million appropriation to GSA in Pub. L. 93–25 was made for the purpose of restoring and carrying on the NIER program, and was necessarily based upon a congressional determination that the program should continue—at least pending possible further congressional review. By contrast, it is clear that OMB's "redirection" of NIER, discussed previously, amounts to termination of the program envisioned and provided for in Pub. L. 93–25. Thus the congressional determination upon which the appropriation is based has been reversed by OMB.

OMB's most recent report pursuant to the Federal Impoundment and Information Act, as amended, submitted to the Congress and to our Office on July 16, 1973, indicates that as of June 30, 1973, $850,000 of the appropriation for NIER made by Pub. L. 93–25 has been placed in reserve, i.e., impounded. See page 31 of the itemized list of impoundments set forth therein. This impoundment is "explained" in the report by reference to two standard "reason(s) for reserve action." These reasons, which purport to invoke the authority of the so-called Antideficiency Act, 31 U.S.C. 665, read as follows:

" 'To achieve the most effective and economical use' of funds available for periods beyond the current fiscal year (31 USC 665 (c) (1)). This explanation includes reserves established to carry out the Congressional intent that funds provided for periods greater than one year should be so apportioned that they will be available for the future periods." and

"Temporary deferral pending the establishment of administrative machinery (not yet in place) or the obtaining of sufficient information (not yet available) properly to apportion the funds and to insure that the funds will be used in 'the most effective and economical' manner (31 USC 665(c) (1)). This explanation includes reserves for which apportionment awaits the development by the agency of approved plans, designs, specifications."

The NIER appropriation is available until expended, and is thus within the application of 31 U.S.C. 665(c) (1). However, in view of OMB's actions and plans, we do not understand how the $850,000 reserve from this appropriation can be justified as an effort to achieve the most effective and economical use thereof. We certainly do not believe

that this reserve can in any sense be considered in furtherance of, or even consistent with, congressional intent. The second reason apparently refers to a deferral pending implementation of the OMB plan by the Secretary of Defense, since neither the appropriation nor the authorizing statute would seem to require the development of any elaborate plans, designs or specifications by GSA.

In our judgment, neither of the reasons cited by OMB provides any legal basis for the current impoundment of the NIER appropriation. It is clear that the Antideficiency Act does contemplate, and in fact requires, reverse or impoundment actions which are designed in good faith to promote the economical and efficient application of appropriations to the purposes for which provided. However, we have on several occasions expressed the opinion that the Antideficiency Act does not authorize impoundments based upon general economic, fiscal or policy considerations which are in derogation of the purposes of an appropriation.

We would concur in Congressman Anderson's characterization of the NIER reserve action as a "policy impoundment," in the sense that it is based upon policy considerations whereby OMB has substituted its judgment for that of the Congress. This impoundment is not justified, in our view, by the Antideficiency Act or any other authority. We also agree with your suggestion that this action represents in its effect an "item veto," particularly since it appears that the decision not to fund NIER was made prior to enactment of Pub. L. 93–25. Of course, unlike a true item veto, the Congress is afforded no opportunity to override the veto.

Sincerely yours,

ELMER B. STAATS,
*Comptroller General of the United States.*

EXHIBIT 2

TOOLS FOR SCHOOLS LOAN AGREEMENTS AS OF SEPT. 30, 1972

| State | Number of loans | Number of items | Acquisition cost |
|---|---|---|---|
| Alabama | 8 | 157 | $633,981 |
| Arkansas | 27 | 507 | 2,126,019 |
| California | 28 | 499 | 2,552,628 |
| Colorado | 1 | 35 | 143,133 |
| Connecticut | 10 | 123 | 450,279 |
| Delaware | 2 | 22 | 111,112 |
| Florida | 1 | 43 | 97,020 |
| Georgia | 12 | 251 | 1,062,123 |
| Idaho | 3 | 33 | 110,098 |
| Illinois | 15 | 229 | 999,404 |
| Indiana | 18 | 321 | 2,229,527 |
| Iowa | 11 | 249 | 1,333,824 |
| Kansas | 10 | 233 | 897,585 |
| Louisiana | 1 | 14 | 42,461 |
| Maine | 3 | 41 | 172,942 |
| Maryland | 1 | 18 | 65,494 |
| Massachusetts | 27 | 665 | 2,573,796 |
| Michigan | 32 | 784 | 4,060,852 |
| Minnesota | 12 | 406 | 2,512,708 |
| Mississippi | 1 | 24 | 77,309 |
| Missouri | 9 | 259 | 1,554,196 |
| Montana | 1 | 5 | 10,668 |
| Nebraska | 4 | 131 | 704,464 |
| New Hampshire | 7 | 177 | 300,001 |
| New Jersey | 12 | 113 | 500,090 |
| New Mexico | 3 | 48 | 176,656 |
| New York | 7 | 49 | 170,998 |

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

Mr. EAGLETON. I yield.

Mr. PASTORE. I understand that this amendment does not add any money to the authorization bill. Is that correct?

Mr. EAGLETON. Not one penny.

Mr. PASTORE. These are tools that were already in inventory and on hand, and it facilitates a better loan in order to bring about a better training program in the different States. Is that correct?

Mr. EAGLETON. That is correct. For 25 years these loans have been made in this manner.

Mr. PASTORE. Why have they been cut off?

Mr. EAGLETON. Mr. President, the OMB makes two points.

First, it costs $1 million a year, they say, to maintain a separate warehouse under GSA.

Second, they say GSA should not be the administrator of the program. The DOD should. My amendment would give the program to DOD.

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

Mr. SYMINGTON. Mr. President, some of us have looked this amendment over. Some years ago I had experience in this field as Chairman of the National Resources Board, now called the Office of Emergency Production. I have discussed the amendment with the distinguished senior Senator from South Carolina, ranking minority member of the Armed Services Committee. He has some words to say. So far as this side of the aisle is concerned, we are ready and willing to accept the amendment, and commend the junior Senator from Missouri for calling it up.

Mr. EAGLETON. Mr. President, I ask for the yeas and nays on the amendment.

The yeas and nays were ordered.

Mr. THURMOND. Mr. President, I yield to the distinguished senior Senator from Vermont.

The PRESIDING OFFICER. The Senator from Vermont is recognized.

Mr. AIKEN. Mr. President, the purpose of the pending amendment has been well described by the statement of the distinguished senior Senator from Missouri.

I simply want to say that the program, which we would continue under proper supervision, was established in 1948 when the Congress approved the National Industrial Equipment Reserve Act. It has done a tremendous amount of good work since that time.

It was my privilege at that time to work for this program. And although my State of Vermont has only one nonprofit school which makes use of this program at this time, throughout the country there are several hundred schools that have had equipment made available to them for helping to train students for highly skilled jobs. That machinery would have otherwise remained idle or rusting away. That is why the 1948 National Industrial Equipment Reserve Act provided that the machine tools in reserve could be loaned out to schools and other nonprofit institutions.

I cannot understand why anyone who really knows this program would want to reduce it or to do away with it. That is why I cosponsored earlier this year a $1.8 million supplemental appropriation to help get this program back into operation. The funds were approved as part of Public Law 93–25, but have not been spent according to the intent of Congress. I might say the Senate Appropriations Committee has been most helpful in trying to carry out the intent of Congress as set forth in Public Law 93–25, and I ask that the following portion of the Senate Appropriations Committee report in connection with the fiscal year 1974 Treasury, postal service, general government appropriations will be printed.

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

[From fiscal year 1974—Treasury, Postal Service appropriation bill report, August 3, 1973]

NATIONAL INDUSTRIAL EQUIPMENT RESERVE

Earlier this year, Public Law 93–25 authorized an appropriation of $1.8 million for use by the General Services Administration to reinstate the National Industrial Equipment Reserve (NIER) program. The Office of Management and Budget has proposed that this program be phased out.

This worthwhile program maintains a machine tool equipment reserve in addition to loaning tools and equipment to schools for use in training students seeking technical careers.

The Committee has learned that as a result of OMB directives, notwithstanding Public Law 93–25, these funds are being used to further phase out the NIER program rather than for its reinstatement as intended by the Congress.

The Committee views OMB's action and attitude with displeasure and insists that OMB reinstate the NIER program immediately, in accordance with Public Law 93–25.

Mr. AIKEN. I simply want to say that I am very happy the distinguished Senator from Missouri has offered his amendment. I have been very pleased to cosponsor it with him.

I hope that there will be no opposition.

Mr. EAGLETON. Mr. President, I thank the distinguished senior Senator from Vermont.

Mr. THURMOND. Mr. President, I yield myself such time as I may require.

Mr. President, the National Industrial Reserve Act of 1948 authorized the establishment of a reserve of machine tools, production equipment and plants, "to supply the needs of the Armed Forces in time of emergency or in anticipation thereof."

Mr. President, I ask unanimous consent that a copy of the act be printed in the RECORD at the conclusion of my remarks.

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

(See exhibit 1.)

Mr. THURMOND. Mr. President, a provision of the act provides for a program commonly known as the "tools for schools" loan program. Under this authority the Secretary of Defense may approve the assignment of tools from the National Industrial Reserve to vocational schools for the purpose of training young people as apprentice machinists and metal workers and workers in other vocations. Under this program the training of these machinists has contributed materially to national defense for the graduates have been used extensively in defense industries and helped supply a vital need during the Southeast Asia production buildup. In addition the Government has received free storage and maintenance of this reserve equipment by loaning a part of it to the vocational training schools. Currently there are 399 school loans in effect covering 8,149 tools located in 44 States.

The General Service Administration in accordance with the act has acted as custodian and has funded for operation of this program since 1948. However, funds for the program were deleted from the GSA fiscal year 1973 budget by the Office of Management and Budget on April 28, 1973. Congress enacted a special supplemental appropriation of $1.8 million to continue the program through fiscal year 1973. Some 77 Congressmen jointly sponsored this legislation.

In May 1973, the Office of Management and Budget proposed to the Secretary of Defense that the National Industrial Equipment Reserve, including the tools for schools program, be phased out and that the $1.8 million appropriated by Congress be used for this purpose.

Possible termination of the tools for schools program has caused widespread congressional criticism.

I believe that the amendment would provide for a phaseout of the National Industrial Equipment Reserve. However, it would authorize the continuance of the tools for schools program under the Defense Industrial Reserve program.

Mr. President, I want to distinguish between the National Industrial Reserve and the Defense Industrial Reserve.

At the time the National Industrial Reserve was established the Defense Industrial Reserve did not exist. The Defense Industrial Reserve at present is structured to provide the reserve of production equipment that is necessary to meet the needs of the Department of Defense in periods of emergency. It is not necessary to maintain two equipment reserves. The National Industrial Reserve has outlived its usefulness and its phase out would not adversely impact on national security, provided the better tools and equipment were transferred to the Defense Industrial Reserve, and provisions were made to authorize the Department of Defense to continue the school loan program through use of equipment in the Defense Industrial Reserve.

As we understand it this amendment would—

First. Codify one defense industrial equipment reserve instead of two thereby providing for more efficient management.

Second. Reinstate the tools for schools as program which has been suspended.

I would like the Senator from Missouri to comment on that.

Mr. EAGLETON. Mr. President, it would reinstate the tools for schools program and put it under Defense. That is correct.

Mr. THURMOND. Mr. President, I thank the distinguished Senator very much.

I am convinced that there is much merit in this program. However, there has not been enough time to staff an official DOD position. I feel that the amendment ought to be adopted. A lot of this equipment is just rusting and is not being used. The Department of Defense is not giving it to the schools. It merely lends it to them. They can get it back. We are making use of that equipment. And to my way of thinking, there is nothing more important in education than vocational education.

The purpose of vocational education is to teach people ways in which to make a living. And that should be one of the most important purposes in educating people.

These tools would be very useful in the vocational schools and the tech schools and the training schools of the country.

When I was Governor of South Carolina, I recommended the establishment of a training school system in South Carolina. Later, there was a tech system established, which carried the training schools on to a higher level.

I know from personal experience that the vocational education that the people receive in these training schools and in these technical schools has been of great value to them. It has enabled us to have more trained people qualify for higher wages and enabled them to increase their standard of living.

I am a strong believer in vocational education.

In my opinion, the Eagleton amendment will promote more vocational education. I feel that it is a worthy amendment.

Mr. President, we are willing to accept the amendment on this side of the aisle.

EXHIBIT 1

NIER

(Public Law 883—80th Congress, Chapter 811—2d Session)

[S. 2554]

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That this Act may be cited as the "National Industrial Reserve Act of 1948".

DECLARATION OF POLICY

SEC. 2. In enacting this Act, it is the intent of Congress to provide a comprehensive and continuous program for the future safety and for the defense of the United States by providing adequate measures whereby an essential nucleus of Government-owned industrial plants and a national reserve of machine tools and industrial manufacturing equipment may be assured for immediate use to supply the needs of the armed forces in time of national emergency or in anticipation thereof; it is further the intent of the Congress that such Government-owned plants and such reserve shall not exceed in number or kind the minimum requirements for immediate use in time of national emergency, and that any such items which shall become surplus to such requirements shall be disposed of as expeditiously as possible.

DEFINITIONS

SEC. 3. (a) The term "national industrial reserve", as used herein, means that excess industrial property which has been or may hereafter be sold, leased, or otherwise disposed of by the United States, subject to a national security clause, and that excess industrial property of the United States which not having been sold, leased, or otherwise disposed of, subject to a national security clause, shall be transferred to the Federal Works Agency under section 5 hereof.

(b) The term "excess industrial property," as used herein, means any machine tool, any industrial manufacturing equipment and any industrial plant (including structures on land owned or leased to the United States, substantially equipped with machinery, tools, and equipment) which is capable of economic operation as a separate and independent industrial unit and which is not an integral part of an installation of a private contractor, which machine tools, industrial manufacturing equipment, and industrial plants are under the control of any executive department or independent establishment in the executive branch of the Government, including any wholly owned Government corporation and which are not required for its immediate needs and responsibilities as determined by the head thereof.

(c) The term "national security clause," as used herein, means those terms, conditions, restrictions, and reservations, heretofore formulated or as may be formulated under section 4(2) hereof for insertion in instruments of sale or lease of property, determined in accordance with section 4(1) to be a part of the national industrial reserve, which will guarantee the availability of such property for the purposes of national defense at any time when availability thereof for such purposes is deemed necessary by the Secretary of Defense.

SEC. 4. To effectuate the policy set forth in section 2 of this Act the Secretary of Defense is hereby authorized and directed to—

(1) determine which excess industrial properties should become a part of the national industrial reserve under the provisions of this Act;

(2) formulate a national security clause, as defined in section 3(c) hereof and vary or modify the same from time to time in such manner as best to attain the objectives of this Act, having due regard to securing advantageous terms to the Government in the disposal of excess industrial property;

(3) consent to the relinquishment or waiver of all or any part of any national security clause in specific cases when necessary to permit the disposition of particular excess industrial property when it is determined that the retention of the productive capacity of any such excess industrial property is no longer essential to the national security or that the retention of a lesser interest than that originally required will adequately fulfill the purposes of this Act: *Provided,* That nothing in this subsection (3) shall require the modification or waiver of any part of any such national security clause when such clause is deemed necessary by the Secretary of Defense to effectuate the purposes of this Act; and

(4) designate what excess industrial property shall be disposed of subject to the provisions of the national security clause.

SEC. 5. (a) In the event that any agency charged with the disposal of excess industrial property, after making every practicable effort so to do, is unable to dispose of any excess industrial plant because of the national security clause it shall notify the Secretary of Defense, indicating such modifications in the national security clause, if any, which in its judgment would make possible disposal of the plant. The Secretary of Defense shall consider and agree to any and all such proposed modifications as in his judgment would be consistent with the purposes of this Act. If, however, such clause is not modified or the requirements thereof waived pursuant to section 4(3), or if modified, such plant cannot then be disposed of under such modified clause, the Secretary of Defense shall direct that such plant be transferred to the Federal Works Agency, and such transfer shall be without reimbursement or transfer of funds.

(b) Notwithstanding any other provisions of law, any agency charged with the disposal of excess machine tools and industrial manufacturing equipment shall transfer custody of such machine tools and equipment as may be designated by the Secretary of Defense pursuant to section 4 hereof to the Federal Works Agency, without reimbursement, for storage and maintenance.

SEC. 6. Subject to provisions of section 7

hereof, the Federal Works Agency is hereby authorized and directed to accept the transfer to it of such excess industrial property as is directed to be transferred to it under section 4 hereof and, as and when directed or authorized by the Secretary of Defense pursuant to section 7 hereof, to utilize, maintain, protect, repair, restore, renovate, lease, or dispose of such property. Notwithstanding section 321 of the Act of June 30, 1932 (47 Stat. 412; U.S.C., title 40, sec. 303(b)), any lease may provide for the renovation, maintenance, protection, repair, and restoration by the lessee, of the property leased, or of the entire unit or installation when a substantial part thereof is leased, as part or all of the consideration for the lease of such property.

SEC. 7. The Secretary of Defense, with respect to property in the national industrial reserve, is authorized when he deems such action to be in the interest of national security—

(1) to establish general policies for the care, maintenance, utilization, recording, and security of such property transferred to the Federal Works Agency pursuant to section 5 hereof; and

(2) to direct the transfer without reimbursement by the Federal Works Agency of any of such property to other Government agencies with the consent of such agencies; and

(3) to direct the leasing by the Federal Works Agency of any of such property to designated lessees; and

(4) to authorize the disposition by the Federal Works Agency of any of such property by sale or otherwise when in the opinion of the Secretary of Defense such property may be disposed of subject to or free of the national security clause provided for in section 5 hereof; and

(5) to authorize and regulate the lending of any such property by the Federal Works Agency to any nonprofit educational institution or training school when (a) the Secretary shall determine that the program proposed by such institution or school for the use of such property will contribute materially to national defense, and (b) such institution or school shall by agreement make such provision as the Secretary shall deem satisfactory for the proper maintenance of such property and for its return to the Federal Works Agency without expense to the Government.

SEC. 8. As and when directed or authorized by the Secretary of Defense pursuant to the provisions of section 7 hereof, the Federal Works Agency shall after the date upon which transfer is directed pursuant to section 5 hereof provide for the transportation, handling, care, storage, protection, maintenance, utilization, repair, restoration, renovation, leasing, and disposition of excess industrial property.

SEC. 9. Nothing contained in this Act shall be construed as authorizing the acquisition of any property for the national industrial reserve except from excess or surplus Government-owned property.

SEC. 10. The Secretary of Defense shall appoint a National Industrial Reserve Review Committee, which shall consist of not exceeding fifteen persons to be appointed from civilian life who are by training and experience familiar with various fields of American industry, including shipbuilding, aircraft manufacture, machine tools, and arms and armament production. The members of such Committee shall serve for such term or terms as the Secretary of Defense may specify and shall meet at such times as may be specified by the Secretary of Defense to consult with and advise the National Military Establishment. Each member of such Committee shall be entitled to compensation in the amount of $50 for each day, or part of day, he shall be in attendance at any regular called meeting of the Committee, together with reimbursement for all travel expenses incident to such attendance: *Provided,* That nothing contained in sections 41, 109, and 113 of the Criminal Code (U.S.C., title 18, secs. 93, 198, and 203); in Revised Statutes, section 190 (U.S.C., title 5, sec. 99); in section 19 —— of the Contract Settlement Act of 1944 (Public Law 395, Seventy-eighth Congress); or in any other provision of Federal law imposing restrictions, requirements, or penalties in relation to the employment of persons, the performance of services, or the payment or receipt of compensation in connection with any claim proceeding, or matter involving the United States, shall apply to such persons solely by reason of their appointment to and membership on such Committee.

SEC. 11. It shall be the duty of the Committee appointed under section 10 hereof to review not less often than once each year the justification for the retention of property in the national industrial reserve established hereunder and (i) to recommend to the Secretary of Defense the disposition of any such property which in the opinion of the Committee would no longer be of sufficient strategic value to warrant its further retention for the production of war materiel in the event of a national emergency; (ii) to recommend to the Secretary of Defense standards of maintenance for the property held in the national industrial reserve; (iii) to review and recommend to the Secretary of Defense the disposal of that property which in the opinion of the Committee could and should be devoted to commercial use in the civilian economy; and (iv) to advise the Secretary of Defense with respect to such activities under this Act as he may request.

SEC. 12. The Secretary of Defense shall submit to the Congress on April 1 of each year a report detailing the action taken by it hereunder and containing such other pertinent information on the status of the national industrial reserve as will enable the Congress to evaluate its administration and the need for amendments and related legislation.

SEC. 13. Section 5 of the Act approved August 5, 1947 (ch. 493, 61 Stat. 774), is hereby repealed.

SEC. 14. There are hereby authorized to be appropriated to the Office of the Secretary of Defense and to the Federal Works Administration, out of any moneys in the Treasury not otherwise appropriated, such sums as the Congress may, from time to time, determine to be necessary to enable the Secretary of Defense and the Federal Works Agency to carry out their respective functions under the Act.

Approved July 2, 1948.

Mr. EAGLETON. Mr. President, I thank the distinguished Senator from South Carolina.

Mr. President, I ask unanimous consent at this time that the name of the distinguished Senator from Georgia (Mr. NUNN) may be listed as a cosponsor of the Eagleton amendment, known as the Eagleton-Aiken amendment, which will now be known as the Eagleton-Aiken-Nunn amendment.

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

Mr. EAGLETON. Mr. President, I am pleased to yield to my distinguished colleague from Missouri.

## THE TRIDENT SUBMARINE

Mr. SYMINGTON. Mr. President, there is a story in the press this morning by two experts in modern weapons technology entitled "Trident: A Major Weapons Decision." I ask unanimous consent that the article in question be printed at this point in the RECORD.

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

[From the Washington Post, Sept. 22, 1973]

TRIDENT: A MAJOR WEAPONS DECISION

(By George W. Rathjens and Jack P. Ruina)

A dozen years ago, Congress and the White House were at loggerheads on the question of whether the nation should build a fleet of B–70 bombers, with Congress supporting the Air Force position. The impasse was resolved by the administration's decision not to continue the program beyond the construction of two prototypes. In retrospect it was a wise decision.

The B–70 had been designed to fly high and fast—a natural extension of the trend in heavy bombers. However, it turned out later that these qualities were unimportant in the defense environment in which it would have had to operate. Penetration of Soviet air defenses can be best accomplished by flying at very low altitudes, something for which the B–52 is superior to the B–70. Had Congress had its way, we would have had a fleet of white elephants; aircraft that were technically advanced but militarily inadequate.

Instead, we have continued to rely on the B–52s as the backbone of our manned bomber force. Despite alarms raised in the '60s about their age, they are still flying and will be for some years to come. And despite improvements in Soviet capabilities both for attacking our bomber bases and for managing their own air defenses, the B–52s are still highly effective as strategic bombers. This is a result of improved countermeasures to Soviet defensive systems, better tactics for penetrating Soviet airspace, changed basing, and different ordnance, including air-to-surface missiles.

Within the next few days, the nation will be confronted with another major decision on strategic weapons that raises somewhat similar questions. This time, however, the roles are reversed. The administration wants to go ahead with the building of a fleet of new missile-launching submarines, the Tridents. But there is substantial sentiment in Congress to defer a commitment to full scale development and production, estimated to cost $13.5 billion.

Like the B–70, the Trident is a logical extension of the machines now in service. It will be twice as large as the Polaris-Poseidon subs, it will go faster, will be quieter and will have more sophisticated sonar equipment. It will also, like the B–70, be much more expensive than its predecessor. The similarity does not stop there. Like the B–70, the Trident could prove to be poorly matched to the environment in which it will have to operate. The Trident submarine also will cost so much that research for other weapons programs will be slighted. Indeed, this has already hapened. Last year, the program to develop a new missile, the C–4, that would be compatible with *both* existing submarines and the Trident was postponed for a year. This was ostensibly because of funding limitations, One cannot help but suspect that a factor in the decision might have been concern that the early availability of the new missile would have undercut the case for the new submarine.

There are two major issues involved in the Trident submarine question: that of the aging of the Polaris-Poseidon ships; and the nature of the defense environment in the '80s and '90s.

As to the first, there is even less reason to believe that the present submarines will wear out than there was to believe that the B–52s would die of old age.

On the question of environment, the Navy seems to fear a situation in which the Soviets will improve their capability to detect our present submarines by the noise they radiate and, in the event of a long war at sea, be able to destroy our submarines

one by one. However, there are reasons to discount this concern. First, with the thermonculear weapons available, a long naval war seems totally unreal. After the first one or two of our ships were sunk, hostilities would be terminated by negotiations or they would escalate into a nuclear exchange with the remainder of the fleet being used to attack the Soviet Union.

Second, U.S. submarines will be able to launch the new C–4 missiles toward the U.S.S.R. from a much greater distance. The problems facing the Soviet Union in conducting anti-submarine warfare will be increased enormously and our existing Polaris-Poseidon force will then very likely be even less vulnerable in the '80s than it is now.

From the perspective of 1973, a more worrisome threat would be the development of a Soviet capability to trail all of the U.S. missile-launching subs in peace-time, with the possibility that the whole force might suddenly be destroyed. This could be accomplished, if at all, only with a large Soviet fleet of high-speed attack submarines. If that were the threat, the Trident's speed would be of little value. Its large size would be a disadvantage. With the kind of sonar the Soviets would most likely use, it could be somewhat more easily tracked than present submarines. More importantly, large size would mean that we would likely have fewer Tridents than we would smaller ships, considering the cost and also the nature of likely strategic arms limitation agreements with the U.S.S.R. The preferred response to such a threat is likely to be, as it was in the case of improved Soviet capabilities against the B–52s, changes in tactics and basing, the use of decoys and other countermeasures, and improved ordnance. *If* a new kind of submarine is required, the trend should probably be in just the opposite direction from Trident. We would want large numbers of small submarines even if economic constraints dictated inferior performance in noise level and sonar performance.

The present submarine force has many years of useful life in it. Its capabilities can be markedly improved by a variety of means, particularly with the new C–4 missile. Thus, this hardly seems like the right time to freeze the design of a successor submarine, particularly since the threat cannot now be defined.

If we jump the gun and commit ourselves to a new vehicle with no clear idea of what the threat may be, we could have a fleet of underwater B–70s on our hands—at over a billion dollars a copy.

Mr. SYMINGTON. This article compares the modern push by Navy and other lobbyists with the push some dozen years ago for the B–70 bomber by Air Force and other lobbyists.

Every Member of the Senate will be, or because so many billion dollars of the taxpayers money is involved, should be, interested in this article.

Moreover, as these two experts point out:

The Trident submarine also will cost so much that research for other weapons programs will be slighted. Indeed, this has already happened. Last year, the program to develop a new missile, the C–4, that would be compatible with both existing submarines and the Trident was postponed for a year. This was ostensibly because of funding limitations. One cannot help but suspect that a factor in the decision might have been concern that the early availability of the new missile would have undercut the case for the new submarine.

If they are in any way worried about higher prices, or dollar value, or taxes, or growing domestic needs in our cities, towns and countryside, they should be interested in the charge that major improvements in our current weapons are being deliberately withheld because such improvements might interfere with the rushed productions of this new unprecedentedly expensive boat.

Surely they should also be interested in the following flat statement by these two technical experts:

If a new kind of submarine is required, the trend should probably be in just the opposite direction from Trident.

Next week I plan to talk about the nature and degree of some of the lobbying that is currently underway to more than double the $642 million that was recommended by the only Senate Committee assigned the job of studying this matter in depth before putting all ten of these boats into production prior to the completion of one—a total abandonment of the "fly before buy" concept laid down over 4 years ago by the Defense Department and this administration.

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

The PRESIDING OFFICER (Mr. PROXMIRE). On whose time?

Mr. EAGLETON. Charged to my time, Mr. President.

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. ROBERT C. BYRD. 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 CONSIDERATION OF XM–1 TANK AMENDMENT

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that on Monday next, upon the disposition of the McGovern amendment on economic conversion, the Senate proceed to the consideration of the Eagleton amendment on the XM–1 tank.

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

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

Mr. ROBERT C. BYRD. I yield.

Mr. PASTORE. When is the school lunch program coming up on Monday?

Mr. ROBERT C. BYRD. The school lunch program will come up at 10:30 a.m. on Monday.

Mr. PASTORE. I thank the Senator.

Mr. ROBERT C. BYRD. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. On whose time?

Mr. ROBERT C. BYRD. How do Senators want the time charged?

Mr. EAGLETON. First, Mr. President, I am prepared to yield back the remainder of my time on the NIER amendment.

Mr. THURMOND. Mr. President, we yield back the remainder of our time on the amendment.

Mr. ROBERT C. BYRD. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The second assistant legislative clerk will call the roll.

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

The PRESIDING OFFICER (Mr. PROXMIRE). Without objection, it is so ordered.

The question is on agreeing to the amendment No. 531 of the Senator from Missouri (Mr. EAGLETON).

On this question the yeas and nays have been ordered, and the clerk will call the roll.

The assistant legislative clerk called the roll.

Mr. ROBERT C. BYRD. I announce that the Senator from Texas (Mr. BENTSEN), the Senator from North Dakota (Mr. BURDICK), the Senator from Florida (Mr. CHILES), the Senator from Mississippi (Mr. EASTLAND), the Senator from Alaska (Mr. GRAVEL), the Senator from Michigan (Mr. HART), the Senator from Indiana (Mr. HARTKE), the Senator from Colorado (Mr. HASKELL), the Senator from Kentucky (Mr. HUDDLESTON), the Senator from Iowa (Mr. HUGHES), the Senator from Hawaii (Mr. INOUYE), the Senator from Massachusetts (Mr. KENNEDY), and the Senator from Utah (Mr. Moss), are necessarily absent.

Mr. GRIFFIN. I announce that the Senator from Oklahoma (Mr. BARTLETT), the Senator from Tennessee (Mr. BROCK), the Senator from New York (Mr. BUCKLEY), the Senator from Kentucky (Mr. COOK), the Senators from Nebraska (Mr. CURTIS and Mr. HRUSKA), the Senator from Colorado (Mr. DOMINICK), the Senator from Oregon (Mr. HATFIELD), the Senator from Maryland (Mr. MATHIAS), the Senator from Illinois (Mr. PERCY), the Senator from Delaware (Mr. ROTH), the Senator from Ohio (Mr. SAXBE), the Senator from Pennsylvania (Mr. SCOTT), and the Senator from Virginia (Mr. SCOTT) are necessarily absent.

I further announce that the Senator from Utah (Mr. BENNETT) and the Senator from Ohio (Mr. TAFT) are absent on official business.

I also announce that the Senator from Oklahoma (Mr. BELLMON) and the Senator from Kansas (Mr. PEARSON) are absent because of illness.

I further announce that the Senator from New Hampshire (Mr. COTTON) is absent because of illness in his family.

I further announce that if present and voting, the Senator from Nebraska (Mr. CURTIS), the Senator from Illinois (Mr. PERCY), and the Senator from Oregon (Mr. HATFIELD) would each vote "yea."

The Senator from New Jersey (Mr. CASE) is detained on official business.

The result was announced—yeas 67, nays 0, as follows:

[No. 408 Leg.]

YEAS—67

| | | |
|---|---|---|
| Abourezk | Goldwater | Nelson |
| Aiken | Griffin | Nunn |
| Allen | Gurney | Packwood |
| Baker | Hansen | Pastore |
| Bayh | Hathaway | Pell |
| Beall | Helms | Proxmire |
| Bible | Hollings | Randolph |
| Biden | Humphrey | Ribicoff |
| Brooke | Jackson | Schweiker |
| Byrd, Harry F., Jr. | Javits | Sparkman |
| Byrd, Robert C. | Johnston | Stafford |
| Cannon | Long | Stennis |
| Church | Magnuson | Stevens |
| Clark | Mansfield | Stevenson |
| Cranston | McClellan | Symington |
| Dole | McClure | Talmadge |
| Domenici | McGee | Thurmond |
| Eagleton | McGovern | Tower |
| Ervin | McIntyre | Tunney |
| Fannin | Metcalf | Weicker |
| Fong | Mondale | Williams |
| Fulbright | Montoya | Young |
| | Muskie | |

NAYS—0

NOT VOTING—33

| | | |
|---|---|---|
| Bartlett | Curtis | Inouye |
| Bellmon | Dominick | Kennedy |
| Bennett | Eastland | Mathias |
| Bentsen | Gravel | Moss |
| Brock | Hart | Pearson |
| Buckley | Hartke | Percy |
| Burdick | Haskell | Roth |
| Case | Hatfield | Saxbe |
| Chiles | Hruska | Scott, Pa. |
| Cook | Huddleston | Scott, Va. |
| Cotton | Hughes | Taft |

So Mr. EAGLETON's amendment (No. 531) was agreed to.

Mr. MANSFIELD. Mr. President, a number of Senators would like to go to the White House to witness the swearing-in of Dr. Henry Kissinger as Secretary of State. The invitation states that the time of the swearing-in will be 11 o'clock. I should like to ask, anticipating that amendments will be forthcoming during our absence from the Senate, that the votes on any amendments in the meantime be deferred until the hour of 12 o'clock.

The PRESIDING OFFICER (Mr. McGOVERN). Is there objection? The Chair hears none, and it is so ordered.

Mr. MANSFIELD. I thank the Chair.

The PRESIDING OFFICER. Does the Senator from Montana renew his suggestion of the absence of a quorum?

Mr. MANSFIELD. 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. ROBERT C. BYRD. 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 FOR TODAY AND MONDAY—TIME LIMITATION AGREEMENT ON GOLDWATER AMENDMENT NO. 476

Mr. ROBERT C. BYRD. Mr. President, with the approval of the distinguished Senator from Wisconsin (Mr. PROXMIRE), the distinguished Senator from Mississippi (Mr. STENNIS), the distinguished Senator from Arizona (Mr. GOLDWATER), and the leadership on both sides, I ask unanimous consent that in lieu of the scheduled amendment dealing with the M–16 rifle which was to be called up at this time by Mr. GOLDWATER, that Mr. GOLDWATER be allowed to call up his amendment dealing with a study relating to the Air National Guard; that there be a time limitation thereon today of not to exceed 30 minutes, equally divided between Mr. STENNIS and Mr. GOLDWATER; that at the conclusion of that time the amendment go over until Monday; that at the hour of 10:30 a.m. on Monday the Senate resume consideration of the unfinished business; that at that time the Senate resume consideration of the Goldwater amendment, with the understanding that there be a 30-minute limitation for further debate, to be equally divided between Mr. GOLDWATER and Mr. STENNIS, with the proviso that there be a time limitation on any amendment to the amendment of 30 minutes, and a time limitation of 20 minutes on any debatable motion or appeal; and that at the conclusion of debate thereon and disposition of any amendment which may be offered thereto, a vote occur on the Goldwater amendment.

Mr. STENNIS. Mr. President, if the Senator will yield, that is entirely agreeable to me.

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

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that this agreement be without prejudice to the rights of Mr. PROXMIRE in respect of his amendment which was to be called up today; that his amendment will follow the debate on the Goldwater amendment today. That should be understood without further request.

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

## ORDER TO CONSIDER SCHOOL LUNCH BILL ON MONDAY

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that on Monday, upon disposition of the amendment by Mr. GOLDWATER, the Senate then lay aside temporarily the unfinished business, as was originally comprehended, and proceed to the consideration of the school lunch bill, as previously ordered, and that the unfinished business remain temporarily laid aside until the disposition of the school lunch bill or upon the conclusion of business on Monday, whichever is the earlier.

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

Mr. ROBERT C. BYRD. I thank all Senators.

## DEPARTMENT OF DEFENSE APPROPRIATION AUTHORIZATION ACT, 1974

The Senate continued with the consideration of the bill (H.R. 9286) to authorize appropriations during the fiscal year 1974 for procurement of aircraft, missiles, naval vessels, tracked combat vehicles, torpedoes, and other weapons, and research, development, test and evaluation, for the Armed Forces, and to prescribe the authorized personnel strength for each active duty component and of the Selected Reserve of each reserve component of the Armed Forces, and the military training student loads, and for other purposes.

Mr. GOLDWATER. Mr. President, I call up my amendment No. 476, and ask unanimous consent that the names of Senators BAKER, INOUYE, and CRANSTON, be added as cosponsors of the amendment.

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

The amendment will be stated.

The assistant legislative clerk read the amendment (No. 476) as follows:

At the appropriate place in the bill insert a new section as follows:

SEC. . (a) The Secretary of Defense is authorized and directed to carry out a comprehensive study and investigation to determine the desirability and feasibility of merging the Air Force Reserve and the Air National Guard of the United States. In carrying out such study and investigation the Secretary shall consider all the advantages and disadvantages of such a merger and shall give special consideration to (1) the increased efficiency which might be expected to result from such a merger, (2) the economies that might be expected to result from such a merger, and (3) the ability of the organization resulting from such a merger to effectively perform its mission.

(b) The Secretary of Defense shall submit to the President and the Congress a detailed report of such study and investigation not later than January 31, 1975. The Secretary shall include in such report a detailed explanation of the facts and information which serve as the basis for any conclusions stated therein, and shall also include in such report such recommendations for legislative action as he deems appropriate.

Mr. GOLDWATER. Mr. President, my amendment directs the Secretary of Defense to carry out a comprehensive study and investigation to determine the desirability and feasibility of merging the Air Force Reserve and the Air National Guard of the United States.

Since 1936, I have been associated with the Infantry Reserve, the Air Force Reserve, and the Air National Guard, so it is from personal experience and association when I say I have only the highest regard for these two organizations. Let me stress at the outset that I am not offering this amendment because I believe one of these organizations is more effective than the other or because I believe it would necessarily be preferable to have one of these organizations rather than the other. To the contrary, I have no preference and certainly I am not sure a merger would serve any useful purpose. I just think we need to find out.

As I say, I have been a member of all these organizations. I was active in the formation of the Air National Guard and the Air Force Reserve; and I cannot even answer the question—and I am asked this question all over the country—"Why do we have to have two flying units?" I say, "Well, I can't say we should or should not."

To indicate the importance of this question, as we continue the concept of a usable Reserve, we are talking about $1,173 million and 142,000 people. So it is not a matter we can just brush under the table.

Mr. President, the most frequent question I have been asked since I began suggesting this study is why even consider such an idea when both the Air Force Reserve and the Air National Guard are performing better today, with a higher percentage of units combat ready, than ever before. To use the vernacular, "why rock the boat" when everything is going so smoothly? Just 2 or 3 years ago I would have agreed that such a study would have been illtimed. At that time I would have objected to such a study because we were still involved in Vietnam, the draft was in effect, the economic condition of the country was considerably different and there was not the intense clamor to reduce the Defense Establishment. Additionally, at that time it was not overly critical that we have the most efficient and effective Air Force Reserve organization possible. Further, our Defense Establishment was not geared to a true total force policy which

called for more than a token dependence upon our Reserve forces.

However, today we find there has been a considerable change. Today the total force policy is in effect as we build toward a genuine dependence upon our Reserve forces, a dependence that we have never had before. Today our Active and Reserve forces are striving to make their required strengths without the pressure of the draft; economic conditions are such that there are especially no extra dollars for the Defense Establishment, and the post war tempo to reduce our military forces is increasing. I believe it may be that we have come to the point where we can no longer afford the luxury of two effective and efficient organizations if it can be shown that one organization can be even more effective and efficient.

All of these factors lead me to believe that the time is right to take a look to see whether, if within today's environment and the environment we project for the future, a single organization would not serve the national interest better.

Now let me turn to some of the objections and concerns that have been raised over what I am proposing. Personally, I would think that those associated with these two splendid organizations would welcome the opportunity for such a study. However, that is not the case since all of the Air Force Reserve, Air National Guard, and Department of Defense officials I have heard from are unanimously opposed to even the idea of a study, let alone a merger.

I might say that I cannot think of anything more politically explosive than to start to meddle with the Air Force and Air National Guard. I know what is going to happen. Every one of the 100 Senators will be besieged before nightfall to "stop GOLDWATER and his crazy idea." I have gone through this myself. I can tell you there is no more politically motivated body.

In reviewing some of these specific concerns I might add that these individuals who have expressed these concerns have many years of experience from which to base their observations and I have great respect for their opinions even though, in this case, I disagree with them.

Both the Air Force Reserve and the Air National Guard officials point out that the scars of Secretary McNamara's 1964 proposal to merge Army Reserve units with the Army National Guard still remain.

I want to emphasize I am not talking about the Army; I am talking about Air.

That experience, they say, was a very traumatic one and was one that brought about hard feelings and turmoil between reservists and guardsmen that lasted for many years even though the Congress vetoed the McNamara proposal. From the McNamara experience it is then postulated that my proposal could bring a renewal of the hard feelings and turmoil.

I find that reasoning pretty far out, but I recognize something like that could happen because this is such an emotional issue. It is my opinion that the McNamara plan got everyone all stirred up because it caught everyone by surprise and it appeared that there was an attempt to get the Congress to give "after the fact" approval. Even the Reserve Forces Policy Board was not aware that the matter was even under discussion until it heard the announcement, along with everyone else, that a merger plan would be implemented. To speculate that my proposal would cause a similar response is, in my opinion, a simple case of overreacting.

The question of the impact on the morale of our Air Force Reservists and Air National Guardsmen because of such a study has also been raised. It is suggested that during any such study a certain degree of uncertainty as to their future status would prevail, thereby impacting on the morale of the individual reservists as well as their units. I suppose this could happen, but I doubt that it would. If the purpose of the study was to decide on one organization or the other, then I could understand why apprehension and uncertainty might be generated. But that is not the stated purpose of the study. In fact, the conclusion of the study could well be that a merger is not desirable or feasible, with the best course of action being to retain both organizations just as they are.

Another concern raised is the potentially unfavorable impact on Air Force Reserves and Air National Guard plans and programs while the study is underway. The rationale is that Defense planners will be reluctant, if not opposed, to committing resources to either the Air Force Reserves or the Air National Guard units while the possibility exists that some change in either organization may be forthcoming. This, the opponents of the study say, could be especially critical during the period the Reserves are being upgraded as meaningful partners in the total force policy. This could be a legitimate concern and it should be one that is watched if the study comes to pass. But, even if it is eventually determined a merger is desirable, I would not visualize any significant change in the number of units or aircraft. Therefore, to delay or stop resources and programs for either the Air Force Reserves or the Air National Guard would indeed be shortsighted since these same resources would be used and required regardless of which way any merger might go. It is my judgment the Deputy Assistant Secretary of Defense for Reserve Affairs, along with his Air Force counterpart, could easily preclude any shortfalls from occurring.

Mr. President, in all of the above objections it is evident that overall this is a very emotional subject. Both Air Force Reservists and Air National Guardsmen are very proud—and rightly so—of their organizations and oftentimes the competition between them is keen. In discussions, Air Force Reservists and Air National Guardsmen will insist that the way they are now organized is the best way and the dual organizations do, among other things, promote healthy competition. Yet as strongly as they argue that two separate organizations are the most effective and most efficient, each seems reluctant and somewhat apprehensive to support a study that might not support that conclusion.

Mr. President, referring now to the study itself, my Air Force Reserve and Air National Guard friends tell me they are not sure whether or not an objective study of this subject could be made. They speculate that undoubtedly a certain amount of "choosing up sides" and parochialism would be displayed, but recognize that the degree of subjectiveness would be dependent upon the composition of the study panel. I do not know whether this would be an overriding factor or not, but certainly it should not preclude us from directing the Secretary of Defense to make this study. It disturbs me to think that in the Air Force Reserve and the Air National Guard we possibly have two organizations that are so sacrosanct they cannot even be looked at. If that were the case, and I certainly do not believe it is, that would be reason enough to conduct the study.

Mr. President, you will note I am allowing more than ample time for the Secretary of Defense to make the study in that he has until January 31, 1975, to report his findings to the President and to the Congress. This coincides with the submission of the fiscal 1976 budget which would make it timely for the Secretary to submit any legislative proposal he might deem appropriate. In that regard we must remember that even if the study concluded a merger was a desirable and feasible thing to do, the Secretary of Defense would still retain the option of proposing legislation for the merger. If such legislation was proposed the entire matter would then be reviewed during hearings by the appropriate congressional committees. Whereas the Secretary of Defense might determine a merger is desirable and feasible, it is the Congress that will decide whether such a merger is, in fact, acceptable.

In closing, I recognize that this is a rather sacred area I am treading on but I believe the conditions of today dictate an ever closer look at every facet of our defense establishment. Simply stated, what I am proposing is only commensurate with good management practice and I ask my colleagues to join with me in this effort.

This is only a study. We are not asking for any money to conduct the study. We are directing the Secretary of Defense to engage in this study and report back to the Armed Services Committees by the end of next year. That is a year and quite a few months off.

During this time, I am certain that both the Guard and the Reserve will have ample time to present their case before the Defense Department.

As I said at the outset, having served in these organizations and having been a founder of both of them, I cannot say whether it is wise or not to leave them the way they are.

I can give no argument for doing it or not doing it. However, I think the time is coming when we are looking at $1 billion in the budget that will affect over 100,000 people. I think that we at least ought to take a look at it. That is all my amendment does. It does not affect any guardsmen or reservists.

As I said at the outset my colleagues

can expect the telephone to be ringing off the hook. Both sides want to keep it the way it is. I am not sure that is not the best way.

However, we have never had a study. It was suggested by Mr. McNamara, and I think everyone knows my views with respect to his ability. Nevertheless it never got any study. I remember that General LeMay discussed this at one meeting. And I thought they were going to throw him out the back door.

The study is needed. I certainly hope that the Senator from Mississippi, the chairman of our committee, would come around to my way of looking at this matter.

Mr. President, that is all I have to say at the moment.

Mr. STENNIS. Mr. President, I yield myself such time as I may require. I will not take much time.

Mr. President, this amendment is offered in good faith by a highly competent man who is a member of our committee. I am certain that he has a good purpose in his mind.

When I was called about this, the first time I knew anything about it, was during this week, sometime on either Tuesday or Thursday. The Air National Guard people feel that they ought to have a chance to get their viewpoints across and say whatever they wanted to say. This matter had not been before the committee.

I have never been present at a conference when this was brought up. I have not agreed to any vote on that. The Senator from Arizona did not know that. However, the floor manager and the leader knew about my position.

We have agreed now, the Senator from Arizona and I, that we will have a discussion of this matter today, that it will then go over until Monday, and that we will bring it back up at 10:30 a.m. and have a discussion and a vote on it. In that discussion, there will be a chance to offer an amendment or amendments.

Mr. President, I am not trying to defeat the study. I am just trying to get the facts here. The whole wording of the amendment, as seen by the Air National Guard, is that it is looking directly at them, largely because the word "merger" is used so much. These men have commonsense enough to know that the Department of Defense is not going to recommend that the Air Force Reserve be merged with State organizations and the Air National Guard. That is just commonsense to me.

Certainly they are entitled to some consideration and some chance to get their views expressed.

I am very glad that we have been able to arrange this matter. When it comes up on Monday, I may offer an amendment. I am very much concerned about the so-called volunteer forces concept and whether or not it will work. I think one way to make it work, and not have to pass a Selective Service Act, is to really augment the equipment and everything else it takes to make modern units out of these reserve units. That would include the Air Force Reserve, the Air National Guard, the Army National Guard, or any of the others.

I think that if we stick to the idea of having a volunteer force and giving it a full chance, we will be further able to equip and modernize and give a job to do to these Reserve units of all kinds.

Mr. President, the Air National Guard, on the facts given to me, has been outstanding during all of the war in Vietnam. They have really been outstanding in the service they rendered. That is no reflection on anyone else. It does not detract from the good record that the Air Force Reserve might have been able to make. However, this Nation is indebted to these numerous Air National Guard units that were, in effect, called to duty, whether actually put on full duty or not. They rendered truly magnificent service.

I was surprised myself. I found that the employers of these men seemed to be very generous in letting them take off additional time if they were rendering service and serving in the war in Vietnam.

I am more familiar with a unit in my home State than I am with anything else. That was a unit that was a cargo carrier. They made trip after trip to Vietnam. Being able to get their crews additional time off their jobs, they were able to make many of these trips.

I am thinking in terms, when and if we have such a study, of being able to have it spelled out as to whether they will give the fullest consideration and study to the modernization needs, not only of the Air Force Reserve, but also the Air National Guard, the modernization needs, equipment, planes, and other furnishing, the modernization steps necessary to do a real job. That is the whole story with me.

I do not look lightly on these studies that are agreed to on the floor. I was a victim, in a way, of the proposal which the Senator referred to when Mr. McNamara was in office. For 3 years I could hardly turn around without someone wanting to talk to me about it. A decision was finally made against a merger. I want to be careful in considering this matter. I want to consider the amendment and consider what should be in it and whether an amendment should be offered.

I am ready to rest the entire matter and come back Monday. I will then have a chance if I want to to offer an amendment, and we can dispose of it.

Mr. GOLDWATER. Mr. President, how much time do I have remaining?

The PRESIDING OFFICER. The Senator from Arizona has 4 minutes remaining.

Mr. GOLDWATER. Mr. President, I know that the Senator from Mississippi has not been here. We can all understand that. We regret it. However, on September 17, I mailed to all Members of the Senate an explanation of the amendment. It is possible that the staff got it and that the Senator did not see it.

I agree with everything that the Senator has said. In fact, Secretary Schlesinger by letter said that the Guard and the Reserve will receive substantially more equipment than they have received in the past. We determined by hearings before the full committee and the subcommittee that we would augment their equipment. So we have no quarrels there.

I will agree that both the Guard and the Reserve have provided outstanding performance. In fact, I can tell the Senator that Air Force Reserve units and Air National Guard units receive higher ready-for-combat reports than regular Air Force units, because the experience level is so high. We are not in disagreement there.

I get back to the central fact that when people ask me, "Why do we have two Reserve units, one called the Reserve and one called the Guard," I cannot give them an answer, and I would like the Secretary of Defense to come over here next year and tell the committee what he recommends.

I would ask the Senator to keep in mind that this is something that has to be done by legislation. The Secretary of Defense cannot combine these two groups. They are set up by law, and we have to change that.

I hope that the Senator, over the weekend, will study my letter, and will come back next week willing to cooperate, because without his help I am afraid we will just drift along without any real knowledge of what can be done with a force that now has to be, in my opinion, able to be called on a moment's notice by the Air Force or by the Secretary of Defense.

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

Mr. GOLDWATER. I am happy to yield.

Mr. CANNON. Do I correctly understand that the Senator's proposal is simply for a study?

Mr. GOLDWATER. That is all.

Mr. CANNON. And to make a report back to the committee?

Mr. GOLDWATER. That is all.

Mr. CANNON. It seems to me that that is certainly a reasonable approach. A study does not commit anyone to anything, and we ought to at least have a factual background and recommendations, because as time goes on, we are going to be more and more in this crunch of finances, the economic crunch, from the standpoint of the military services, and I think if we have studies to support our actions and support our position, we will be in a much stronger position than if we just try to operate on the basis of the status quo.

Mr. GOLDWATER. The Senator has stated my case far better than I can. All we are asking is for the Secretary of Defense to tell us what he thinks is best. If he tells us the present situation is best, fine and dandy. I just want to know what they think about it.

Mr. CANNON. I thank the Senator.

Mr. STENNIS. Mr. President, how much time do I have remaining?

The PRESIDING OFFICER. The Senator from Mississippi has 7 minutes remaining.

Mr. STENNIS. Mr. President, may I ask the Senator from Nevada a question in connection with the remarks he has just made?

Mr. CANNON. Yes.

Mr. STENNIS. The Senator is highly competent in his field. With respect to

the resolution just calling for a study of the merger, is it not hard for the Senator from Nevada to imagine the Department of Defense recommending that the Air Force Reserve be merged with the Air National Guard?

Mr. CANNON. I frankly do not know. I think that what they ought to do is make a study. If the study showed that that was the best solution to the problem and the most economical solution, I would certainly think they would be willing to recommend it. I do not see anything difficult about it, if the facts warrant.

That is all I am saying, that I would support the Senator's proposal for a study to find out actually what ought to be done, because we are going to be in a difficult situation in the future, as the squeeze gets stronger and stronger from an economic standpoint. We are seeing the results of it here this year. We know we do not have enough economic resources to justify all the different weapons systems, for example, that all the services want, so some decisions have to be made from the standpoint of economics, from the standpoint of operations, and from the standpoint of organization. I think this is just a realistic study to try to get the facts to make a determination.

Mr. STENNIS. Back to my question, if I may, does the Senator think it is realistic to expect the Department of Defense, if the facts are anywhere near close, to come in and recommend that one of its children—and the Air Force Reserve is a highly important part of the Air Force—be merged over into the Air National Guard, which is partly a State organization? I cannot conceive of it, myself.

Mr. CANNON. To answer the Senator's question, he said if the facts were somewhat even. I do not think they would, no. But I think we ought to know that. If the facts were not even, if there were some basic justification, I do not think they would hesitate to do it. They have made some tough decisions in the past on a lot of their weapons systems. When they knew they could not have everything, they have come in and said, "Well, we have decided we cannot go ahead with this, and we want to do something else."

So, to answer the Senator's question, I do not think they would have a hard time making that decision if the facts warranted, and that is the thing I would like to know.

Mr. STENNIS. If the Senator will yield for another question, would we not have an odd situation, that would involve problems of administration, if we had the Air Force Reserve merged into and operating with the Air National Guard, which is partly a State organization? Would that present any problems to the Senator's mind?

Mr. CANNON. I do not know. That is why I support the study. I would like to know factually. Maybe it would. If it would, maybe that is what the study would show. That is why I say I would support a study. Let us find out the answers to these questions.

Mr. STENNIS. The Senator is an experienced and highly valuable officer in the Air Force. I am not disparaging the Senator at all. I consider him one of the most valuable Members we have, in or out of the service. Could the Senator picture, now, any Secretary of Defense recommending that this child of the Department of Defense be merged with these various State organizations?

Mr. CANNON. I would not be willing to agree with that assumption at all. I think if the facts justified it, it might well be. I thank the Senator for his very complimentary remarks with respect to me, but I would point out that I have served in both the Air National Guard and the regular Defense Establishment, so I think I have a rather objective point of view.

I say again, I would like to see the study, and determine what the facts support. I think if it showed there would be economies of operation and economies of administration, and they could develop a better organization from the structural standpoint, I think the Secretary of Defense is interested in the advantage to this country, not whether he secures another separate wing under the Defense Establishment.

Mr. STENNIS. One more question for the Senator. He perhaps heard me mention the possibility of an amendment to this amendment that would give equal weight in this study to the modernization needs of the Air Force National Guard and the Air Force Reserve. Would the Senator be willing to support such an amendment?

Mr. CANNON. I would not want to see it as an amendment to this, because I would not want to see it diluted. I would support that proposition as a separate amendment, but I would not want to see it as a part of this same study. I think we would be mixing the chickens and the eggs together.

But I would support the Senator's proposal as a separate amendment.

Mr. STENNIS. May I ask, how could they really make a study of a merger, though, unless they went into, in part, a study of these modernization needs?

Mr. CANNON. Well, I think they are two completely separate matters, and could be handled separately. Modernization I would support, even if there were not any merger. So I think the Senator could well justify the amendment requiring them to study the modernization requirements and updating that branch of the service independent of whether they do or do not have a merger. So I would prefer to have the proposal as a separate amendment.

Mr. STENNIS. I thank the Senator. It has been my observation that both the Air Force Reserve and the Air National Guard have been neglected, to a degree, with reference to equipment and modernization, and I am not blaming anyone. When it comes to a choice by the Air Force as to which one is going to get a certain military dollar, they naturally would lean toward the Regulars, I would think, I do not blame them. We look after those needs first. Especially they do not look after the Air National Guard first, which I would not expect them to do.

Mr. CANNON. The Senator knows that I have long been a supporter of modernization of the Guard. We have seen consistently over the years the fact that the Regular Establishment uses the new equipment first and then, when it gets ready to pass it on, it goes to the Guard to modernize it. All it does is upgrade it with the use of equipment which the Regular Establishment has worked itself out of.

That has been the consistent pattern. As a member of the Armed Services Committee for the past 15 years, I have consistently always supported trying to modernize the National Guard Establishment.

Mr. STENNIS. That is very true.

Mr. TOWER. Mr. President, the proposal by the Senator from Arizona (Mr. GOLDWATER) says that the Secretary shall consider all the advantages and disadvantages of such a merger. Therefore, I would ask him, it is conceivable that the result of such a study could be the conclusion that they should not merge; is that not correct?

Mr. GOLDWATER. Yes.

Mr. TOWER. I thank the Senator from Arizona.

Mr. STENNIS. Mr. President, I yield back the remainder of my time.

Mr. GOLDWATER. Mr. President, I have a few seconds left and I yield it back.

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

The PRESIDING OFFICER (Mr. NELSON). The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that the quorum call be rescinded.

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

ORDER ON M–16 RIFLE AMENDMENT

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that the amendment by the distinguished Senator from Arizona (Mr. GOLDWATER) on the M–16 rifle be laid aside temporarily, and remain temporarily laid aside until such time as the distinguished author of that amendment wishes to call it up.

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

AMENDMENT NO. 513

The PRESIDING OFFICER. The Senate will now proceed to the consideration of amendment No. 513 of the Senator from Wisconsin (Mr. PROXMIRE), on which there shall be 2 hours of debate.

The clerk will state the amendment.

The legislative clerk read as follows:

"SEC. 305. Notwithstanding any other provision of law, the number of general and flag officers serving on active duty on the date of enactment of this Act shall be reduced by not less than 30 per centum during the period beginning on the date of enactment of this Act and ending on June 30, 1976. The reduction of such officers shall be apportioned among the Army, Navy, Marine Corps, and Air Force in such manner as the Secretary of Defense shall prescribe, except that in applying any portion of such reduction to any military department, the reduction shall be applied to the maximum extent practicable to the support forces, including the headquarters staffing, of such department.

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that I may proceed for 1 minute, without the time being charged against either side.

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

Mr. ROBERT C. BYRD. Mr. President, I suggest the absence of a quorum and ask unanimous consent that the time not be charged against either side.

The PRESIDING OFFICER. Without objection, it is so ordered, and the clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. ROBERT C. BYRD. 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 RECOGNITION OF SENATOR McINTYRE AND SENATOR GRIFFIN ON MONDAY

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that immediately after the 2 leaders have been recognized on Monday, the distinguished Senator from New Hampshire (Mr. McINTYRE) be recognized for not to exceed 15 minutes; that morning business, with the usual 3-minute limitation on statements therein, ensue until the hour of 10:30 a.m., at which time the Senate will resume consideration of the unfinished business.

Mr. TOWER. Would the Senator amend that to include time for the distinguished Senator from Michigan (Mr. GRIFFIN)?

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

Mr. ROBERT C. BYRD. I yield.

Mr. GOLDWATER. I thought we had an agreement about 10:30.

Mr. ROBERT C. BYRD. We have. I am filling in the 30 minutes prior thereto.

Mr. President, I ask unanimous consent that, in lieu of morning business on Monday, the distinguished Senator from Michigan (Mr. GRIFFIN) be recognized following Mr. McINTYRE, and that Mr. GRIFFIN's time run until the hour of 10:30 a.m. on Monday.

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

## FIFTEEN-MINUTE RECESS

Mr. ROBERT C. BYRD. Mr. President, I move that the Senate stand in recess for 15 minutes.

The motion was agreed to; and at 11:16 the Senate took a recess for 15 minutes.

The Senate reassembled at 11:31 a.m., when called to order by Mr. GOLDWATER.

The PRESIDING OFFICER. The Chair suggests the absence of a quorum. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

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

The PRESIDING OFFICER (Mr. NELSON). Without objection, it is so ordered.

Mr. PROXMIRE. Mr. President, I call up amendment No. 513.

The PRESIDING OFFICER. The amendment is already before the Senate.

Mr. PROXMIRE. Mr. President, I yield to the Senator from West Virginia.

### ORDER FOR LIMITATION ON TIME ON MCGOVERN AMENDMENT

Mr. ROBERT C. BYRD. Mr. President, I thank the Senator from Wisconsin.

Mr. President, I have cleared the requests I am about to make with the managers on both sides and with the distinguished authors of the amendments.

I ask unanimous consent that at such time as the Senator from South Dakota (Mr. McGOVERN) calls up his amendment on the categorical ceiling, there be a time limitation of 4 hours to be divided in accordance with the usual form, that the time on any amendment thereto be 30 minutes, to be divided in accordance with the usual form.

Mr. GOLDWATER. Mr. President, would the Senator indicate when that amendment might be called up?

Mr. ROBERT C. BYRD. Mr. President, there is no knowledge as to when that will be called up.

Mr. GOLDWATER. It will not be today?

Mr. ROBERT C. BYRD. It will not be today.

The PRESIDING OFFICER. Is there objection to the request of the Senator from West Virginia? The Chair hears none, and it is so ordered.

### ORDER FOR A LIMITATION OF TIME ON PROXMIRE AMENDMENT NO. 515

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that at such time as the Senator from Wisconsin (Mr. PROXMIRE) calls up his amendment No. 515 on the outlay ceiling, there be a time limitation of 4 hours, that the time limitation on any amendment thereto be 30 minutes, the time to be divided in accordance with the usual form.

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

### ORDER FOR TIME LIMITATION ON STEVENS AMENDMENT

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that at such time as the Senator from Alaska (Mr. STEVENS) calls up his amendment on housing allowance, there be a time limitation of 1 hour, with 20 minutes on any amendment thereto, the time to be equally divided in accordance with the usual form.

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

### ORDER ON NONGERMANE AMENDMENTS

Mr. ROBERT C. BYRD. Mr. President, this may be a good time to have an understanding. Unless we specifically bar nongermane amendments to these amendments, nongermane amendments could be called up to amendments on which we already have time limitations. And if such would happen, the limitations on time would be pretty restrictive. Maybe we should try to get consent that no nongermane amendments, to these amendments on which time agreements have already been agreed to, would be in order.

Mr. GRIFFIN. Mr. President, I agree with the majority whip. And I hope that the agreement could be put in that form.

Mr. ROBERT C. BYRD. Mr. President, for example, the antibusing amendment, which I strongly support, could be called up and offered as an amendment to an amendment on which there is a very brief time agreement. And we would be in the soup. So I make that unanimous-consent request.

Mr. GRIFFIN. Is that request with respect to all time agreements that have been entered into in the pending bill?

Mr. ROBERT C. BYRD. Yes. I would be agreeable. I think we ought to agree that no nongermane amendments could be offered to any amendment on which a time agreement has been entered into or may be subsequently entered into on this bill.

Mr. GRIFFIN. I agree.

Mr. PROXMIRE. Mr. President, would the Senator consider making that apply for the time being only on those amendments on which there has been an agreement?

Mr. ROBERT C. BYRD. Yes.

Mr. PROXMIRE. Mr. President, I would like to have the opportunity to phrase a reservation with respect to future agreements.

Mr. ROBERT C. BYRD. Very well. I make that unanimous-consent request with regard only to agreements that have already been entered into as to time.

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

### AMENDMENT NO. 513

Mr. PROXMIRE. Mr. President, with respect to my amendment No. 513, I have become increasingly concerned about the preparedness of our military services. Are we prepared to fight a conventional war on a moment's notice? Can we accomplish the military objectives called for in an emergency?

Frankly, I have concluded that for the most part, the conventional fighting capability of the Armed Forces is at a low level. To put it bluntly we have a fat, undertrained fighting force on our hands.

Now this is a serious business. While we have all been concentrating on the more glamorous strategic weapon systems, the SALT talks, and plans for modernization of our deterrent forces, we have allowed our convention forces to weaken from neglect.

This is just not a question of grade creep although that plays an important part. It is also a question of morale, training, and quality.

One of the most appalling facts to come to light in recent years is the tendency to permit top heavy and bloated command headquarters. This is not a funny matter. What are we going to do with all these generals, admirals, captains, and colonels when an emergency calls for quick action? The headquarters are so stuffed that any action is staffed to death. Decisions must go through interminable process of review and rewrite. Communications are inept and delayed.

All this points to a dangerous situation—one in which we might not be able to react to an emergency in time.

We are building an army of support troops, headquarters staffs, review staffs, command echelons, and rising operating costs. Where are the fighting men?

According to the analysis of the Armed Services Committee there are 105,000 slots for various command headquarters in the new military budget. The com-

mittee recommends an overall 10 percent cutback in this area in order to return to pre-Vietnam levels.

In particular, the committee recommends a 30-percent cutbacks in headquarters identified as badly overstaffed. The list includes Supreme Headquarters Allied Powers Europe, the European Command, U.S. Army Europe, U.S. Air Force Europe, and the Commander in Chief U.S. Navy Europe. The 30-percent cutback would reduce the assigned military personnel by 5,500 people before June 30, 1974.

Mr. President this proposal makes good sense. I only wish that it were incorporated into the legislation so that the Defense Department would not be able to continue to delay in dealing with this problem. The proposal for a 15-percent cut in headquarters staffing in the Washington, D.C., area made by the committee also appears prudent though too little. In any event, the committee has done a good job in hightlighting where we can use our manpower more effectively.

Now what are the facts involved? Just how overstaffed are we?

The facts are staggering. First I will discuss the raw figures and then the ratio's which reflect an accurate picture of the top heavy command system.

In 1945 there were 12,123,455 men and women in the U.S. Armed Forces. The total officer corps was 1,260,109.

At that time the total number of four- and five-star generals and admirals was 20. In 1952 we had 25. In 1972 there were 39.

There were 101 lieutenant generals and vice admirals at the height of World War II. By 1952 this had declined to 65 even though we were still involved in the Korean war. But by 1972 the number of lieutenant generals and vice admirals blossomed to 142. It must be remembered now that these 142 served in an Armed Forces not of 12 million but of less than 2½ million. So we had more lieutenant generals and vice admirals now with less than one-fifth as many troops to command.

The number of major generals, brigadier generals, and rear admirals declined from 1945 to 1972 from a level of 1,929 to 1,131. This latter figure, however, is still higher than the Korean war total of 1,052.

Colonels and naval captains increased by almost 2,000 from World War II to 1972. The numbers are 14,989 in 1945 to 16,547 in 1972.

For all the officers just mentioned, the total 1945 level was 17,039 to the 1972 level of 17,859. In other words, the officer strength of this country, colonels, naval captains and above, has stood still while the total manpower strength has been reduced over 80 percent.

These gross statistics do not present the whole picture however. It is the ratios of officers to manpower level that accurately depict the facts about the top-heavy command structure.

Taking a look at the ratios of officers to total manpower takes into consideration the changes in force strengths over the years. It is an unbiased and accurate means of comparison.

They look this way. During World War II there was one four- or five-star officer for every 600,000 troops, or one for every 63,000 other officers.

During the Korean war it was one for every 145,000 troops or 53,000 officers. Then with 1972, the ratio moves to one four- and five-star officer for every 61,000 troops and 8,500 officers.

In other words there are 10 times more four- and five-star officers per troops now than in World War II. Ten times more.

There are seven times more lieutenant generals and vice admirals per ratios of troops now than in 1945. Back then these three-star officers were 1 in 120,000. Now, they are 1 in 17,000.

Only in the category of major generals, brigadier generals, and rear admirals is there any indication of a decline in real numbers or ratios. The total number of these officers fell from 1,929 in 1945 to 1,131 in 1972. The ratios of officer to troop level also were down.

This slight dip in one category is more than made up by the swing upward in the number of colonels and Navy captains. From 15,000 in 1945 they have climbed to 16,500 in 1972. During the Second World War there was 1 colonel or Navy captain for every 808 men. Now it is 1 out of every 143. This is an increase of about six times. Six times more colonels and captains than before.

Looking at all officers above the rank of colonel/captain, the story remains dismal. There are over five times more of these officers by ratio now than in 1945. Once the ratio was 1 per 711 other men. Now it is 1 per 132 men.

Mr. President, I ask unanimous consent that four charts representing manpower data for 1945, 1952, 1971, and 1972 be printed in the RECORD, along with four additional charts showing the ratios derived from these data.

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

DEPARTMENT OF DEFENSE—MILITARY PERSONNEL ON ACTIVE DUTY BY GRADE IN WHICH SERVING, JUNE 30, 1945

| | Total, Department of Defense | Army and Air Force | | | Navy (excluding Coast Guard) | Marine Corps |
|---|---|---|---|---|---|---|
| | | Total, War Department | Army commands | Air Force commands | | |
| Total | 12,123,455 | 8,267,958 | 5,985,099 | 2,282,259 | 3,380,817 | 474,680 |
| Officers, total | 1,260,109 | 891,663 | 510,209 | 381,454 | 331,379 | 37,067 |
| General of the Army—Fleet admiral | 7 | 4 | | | 3 | |
| General—Admiral | 31 | 13 | | | 17 | 1 |
| Lieutenant general—Vice admiral | 101 | 50 | 1,221 | 298 | 49 | 2 |
| Major general / Rear admiral [1] | 1,929 | 392 | | | [1] 401 | 28 |
| Brigadier general | | 1,060 | | | | 48 |
| Colonel—Captain | 14,989 | 10,721 | 8,145 | 2,576 | 3,877 | 391 |
| Lieutenant colonel—Commander | 36,967 | 29,077 | 21,852 | 7,225 | 6,861 | 1,029 |
| Major—Lieutenant commander | 91,602 | 70,086 | 46,686 | 23,400 | 19,356 | 2,160 |
| Captain—Lieutenant | 300,610 | 197,591 | 125,885 | 71,706 | 96,784 | 6,235 |
| 1st lieutenant—Lieutenant (junior grade) | 436,792 | 328,245 | 193,328 | 134,917 | 94,278 | 14,269 |
| 2d lieutenant—Ensign | 294,121 | 198,164 | 96,229 | 101,935 | 86,316 | 9,641 |
| Chief or comm. warrant / Warrant junior grade or warrant / Flight officers | 82,960 | 56,260 | 16,863 | 39,397 | 23,437 | 3,263 |
| Enlisted, total | 10,795,775 | 7,374,710 | 5,743,905 | 1,990,805 | 2,988,207 | 432,858 |
| E-7 [2] | 248,520 | 112,307 | 70,845 | 41,462 | 124,310 | 11,903 |
| E-6 [2] | 533,084 | 215,396 | 110,073 | 105,323 | 300,315 | 17,383 |
| E-5 [2] | 1,089,117 | 611,859 | 363,468 | 248,391 | 449,426 | 27,832 |
| E-4 [2] | 1,734,787 | 1,051,275 | 693,410 | 357,865 | 633,799 | 49,713 |
| E-3 [2] | 2,388,387 | 1,541,699 | 1,090,107 | 451,682 | 757,809 | 88,879 |
| E-2 [2] | 2,910,031 | 2,255,620 | 1,832,586 | 423,034 | 500,225 | 154,186 |
| E-1 [2] | 1,891,849 | 1,586,554 | 1,313,506 | 273,048 | 222,323 | 82,972 |
| Officer candidates, total | 67,571 | 1,585 | 1,585 | | 61,231 | 4,755 |
| Cadets USMA | 1,585 | 1,585 | 1,585 | | | |
| Navy officer candidates | 61,231 | | | | 61,231 | |
| Marine Corps officer candidates | 4,755 | | | | | 4,755 |

[1] Includes 140 commodores.

[2] Grade designations established by "Career Compensation Act of 1949." Includes 16,764 aviation cadets.

DEPARTMENT OF DEFENSE—MILITARY PERSONNEL ON ACTIVE DUTY BY GRADE IN WHICH SERVING, JUNE 30, 1952

| | Total Department of Defense | Army | Navy | Marine Corps | Air Force |
|---|---|---|---|---|---|
| Total | 3,935,912 | 1,596,419 | 824,265 | 231,967 | [1] 983,261 |
| Officers, total | 375,829 | 148,427 | 82,274 | 16,413 | 128,742 |
| General of Army or fleet admiral | 6 | 3 | 3 | | |
| General or admiral | 19 | 8 | 5 | 1 | 5 |
| Lieutenant general or vice admiral | 65 | 22 | 25 | 4 | 14 |
| Major general, brigadier general, or rear admiral | 1,052 | 165<br>281 | [2] 256 | 18<br>31 | 120<br>181 |
| Colonel or captain | 12,490 | 4,869 | 2,983 | 516 | 4,122 |
| Lieutenant colonel or commander | 28,927 | 12,830 | 6,632 | 1,011 | 8,454 |
| Major or lieutenant commander | 53,008 | 17,249 | 12,222 | 2,848 | 20,689 |
| Captain or lieutenant | 107,412 | 36,988 | 24,958 | 5,549 | 39,917 |
| 1st lieutenant or lieutenant (j.g.) | 81,556 | 36,595 | 15,004 | 647 | 29,310 |
| 2d lieutenant or ensign | 65,937 | 24,922 | 14,356 | 4,932 | 21,727 |
| Chief or Comm Warrant W-4 | 447 | 281 | 15 | 20 | 131 |
| Chief or Comm Warrant W-3 | 2,507 | 853 | 1,011 | 358 | 285 |
| Chief or Comm Warrant W-2 | 6,706 | 2,243 | 2,974 | 459 | 1,030 |
| Junior warrant or warrant | 15,697 | 11,118 | 1,803 | 19 | 2,757 |
| Enlisted, total | 3,245,310 | 1,446,266 | 735,753 | 215,554 | 847,737 |
| E-7 | 154,837 | 43,930 | 58,104 | 7,657 | 45,146 |
| E-6 | 202,123 | 78,367 | 61,849 | 7,935 | 53,972 |
| E-5 | 364,434 | 165,396 | 60,790 | 11,441 | 126,807 |
| E-4 | 630,129 | 326,603 | 115,124 | 28,791 | 159,611 |
| E-3 | 845,724 | 411,604 | 220,249 | 33,177 | 180,694 |
| E-2 | 806,266 | 295,684 | 177,118 | 105,849 | 227,615 |
| E-1 | 241,797 | 124,682 | 42,519 | 20,704 | 53,892 |
| Officer candidates, total | 14,773 | 1,726 | 6,265 | | 6,782 |
| Cadets USMA | 1,726 | 1,726 | | | |
| Navy Officer Candidates | 6,265 | | 6,265 | | |
| Aviation Cadets | 6,782 | | | | 6,782 |

[1] Includes 4 commodores.

[2] Includes 9,787 Army personnel in training for SCARWAF duty.

DEPARTMENT OF DEFENSE—MILITARY PERSONNEL ON ACTIVE DUTY BY GRADE IN WHICH SERVING, JUNE 30, 1971

| | Total Department of Defense | Army | Navy | Marine Corps | Air Force |
|---|---|---|---|---|---|
| Total | 2,714,727 | 1,123,810 | 623,248 | 212,369 | 755,300 |
| Officers, total | 371,416 | 148,950 | 74,782 | 21,765 | 125,919 |
| General of Army or fleet admiral | 1 | 1 | | | |
| General or admiral | 39 | 15 | 9 | 2 | 13 |
| Lieutenant general or vice admiral | 145 | 45 | 49 | 9 | 42 |
| Major general, brigadier general, or rear admiral | 1,145 | 197<br>255 | 256 | 28<br>38 | 157<br>214 |
| Colonel or captain | 17,388 | 6,008 | 4,286 | 747 | 6,347 |
| Lieutenant colonel or commander | 40,431 | 14,607 | 8,673 | 1,650 | 15,501 |
| Major or lieutenant commander | 65,724 | 22,302 | 15,015 | 3,350 | 25,057 |
| Captain or lieutenant | 122,351 | 49,130 | 18,829 | 5,643 | 48,749 |
| 1st lieutenant or lieutenant (junior grade) | 59,686 | 24,010 | 13,738 | 6,084 | 15,851 |
| 2d lieutenant or ensign | 39,288 | 13,691 | 9,488 | 2,522 | 13,587 |
| Chief warrant officer W-4 | 2,345 | 1,621 | 243 | 83 | 398 |
| Chief warrant officer W-3 | 3,637 | 3,219 | 104 | 314 | |
| Chief warrant officer W-2 | 14,848 | 11,076 | 2,815 | 957 | |
| Warrant officer W-1 | 4,388 | 2,773 | 1,277 | 338 | |
| Enlisted, total | 2,329,754 | 971,872 | 542,298 | 190,604 | 624,980 |
| E-9 | 15,926 | 4,546 | 3,390 | 1,700 | 6,290 |
| E-8 | 40,842 | 15,687 | 9,018 | 3,750 | 12,387 |
| E-7 | 151,649 | 58,392 | 38,864 | 8,903 | 45,490 |
| E-6 | 270,733 | 94,725 | 77,693 | 14,760 | 83,555 |
| E-5 | 450,338 | 181,068 | 94,370 | 25,236 | 149,664 |
| E-4 | 576,306 | 266,825 | 118,315 | 33,788 | 157,378 |
| E-3 | 409,904 | 129,900 | 134,680 | 43,722 | 101,602 |
| E-2 | 210,415 | 74,958 | 53,226 | 30,789 | 51,442 |
| E-1 | 203,641 | 145,771 | 12,742 | 27,956 | 17,172 |
| Officer candidates, total | 13,557 | 2,988 | 6,168 | | 4,401 |
| Cadets USMA | 2,988 | 2,988 | | | |
| Midshipmen USNA | 4,485 | | 4,485 | | |
| Cadets USAFA | 4,401 | | | | 4,401 |
| Naval enlisted officer candidates | 1,683 | | 1,683 | | |

DEPARTMENT OF DEFENSE—MILITARY PERSONNEL ON ACTIVE DUTY BY GRADE IN WHICH SERVING, OCTOBER 31, 1972

| | Total Department of Defense | Army | Navy | Marine Corps | Air Force |
|---|---|---|---|---|---|
| Total | 2,371,574 | 865,463 | 593,824 | 199,168 | 713,119 |
| Officers, total | 331,233 | 120,576 | 71,570 | 19,609 | 119,478 |
| General of the Army or fleet admiral | 1 | 1 | | | |
| General or admiral | 38 | 13 | 9 | 2 | 14 |
| Lieutenant general or vice admiral | 142 | 48 | 47 | 8 | 39 |
| Major general or rear admiral (U) | 480 | 197 | 105 | 24 | 154 |
| Brigadier general or rear admiral (L) | 651 | 249 | 153 | 38 | 21 |
| Colonel or captain | 16,547 | 5,647 | 4,101 | 697 | 6,102 |
| Lieutenant colonel or commander | 36,832 | 12,411 | 8,443 | 1,544 | 14,434 |
| Major or lieutenant commander | 61,432 | 20,133 | 15,446 | 3,053 | 22,800 |
| Captain or lieutenant | 112,674 | 39,405 | 19,301 | 5,306 | 48,662 |
| 1st lieutenant or lieutenant (jg) | 43,114 | 15,535 | 9,270 | 4,717 | 13,592 |
| 2d lieutenant or ensign | 37,620 | 11,402 | 10,253 | 2,681 | 13,284 |
| Chief warrant officer W-4 | 1,923 | 1,464 | 109 | 164 | 186 |
| Chief warrant officer W-3 | 4,548 | 3,279 | 639 | 630 | |
| Chief warrant officer W-2 | 12,600 | 9,289 | 2,684 | 627 | |
| Warrant officer W-1 | 2,631 | 1,503 | 1,010 | 118 | |
| Enlisted, total | 2,026,542 | 740,931 | 516,391 | 179,559 | 589,661 |
| E-9 | 15,230 | 4,082 | 3,747 | 1,495 | 5,906 |
| E-8 | 37,922 | 13,644 | 9,057 | 3,288 | 11,933 |
| E-7 | 140,541 | 50,644 | 37,722 | 8,664 | 43,511 |
| E-6 | 250,660 | 82,903 | 74,894 | 12,912 | 79,951 |
| E-5 | 366,088 | 123,291 | 83,191 | 25,310 | 134,296 |
| E-4 | 473,310 | 189,972 | 107,592 | 22,800 | 152,946 |
| E-3 | 305,381 | 85,125 | 99,464 | 28,434 | 92,358 |
| E-2 | 195,745 | 74,068 | 50,503 | 34,367 | 36,807 |
| E-1 | 241,665 | 117,202 | 50,221 | 42,289 | 31,953 |
| Officer candidates, total | 13,799 | 3,956 | 5,863 | | 3,980 |
| Cadets, U.S. Military Academy | 3,956 | 3,956 | | | |
| Midshipmen, U.S. Naval Academy | 4,236 | | 4,236 | | |
| Cadets, U.S. Air Force Academy | 3,980 | | | | 3,980 |
| Naval enlisted officer candidates | 1,627 | | 1,627 | | |

JUNE 30, 1945

| Category | Total | DOD ratio | Officer ratio |
|---|---|---|---|
| Generals of the Army/ fleet admirals and generals/admirals | 20 | 1/606,172 | 1/63,005 |
| Lieutenant generals/ vice admirals | 101 | 1/120,034 | 1/12,476 |
| Major generals/ brigadier generals/ rear admirals | 1,929 | 1/6,284 | 1/653 |
| Colonels/captains | 14,989 | 1/808 | 1/84 |
| All generals | 2,050 | 1/5,913 | 1/614 |
| All categories above | 17,039 | 1/711 | 1/73 |
| Total, DOD Armed Forces | 12,123,455 | | |
| Total, Officer Corps | 1,260,109 | | |
| Total, Officer Corps/ total DOD ratio | | 1/9.6 | |

JUNE 30, 1952

| Category | Total | DOD ratio | Officer ratio |
|---|---|---|---|
| Generals of the Army/ fleet admirals and generals/admirals | 25 | 1/145,436 | 1/15,033 |
| Lieutenant generals/ vice admirals | 65 | 1/55,937 | 1/578 |
| Major generals/ brigadier generals/ rear admirals | 1,052 | 1/3,456 | 1/357 |
| Colonels/captains | 12,490 | 1/291 | 1/30 |
| All generals | 1,142 | 1/3,183 | 1/329 |
| All categories above | 13,632 | 1/266 | 1/27 |
| Total, DOD Armed Forces | 3,635,912 | | |
| Total, Officer Corps | 375,829 | | |
| Total Officer Corps/ total DOD ratio | | 1/9.6 | |

JUNE 30, 1971

| Category | Total | DOD ratio | Officer ratio |
|---|---|---|---|
| Generals of the Army/ fleet admirals and generals/admirals | 40 | 1/67,868 | 1/9,285 |
| Lieutenant generals/ vice admirals | 145 | 1/18,722 | 1/2,561 |
| Major generals/ brigadier generals/ rear admirals | 1,145 | 1/2,370 | 1/324 |
| Colonels/captains | 17,388 | 1/156 | 1/21 |
| All generals | 1,330 | 1/2,041 | 1/279 |
| All categories above | 18,718 | 1/145 | 1/20 |
| Total, DOD Armed Forces | 2,714,727 | | |
| Total, Officer Corps | 371,416 | | |
| Total, Officer Corps/ total DOD ratio | | 1/7.3 | |

OCTOBER 31, 1972

| Category | Total | DOD ratio | Officer ratio |
|---|---|---|---|
| Generals of the Army/Fleet Admirals and generals/admirals | 39 | 1/60,809 | 1/8,493 |
| Lieutenant generals/vice admirals | 142 | 1/16,701 | 1/2,332 |
| Major generals/brigadier generals/rear admirals | 1,131 | 1/2,096 | 1/292 |
| Colonels/captains | 16,547 | 1/143 | 1/20 |
| All generals | 1,312 | 1/1,807 | 1/252 |
| All categories above | 17,859 | 1/132 | 1/18 |
| Total, Officer Corps/total DOD ratio | | 1/7.1 | |

Mr. PROXMIRE. What conclusions should be drawn? Can there be any doubt that the American military machine is burdened with a World War II command structure while facing a modern era with less than one-fifth as many men? This is rampant bureaucracy with a vengeance.

One sorry consequence is the tendency to place ever higher officers in ever lower posts. Once a second lieutenant could carry out a staff function in a European base. Now that same function would be handled by a full four-star general with the normal retinue of three- and two-star generals assisting him and the majors, colonels, and captains under them. One general is an army by himself—an army of bureaucrats.

But can it be said that all these generals and admirals provide a better defense? The answer must be no.

There are some 9,500 headquarters staff assigned to European stations. In the Supreme Headquarters Allied Powers Europe, there are 31 generals and admirals, 141 colonels and Navy captains and 332 lieutenant colonels and Navy commanders.

The Armed Services Committee has noted that 150 new men have been added to the European Command, another headquarters. They note that there are nine tactical Air Force Wings in Europe but three subordinate major headquarters serving them. One of these headquarters has only one tactical wing under its command.

The 16th Air Force Headquarters command has nothing to do but remain a "point of contact" with the West German government but they have 40 men for this job. Similar statements can be made for Army and Navy units in Europe.

To return to the major question—do all these headquarters and officers in Europe provide us with a stronger defense?

Not according to the investigations made by the General Accounting Office. In a report made available to Congress on March 9 of this year, we find that much of the authorized equipment that was to have been prepositioned in Europe to meet an emergency outfitting of U.S. troops flown in from the continental United States was inoperable. More was positioned than could be maintained. The GAO also found that there were substantial shortages of ammunition and repair parts.

I would think one thing that a top-heavy command staff could do would be to keep track of the equipment they have, but obviously they have not even been able to do that.

To make things even worse, the U.S. troops earmarked for a quick reinforcement of Europe had severe manpower shortages.

Then add to this the fact that the prepositioned stores were highly concentrated and vulnerable to attack and the fact that a wartime line of communications had not been established to support these troops we plan to send over there in an emergency. Plans for storing the equipment in controlled humidity warehouses fell apart when the warehouses were found to be ineffective.

The actual status of this prepositioned equipment was not even reported to Army headquarters in Washington. Equipment was consistently reported as combat-ready when it was not.

How in the world can anyone call this being prepared? And what in the world are all those generals and admirals doing in Europe aside from attending endless rounds of receptions?

Certainly they have not been paying any attention to our military posture or these extraordinary shortages would not have taken place.

That is the most important lesson to be learned. Too many generals and admirals only erode our military posture. I am alarmed by these facts and I think it is time the Congress asked to correct it. I do not want this country to fall into a second class position in terms of conventional warfare capability but it looks like we are heading that way.

The Army is not the only branch at fault in Europe. Another GAO report submitted on April 25, 1973, confirmed that U.S. Air Force squadrons were not fully combat ready.

Mr. President, we cannot let this go on. The only way to correct this sagging conventional defense posture is to shake up the headquarters. Get them out of the nightclubs and into the field. But first bring half of the generals and admirals and their staff home. Only then will we have a lean-mean fighting force in Europe.

A look at our force in the Pacific does not present any more convincing posture of strength. There are five major commands in Hawaii alone—4,641 personnel are assigned to these five commands—one for each service and a unified command over all.

One thousand twenty-eight men are assigned to the Army headquarters in Hawaii which only looks after the single U.S. division in Korea. Furthermore there are 948 more people assigned to headquarters in the 8th U.S. Army Command in Korea and 123 assigned to the Army I Corps in Korea. This is not counting the 274 assigned to the United Nations Joint U.S. Forces Command in the same place. As the armed service report concluded, the 2d Infantry Division in Korea must be the most supervised unit in the world.

In total these five major commands in Hawaii contain 41 generals and admirals, 263 colonels and Navy captains, and 524 lieutenant colonels and Navy commanders. The committee is right. That burden could be cut by at least 1,300 men. I would add, make the full cut among high ranking officers.

Mr. President, the Brookings Institution has published an analysis of support cost in the defense budget written by Martin Binkin. This excellent study makes several appropriate conclusions. It shows conclusively that support levels have not been reduced in proportion with other components in the defense budget. We have a higher proportion of support costs than ever before. With the entire manpower budget consuming 56 percent of the defense dollar, we are heading for a capability crisis.

Listen to one of the most important conclusions of that study. Mr. Binkin states that:

> Headquarters activities provide the least-risk option for reducing the support establishment.

I would be stronger than that. Reducing our headquarters structure would provide a better defense. It would allow quicker decisions and a more efficient organization of manpower.

The Brookings analysis, by the way, identified about $2.2 billion in savings that could be made in the support field.

Mr. President, perhaps the most persuasive arguments for cutting back on the number of generals and admirals and the support structure has come from a man who has the respect of this entire body and that of the Nation.

Adm. Hyman Rickover testified before Congress that:

> If we ever want to make any progress in the Pentagon, somebody is going to have to reduce the number of officers, the number of generals and admirals and senior civilians, because every time one of those jobs is set up, each one of them gets a large staff. Each staff has to make work, so pretty soon the energy of the entire enterprise is taken up in doing, undoing, redoing, and satisfying everybody higher up and soon all productive work stops . . . I have frequently urged that there be a drastic reduction in officers and officials of the Department of Defense. Each new Secretary vows to do this but soon becomes entangled in the deadly net. And so, when he leaves there is an even tighter net—a net with a mesh so fine practically nothing can be strained through.

One day last week Admiral Rickover sat in my office discussing another defense question and I asked him about the manpower problem. He said that if it was his decision he would cut the number of generals and admirals in half.

Think of that for a moment. Here is one of the best men our military has ever turned out. He masterminded our submarine program and created the closest thing we have to the invulnerable deterrent system. He is an admiral and those of us in this Chamber know he is a tough bargainer. He also has that lost art of speaking the blunt truth.

If a man like that says we have twice too many generals and admirals then he must be heard. I should also mention he would do away with the staffs of these generals and admirals.

Mr. President, my original amendment is far more conservative than what Admiral Rickover has recommended. My

amendment would have cut back on the number of generals and admirals by 30 percent over a 3-year period. This would ease any problems relating to a one-time cutback affecting large numbers of men.

I had fully intended to offer that amendment today, particularly in light of the personal statement made to me by Admiral Rickover. I believe that the Armed Forces could cut out half of the generals and admirals and be more efficient. My amendment would have only reduced them by 30 percent.

It is my intention now, however, to offer a substitute to my own amendment based on the extraordinarily sound analysis made by the Armed Services Committee. I have read that report several times and find it to be one of the best documents on our military manpower. The committee really went out and got the facts. And the facts are overwhelming.

My substitute amendment takes the recommendation of the committee, which does not carry the weight of law, and turns it into legislation. I refer to the particular recommendation to reduce the number of military personnel at various headquarters by 30 percent—not less than 5,500 men on or before June 30, 1974. My amendment contains the same list of headquarters as shown in the committee report.

As justification for this amendment I can think of no better support than the committee report itself. The analysis contained therein is excellent. In fact, it is alarming. I hope that every Senator will be able to read that report before voting on this amendment.

I claim no credit for this amendment. It belongs in substance and philosophy to the committee. I would simply give it the force of law. It seems to me that the Defense Department would understand a law better than a recommendation. I am sure it would get better results.

We know that on the basis of past experience, this is an extraordinarily difficult action for the military to take. As Admiral Rickover has said again and again, Secretaries of Defense go on vowing to reduce the excess of staffs and the excess of admirals and generals, but they are never able to do it. I think that this support language is likely to have some effect. It is a good statement, well documented, and should be supported. But what all of us know is, it is unlikely to get the kind of action that the language in the bill could get.

For that reason, I ask unanimous consent that the relevant excerpt from the Armed Services Committee report, pages 129 to 140, be printed in the RECORD.

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

TITLE III—ACTIVE DUTY MANPOWER AUTHORIZATION

BACKGROUND

Under Section 509 of Public Law 91-441 the Congress is required to authorize active duty military personnel end strength for each of the military services. The committee held hearings in open session on June 11th, 12th and 13th, 1973, and heard testimony from Defense military manpower experts on the active duty military personnel strengths requested by the Department of Defense. Based on this testimony and the information provided in the Military Manpower Requirements Report for FY 1974 submitted by the Department of Defense, the committee staff has conducted a comprehensive analysis of military personnel requirements.

COMMITTEE RECOMMENDATIONS

*Reduction of 156,100 DOD-wide manpower to be apportioned by the Secretary of Defense—7% reduction*

For the reasons discussed below, the committee recommends a reduction totalling 156,100 in active duty end strength, or 2,076,802 rather than the 2,232,902 included in the budget as shown below:

| Active-duty end strength: | |
|---|---|
| DOD proposal | 2,232,902 |
| Committee action | —156,100 |
| Committee recommendation | 2,076,802 |

In addition the committee provides in the bill that the Secretary of Defense will prescribe the apportionment of the reduction among the Army, Navy, Marine Corps and Air Force with the proviso that the reduction be applied to the support forces of the military departments to the maximum extent practicable. The Secretary of Defense shall report to the Congress within 60 days after enactment on the manner in which the reduction is to be apportioned to the military departments and mission areas described in the Military Manpower Requirements Report. That report will include the rationale for each reduction.

REQUIREMENT FOR STATUTORY AUTHORIZATION OF DOD CIVILIAN MANPOWER

In addition to the recommendations on the active duty end strength authorization, the committee recommends amending the law to require authorization of Defense Department civilian employee end strengths.

REQUIREMENT FOR MILITARY OVERSEAS ASSIGNMENTS

The committee added amendatory language providing that beginning FY 1975 the annual Defense Manpower Requirement Report will include a full justification and explanation of the manpower required to be stationed or assigned to duty in foreign countries and aboard vessels located outside the territorial limits of the United States.

DISCUSSION

The committee reductions amount to about 7% of the total end strength requested by the Defense Department for fiscal year 1974 and would reduce strength about 9% below the fiscal year 1973 end strength.

SAVINGS IN FUTURE YEARS RESULTING FROM MANPOWER REDUCTIONS

Based on present pay costs the committee reduction of 156,100 once implemented and fully effective, would save about $1.6 billion annually in future years.

NEED FOR A STRONG, EFFICIENT DEFENSE

The committee strength recommendations are based upon several major concerns. The first of these concerns is to insure that the United States has a strong defense capability, but one that is also efficient and balanced. The committee is concerned about the trend to fewer forces, but relatively more manpower. The sharp phasedown of force units and force levels below FY 64 levels has not been matched by a corresponding phasedown of manpower and support levels. For example, in FY 74 the Defense Department proposes a 20% reduction of Army Divisions, 37% and 28% reductions of Navy carriers and escort ships, respectively, and a 59% reduction in Air Force heavy bombers below FY 64 levels. But the FY 74 Defense request for manpower was only 16% below the FY 64 level.

The following table compares the changes in forces with changes in total manpower between FY 64 (pre Vietnam) and FY 74:

*Percentage change between fiscal years 1964 and 1974*

| | Percent |
|---|---|
| Army: | |
| Air defense batteries | —80 |
| Divisions | —20 |
| Manpower | —17 |
| Navy: | |
| Polaris-Poseidon missiles | +95 |
| Carriers | —37 |
| Escort ships | —28 |
| Amphibious ships | —53 |
| Manpower | —16 |
| Marine Corps: | |
| Divisions | None |
| Wings | None |
| Manpower | +3 |
| Air Force: | |
| ICBM | +61 |
| Strategic bombers | —59 |
| Interceptor squadrons | —80 |
| Tactical wings | —5 |
| Manpower | —19 |

Thus in a time of economic difficulty and competing priorities, and despite technological advances that should substitute machines for men, the proportion of manpower to force units rises in FY 74. The committee believes the Defense Department must strive to be lean and ready to provide an adequate defense at reasonable costs and this means finding ways to more efficiently use its manpower resources through better organization and utilization of personnel.

RISING OPERATING COSTS

A second major concern is the sharp rise in operating costs, particularly manpower costs. Research and development, procurement of weapons and material and military construction costs all together add up to only 30% of the total Defense budget. The other 70%—operating costs—has grown from 55% of the budget in FY 64 largely as a result of two factors: rising manpower costs and rising support costs. In that time, pay and allowances of military and civilian personnel have doubled—from $22 billion in FY 64 to $44 billion in FY 74 so that now 56 cents of every Defense dollar goes for pay and allowances. At the same time support costs have also risen so that now 65% of the operating budget goes for support.

It is this double shift of resources which puts heavy pressure on the hard combat force structure and concerns this committee. First there is the shift of resources out of investing in force improvements to operating the current force structure; and secondly there is the shift from operating combat units to support and auxiliary functions. The committee believes manpower costs and support costs must be brought under tighter control. Thus the committee expects that the large proportion of the recommended manpower reduction will be taken in the auxiliary and support areas.

ALL-VOLUNTEER FORCE PROBLEMS

A third major concern of the committee is the All-Volunteer Force. This concern stems from three major issues: first the All-Volunteer Force concept has added substantially to manpower costs—over $3 billion in FY 74 specifically identified by the Defense Department and substantially more not specifically identified. These costs contribute to the problems mentioned earlier. Second, several witnesses testified that an all-volunteer force was a peacetime concept and that the reserves and draftees would be used in wartime. Combined with the cost problem it raises a question about the amount of money that should be spent to achieve the all-volunteer force if it is only a peacetime concept. This raises questions about the preparedness of all aspects of the defense manpower system—including the reserves and Selective Service—to respond to emergencies when the active forces are based on a peace-

time concept. Thirdly, is the uncertainty over the kind of personnel who will constitute the active duty forces and the kind of institutions the military services will become as their personnel characteristics change. The committee is concerned about the evident difficulties the Defense Department is having in achieving a quality all-volunteer force at a cost the country can afford.

CONCERN FOR MANPOWER MANAGEMENT

Finally, this bill authorizes the total personnel strengths for each service—not the individual people who do them. There would be no way to do that. The Defense Department must recruit, train and assign individuals not to exceed the authorized level of jobs. However, how well the jobs are done depends on the quality of the people and how well they are managed. The committee noted two trends that raise concern: there was a shortfall in people compared with jobs authorized in FY 73. This resulted from recruiting shortfalls this spring. Secondly there was a malassignment of personnel as between combat and support jobs. Combat jobs tend to be undermanned while support jobs—particularly headquarters staffs—tend to be overmanned. Both of these trends place an increased burden on the people who must do the jobs—particularly in the hard combat units. The committee believes that manpower must be managed carefully so that there are enough of the appropriate people available to do the jobs and so that those who are available are assigned according to priorities which give precedence to those jobs that have the most direct bearing on the national security.

MILITARY MANPOWER REQUIREMENTS

In making its review of overall Defense military manpower, the committee reviewed each of the major functional categories which require men. The following table shows how the Defense military manpower request is distributed among these categories:

*DOD military manpower request (active duty end strengths, fiscal year 1974)*

[In thousands]

| | |
|---|---|
| Strategic Forces | 127 |
| General-purpose forces | 921 |
| Land forces | 526 |
| Tactical air forces | 176 |
| Naval forces | 182 |
| Mobility forces | 38 |
| Auxiliary forces | 172 |
| Intelligence and security | 62 |
| Communications | 49 |
| Research and development | 34 |
| Support to other nations | 9 |
| Geophysical activities | 17 |
| Mission and central support forces | 680 |
| Base operating support | 265 |
| Medical support | 84 |
| Personnel support | 28 |
| Training | 179 |
| Command | 103 |
| Logistics | 21 |
| Individuals | 333 |
| Transients | 89 |
| Patients and prisoners | 11 |
| Trainees | 220 |
| Cadets | 12 |
| Total DOD | 2,233 |
| Army | 804 |
| Navy | 566 |
| Marine Corps | 196 |
| Air Force | 666 |

TIGHTENING UP ALONG THE LINE

There are two ways to review the manpower in these categories.

First, one can assume that the manning is fixed for the units in each category and that there is a fixed relationship between the mission categories at the top and the support categories at the bottom. This "vertical" approach means that changes in manpower can be made by adjusting the mission units (e.g. divisions, ships, aircraft) and then reducing the support tail at the bottom by a proportionate amount. This approach leads to relatively heavy reductions of forces to accommodate manpower reductions.

Secondly, one can assume that the manpower in each category depends primarily on the policies used to carry out the functions in that category although the manpower needed in the various support categories depends on other categories as well. This latter "horizontal" approach looks to tightening up along the line and thus minimizes the impact on combat forces. It is this latter approach that the committee chose in its review. However, the committee did recognize the chain reaction that reductions in one area have on the other areas that support the reduced area. For example, a reduction in command and headquarters reduces the overall need for manpower, and thus reduces the number of men who must be brought into the service and trained. This "tail" effect was included in the overall committee reductions.

ILLUSTRATIVE REDUCTIONS BY SERVICE

As a result of the committee review, a number of reductions in the various mission areas and Services were considered. However, the committee decided to require the Secretary of Defense to apportion the reductions among the Services, with the proviso that they be applied to the support areas as much as possible. The following table should not be considered binding but rather illustrative of one way the reduction could be apportioned among the Services:

[Manpower in thousands [1]]

| | Fiscal year 1974 DOD request | Illustrative reduction | Resulting authorization |
|---|---|---|---|
| Army | 804 | −71 | 733 |
| Navy | 566 | −46 | 520 |
| Marine Corps | 196 | −2 | 194 |
| Air Force | 666 | −37 | 629 |
| Total | 2,233 | −156 | 2,076 |

[1] Totals may not add due to rounding

ILLUSTRATIVE REDUCTIONS BY MISSION AREA

Because the Secretary of Defense will apportion the overall 156,100 strength reduction, the following discussion does not imply specific reductions which must be made but provides an illustration of the various functions and missions considered by the committee in arriving at its overall conclusion.

SUPPORT FUNCTIONS

By far, the largest share of the total committee recommended reduction came from the various support areas. Support units and functions are found throughout the structure of each of the Services including some of the so-called "mission categories." As pointed out by the Military Manpower Requirements Report for FY 73, similar support functions appear in different categories for different Services because of organizational differences between the Services. As mentioned earlier, the committee approach focused on tightening up on support all along the line. The following areas are illustrative of reductions to the mission support, central support and individual areas that the committee considered.

COMMAND AND HEADQUARTERS

There are 105,000 authorizations included in the various command/headquarters categories of the FY 74 Defense manpower request broken down as follows:

COMMAND/HEADQUARTERS

[Manpower in thousands]

| | Fiscal year— | | |
|---|---|---|---|
| | 1972 | 1973 | 1974 |
| Army | 29 | 31 | 29 |
| Navy | 31 | 27 | 25 |
| Marine Corps | 8 | 8 | 8 |
| Air Force | 47 | 44 | 43 |
| Total, command manpower | 115 | 110 | 105 |

While there has been a decline in the number of command/headquarters authorizations since FY 72, in some areas it has not kept pace with overall reductions in the forces being commanded. Army and Marine Corps command/headquarters manpower remains at the same level as FY 72 despite reductions in the number of troops commanded. The Navy has shut down over 20% of its ships and 15% of its bases and Air Force overall manpower has been reduced by 60,000. In addition to scaling command down in proportion to other changes, a real tightening up is needed on the number of levels and the manning at each headquarters level. Thus the committee believes a minimum 10% reduction in this category would be appropriate.

The committee believes the Department of Defense and each of the Services should make substantial reductions in their headquarters staffs in conjunction with the overall manpower reduction directed by the committee. As combat forces are reduced in peacetime, similar reductions must take place in the "overhead structure" of the military, particularly headquarters staffs and organizations. The urgency to realize maximum economies in the Defense establishment, plus the need to achieve balanced force reductions, dictates that the "hierarchy of command" be reduced.

One of the factors influencing the committee's judgment is as follows:

The Bomber Defense Subcommittee of the Senate Armed Services Committee for 2 years examined the personnel staffing at the North American Air Defense (NORAD) headquarters, as well as the Aerospace Defense Command (ADC), both located at Colorado Springs, Colorado. The Subcommittee urged reductions in these two headquarters or a consolidation of their staffs. It was advised repeatedly that such action was not possible. Finally on June 28, 1973, the committee was told these two major headquarters will be consolidated with a reduction of 930 in personnel, including 8 generals, 24 colonels, and 66 O–5s (Lt. Col.). The committee was advised that this consolidation will result in "no degradation in air defense capabilities." This is a consolidation of a unified command under the Joint Chiefs of Staff, with an Air Force command. The point stressed by the committee is that it can be done if the Defense Department sets its mind to it.

Inevitably reductions involve the exercise of sound judgment. The committee called upon its experience over the past 2 years in reaching its decision. Initially the committee seriously considered establishing a fixed number of personnel reductions in each headquarters. Past experience has shown that unless this is done personnel reductions seldom are ever achieved. However, the committee finally decided to give the various commanding officers in the headquarters listed flexibility in deciding precisely where and in what numbers people should be reduced. The services are advised that this flexibility should not be construed as a means of avoiding the achievement of significant personnel reductions.

For example, the Army is requesting $22.2 billion this year. In our view, the highest priority in the Army is the combat readiness of its 13 divisions. Any other mission is clearly secondary. Therefore, unless the sizable personnel in Army headquarters are appreciably

involved in accomplishing this primary mission their justification can and should be questioned.

With this background, the committee recommends a reduction of 5500 people (30%) in the following list of headquarters by June 30, 1974. This would bring assigned staffing down from 18,100 to 12,600. Authorized strengths should undergo comparable reductions. Other military commands should not assume reductions in their commands are not warranted. They should initiate positive action in line with the reductions discussed for the commands listed herein.

The committee requests the Department of Defense to report to the committee by February 1, 1974, on the progress achieved in compliance with this report and its plan to accomplish the balance of reductions by the end of the Fiscal Year.

This report shall include the numbers by rank by which each headquarters was reduced. It should also show the precise reductions in the officer force structure achieved and planned to be achieved during the fiscal year, inasmuch as it is the committee's intention that the positions abolished or reduced shall not be laterally transferred elsewhere in the Defense Department.

One of the objectives sought by the committee is to materially reduce the number of studies and reports that has become a way of life in the defense establishment. This "paper war" must be sharply restricted. It is our hope that smaller headquarters staffs will have a favorable reaction in combating the "paper war," inasmuch as our experience has shown that sizable headquarters staffs generate burdensome "paperwork" requirements to justify their existence.

In addition, the committee would look with favor on significant reductions in the headquarters organizations and staffs in the Washington area. We cannot indefinitely perpetuate an establishment of this size. A reduction approximating 15% would be a reasonable objective by the end of FY 1974.

A. REDUCTIONS IN HEADQUARTERS IN EUROPE

The committee believes sizable reductions can be achieved in the numerous headquarters in Europe. In particular, we cite the following headquarters staffs where the committee felt at least 2,200 of the 9,500 personnel assigned could be eliminated when adequate consideration is given to the U.S. combat forces actually assigned in this area.

| | Personnel authorized | Personnel assigned | Date |
|---|---|---|---|
| SHAPE (Supreme Headquarters Allied Powers Europe) | 4,827 | 4,505 | July 1, 1973 |
| EUCOM (European Command) | 885 | 965 | July 5, 1973 |
| USAREUR (U.S. Army Europe) | 1,195 | 1,250 | May 31, 1973 |
| V Corps | 328 | 587 | Do |
| VII Corps | 355 | 462 | Do |
| USAFE (U.S. Air Force Europe) | 1,565 | 1,510 | Mar 31, 1973 |
| 17th Air Force | 43 | 40 | Do |
| CINCUSNAVEUR (Commander-in-Chief, U.S. Navy Europe) | 190 | 216 | May 31, 1973 |

*1. SHAPE (Supreme Headquarters Allied Powers Europe)*

SHAPE is the military arm of the NATO Alliance. As such it has major headquarters with over 17,000 personnel assigned, scattered throughout Europe. In 22 of these headquarters the United States has 25% or 4505 U.S. personnel assigned as its contribution. This number includes 31 U.S. generals/admirals; 141 0–6s (colonels/Navy captains); and 332 0–5s (lieutenant colonel/Navy commanders).

SHAPE essentially has a wartime mission. In peactime they plan for war. They have little to do with U.S. ground or air forces on a day-to-day basis. The Army and Air Force headquarters in Europe handle their own personnel, training, and logistics matters.

While the committee has no authority or control over the 12,500 allied non-U.S. personnel we do feel the presence of 4,505 U.S. personnel is excessive and recommend substantial reductions by the end of fiscal year 1974. It is our firm conviction that we can ill afford this tremendous number of personnel in these headquarters when it is recognized that there are only 4⅓ U.S. Army divisions in Europe.

*2. EUCOM (European Command)*

The U.S. maintains a unified command at Stuttgart, Germany. As of July 5, 1973 it was authorized 885 but had 965 assigned. Also, the Committee is aware that this headquarters has added, rather than subtracted, about 150 people in the last 18 months.

The committee believes this headquarters should be reduced substantially. Specifically, the committee feels the justification for the 62 personnel assigned to the Military Assistance Advisory Group (MAAG) office should be intensely reviewed, recognizing that there are significant MAAG personnel assigned to Turkey, Greece, and Spain, where the last of our grant aid programs are being carried out.

The committee believes substantial reductions are justified and necessary in each of the Army, Air Force, and Navy headquarters commands in Europe as well as the two Army Corps headquarters and the 17th Air Force. For example, the need to have 2,200 personnel in the three major Army headquarters appears excessive, once again recognizing that there are only 4⅓ divisions in Europe.

In the case of the Air Force, substantial reductions would appear possible when recognition is given to the fact that there are only nine Tactical Wings located in Europe. Also the Air Force has three major subordinate headquarters in Europe, namely the 16th Air Force Headquarters in Spain with only one Tactical Fighter Wing under its command; the Third Air Force Command in England with four Tactical Wings under its command; and the 17th Air Force in Germany with four Tactical Wings under its command.

The need for the continued existence of the 17th Air Force should be seriously examined by the Air Force. A previous justification to the committee was that it served as a "point of contact" with the West German Government. We feel the main Air Force headquarters could fully discharge this responsibility.

With respect to the Navy, its headquarters in London has been controversial for many years because its peacetime function is command of the Sixth Fleet in the Mediterranean who already possess a full complement of admirals to run the Fleet. In time of war, the NATO commander in Naples, always a U.S. admiral, assumes command of the Sixth Fleet. We believe close attention should be given to the merit of merging the command in London with that in Naples. It is felt that merely because the U.S. Navy commander in Naples has a NATO "hat" in wartime should not present an insurmountable obstacle.

B. REDUCTION IN THE REDCOM (READINESS COMMAND) HEADQUARTERS

| | |
|---|---|
| Readiness Command: | |
| Personnel authorized | 395 |
| Personnel assigned | [1]414 |

[1] As of July 1, 1973.

The Readiness Command (REDCOM) at McDill Air Force Base, Florida, is a unified command whose mission is to command U.S. based combat forces that are not assigned to someone else. It has no area responsibility. Its main mission is to plan for periodic joint Air Force/Army training exercises.

The committee believes very substantial reductions are possible in this command when close attention is given to its prime mission. The Defense Department should advise the committee in its February 1974 report why a staff of no more than 50 people, headed by one brigadier general, could not discharge the mission of planning the periodic Army-Air Force joint training exercises. In addition meaningful justification should be presented on continuing the existence of this command beyond fiscal year 1974.

C. REDUCTION IN PACIFIC COMMAND HEADQUARTERS IN HAWAII

| | Personnel authorized | Personnel assigned | Date |
|---|---|---|---|
| CINCPAC | 1,082 | 1,058 | July 5, 1973 |
| PACAF | 1,260 | 1,278 | Mar 31, 1973 |
| CINCPAC Fleet | 471 | 513 | May 31, 1973 |
| USARPAC | 924 | 1,028 | Do |
| FMFPAC | 784 | 764 | June 21, 1973 |

There are 5 major commands in Hawaii. The Commander-in-Chief of the Pacific, CINCPAC, is a unified command under the Joint Chiefs of Staff. In addition, each service has its own major headquarters.

CINCPAC has operational control over the forces in the Pacific area. Each service component administers and takes care of its own personnel, training, and logistic matters.

It is our considered opinion that these headquarters staffs should undergo substantial reductions. For example, it is difficult to understand the justification for the Army to have 1,028 people assigned to its headquarters staff in Hawaii, recognizing that the Army division in Korea is the only one in the Pacific west of Hawaii. This situation is all the more questionable when the committee considered the fact that there are 948 people assigned to the Eighth U.S. Army Command in Korea; 123 people assigned to the Army I Corps in Korea; and 274 people assigned to the United Nations/Joint U.S. Forces Command in Korea. Certainly the Second Infantry Division in Korea must be the most supervised unit in the world.

It seems reasonable to conclude that a consolidation of these five headquarters in Hawaii may be the wisest course of action. It would be similar to the effective consolidation recently directed at NORAD/ADC.

The committee felt that a reduction of at least 1,300 personnel in these five headquarters from a total of over 4,600 personnel would be reasonable and consistent with the combat forces assigned to this area of the world.

What impressed the Committee most is the fact there are 4,641 personnel assigned to these 5 major comands, including 41 generals/admirals; 263 colonels/Navy captains; and 524 lieutenant colonels/Navy commanders. Yet this compares with only 3,950 people assigned to the comparable commands in Europe where we have a far greater number of U.S. personnel.

The Defense establishment must appreciate the need for a reasonable correlation between limited potential combat forces and reasonable headquarters staffing to support these forces.

D. REDUCTION IN U.S. KOREAN HEADQUARTERS

| | Personnel authorized | Personnel assigned | Date |
|---|---|---|---|
| United Nations Command/Joint U.S. Forces | 312 | 274 | June 30, 1973 |
| 8th U.S. Army Headquarters | 846 | 948 | May 31, 1973 |
| Korea I Corps | 92 | 123 | Do |

The U.S. Army has one division in Korea. Yet, there are three major headquarters over and above the division.

The committee does not feel adequate need exists to maintain 1,345 mostly high-ranking officers in these three headquarters when only one U.S. division and less than one U.S. tactical air wing is located in Korea. We cannot afford the luxury of such heavy staffing in the absence of significant combat forces. Hence a reduction of 50 percent appears reasonable and sound.

E. NORTH AMERICAN AIR DEFENSE COMMAND/CONAD

| | Personnel authorized | Personnel assigned | Date |
|---|---|---|---|
| NORAD/CONAD | 806 | 854 | June 30, 1973 |
| ADC | 1,434 | 1,267 | Mar. 31, 1973 |

The committee was advised on June 28, 1973, of a proposed consolidation of the North American Air Defense Command (NORAD/CONAD) headquarters with the Air Force Aerospace Defense Command headquarters, both located at Colorado Springs, Colorado.

NORAD is a unified command under the Joint Chiefs of Staff and includes Canadian Forces. CONAD (Continental Air Defense Command) is the U.S. element of NORAD, which will be reduced. Canadian forces will be unaffected. Therefore, it is only U.S. personnel in NORAD that is affected.

The Bomber Defense Subcommittee of the Senate Armed Services Subcommittee attempted to obtain reductions in these two headquarters over 2 years ago. This subcommittee met with little success as it was consistently advised that reductions were not possible. All personnel were stated to be essential. The committee compliments those responsible for the recently announced consolidation reducing 930 personnel. In particular, we noted the Air Force statement that "there will be no degradation in Air Defense capabilities."

The committee takes one exception to the recently announced consolidation. The Air Force hopes to reprogram the manpower authorizations into other areas. This would negate any savings. We firmly recommend these manpower authorizations be removed from the force structure and that the report requested of the Defense Department in February 1974 so reflect particularly with respect to the rank 0–5 (Lt. Col.) and above.

F. WSEG (WEAPONS SYSTEM EVALUATION GROUP)

| | |
|---|---|
| Personnel authorized | 88 |
| Personnel assigned | [1] 83 |

[1] As of June 30, 1973.

The committee believes earnest consideration should be given to eliminating this group. Its primary function is to serve as a study group for the Joint Chiefs of Staff and DDR&E. Basically it works with civilian personnel at IDA (Institute for Defense Analysis) to incorporate military thinking in IDA's studies. The Advanced Research Projects Agency (ARPA) could handle the study functions performed by this group in addition to their current assignments.

*Enlisted Aides*

A subject of major interest and concern on the part of the committee was enlisted aides. Enlisted aides authorized to have been flag officers as well as certain captains in the Navy in all of the Services who live in public quarters for the purpose of relieving the officers from minor tasks and details related to their military and official responsibilities.

Testimony before the committee and a GAO study done in April of this year indicated that 1722 enlisted aides were assigned to 970 senior officers. The cost of the enlisted aide program in fiscal year 1973 for personnel costs and training costs was $21.7 million. Based on personnel alone, the average cost per officer served by enlisted aides last year was $22,000.

The committee does not question that senior military officers spend a significant part of their time outside the office or "off-duty" fulfilling essential national, community, and military obligations. Nor does it question that some of the duties performed by enlisted aides allow the officers to concentrate more fully on their primary military and official duties. The committee does, however, take strong issue with the use of enlisted aides in obviously personal services such as babysitting and dog walking.

The military services have taken several steps to respond constructively to criticism of the enlisted aide program, as follows:

Guidelines have been issued on the use and duties of the enlisted aide.

The Army and Marine Corps have closed their training courses for enlisted aides. (The Navy and Air Force did not have such courses.)

The committee recommends reducing the number of enlisted aides from 1722 to 1105. The reduction is an overall 36% cut as follows:

Army—Reduction of 90 (510 to 420).
Navy—Reduction of 330 (577 to 247).
Marine Corps—Reduction of 35 (90 to 55).
Air Force—Reduction of 152 (535 to 383).

The savings from reduction would be about $7 million and presumably the termination of the training schools will result in a further savings of about $360,000 per year.

The committee believes that the Secretary of Defense should have the responsibility of allocating the 1105 enlisted aides to generals and admirals living in public quarters. The committee does stipulate that no officer below general/flag rank should be assigned enlisted aides.

Mr. PROXMIRE. Mr. President, I send to the desk my substitute amendment.

The PRESIDING OFFICER (Mr. BAYH). The Chair is advised by the Parliamentarian that it would take unanimous consent to modify the amendment at this time.

Mr. PROXMIRE. That is because of the unanimous-consent agreement on time?

The PRESIDING OFFICER. Yes.

Mr. PROXMIRE. Mr. President, I ask unanimous consent to modify my amendment as indicated in my speech.

Mr. GOLDWATER. Mr. President, I object.

The PRESIDING OFFICER. Objection is heard.

Mr. PROXMIRE. Mr. President, I offer this amendment as a substitute for my amendment. I will have to reconsider the time limitations.

The PRESIDING OFFICER. The rule would require that the Senator offer the substitute at the expiration of time.

Mr. PROXMIRE. I understand.

I yield back all of my time, Mr. President.

The PRESIDING OFFICER. Does the minority side care to debate the issue?

Mr. GOLDWATER. Mr. President, will the Senator from South Carolina yield? I would like to speak against the amendment.

Mr. THURMOND. I yield to the Senator from Arizona.

The PRESIDING OFFICER. The Senator from Arizona is recognized.

Mr. GOLDWATER. Mr. President, I very reluctantly raised the objection to the unanimous-consent request of the distinguished Senator from Wisconsin (Mr. PROXMIRE) because we have had so much abuse on this floor of our general officers of higher rank that I believe it is time we find out just what the attitude of this body is.

Either we approve the condemnations, the allegations, and the insinuations, or we back the military in its efforts properly to run the Armed Forces.

The PRESIDING OFFICER. If the Senator from Arizona will permit, the Chair would interrupt just long enough to receive a message from the President of the United States.

## MESSAGE FROM THE PRESIDENT

A message in writing from the President of the United States was communicated to the Senate by Mr. Marks, one of his secretaries.

## DEPARTMENT OF DEFENSE APPROPRIATION AUTHORIZATION ACT, 1974

The Senate continued with the consideration of the bill (H.R. 9286) to authorize appropriations during the fiscal year 1974 for procurement of aircraft, missiles, naval vessels, tracked combat vehicles, torpedoes, and other weapons, and research, development, test and evaluation for the Armed Forces, and to prescribe the authorized personnel strength for each active duty component and of the Selected Reserve of each reserve component of the Armed Forces, and the military training student loads, and for other purposes.

Mr. GOLDWATER. Mr. President, I rise in opposition to the amendment which would arbitrarily reduce the number of flag officers of the military services. The Senate has historically treated this subject in a reasoned and orderly manner—to propose to reduce by nearly a third the numbers of generals and admirals of the active services is a step of grave importance to the military services and the national security.

The Senate is aware that, during the years since 1954 when the Officer Grade Limitation Act—OGLA—was passed, requirements for senior managers serving outside the parent services have, within the strength limitations imposed by the OGLA and the Senate Armed Services Committee, greatly increased. These requirements, generated in part by the increasing complexities of military technology, and in part by the Defense Reorganization Act of 1958 which strengthened the staff of the Secretary of Defense, the JCS, and the unified command system, have greatly increased the numbers of general and flag officers who are serving outside their services.

The Air Force's total general officer strength, for example, has increased from 373 in 1954 to a Vietnam maximum of 443 in 1968, and has since decreased to 411 at the end of fiscal 1973. While there has been a net increase of 38 general officers in the Air Force since the passage of OGLA, there has been a greater increase in the numbers of general officers serving outside the Air Force—from 58 to 117. Thus, there are 21 fewer generals available to run the Air Force since the passage of OGLA in 1954.

If there is a need to reduce the general officer strength of the services, then

it is the responsibility of the Congress to critically examine the issue. We should not, however, arbitrarily restrain the services without full and careful hearings and a sober determination that the numbers are in fact excessive.

Mr. President, on September 10, I placed in the RECORD an article published in the Army and Navy Journal of May 1972, showing the percentage of general officers to 100,000 active duty servicemen in different forces around this globe. Contrary to what we have been told repeatedly on the floor of the Senate, only one country has fewer generals than we have per 100,000 men, and that is the Federal Republic of Germany, which has 47. The United States has 54. It ranges up through Spain, with 107; the United Kingdom, with 186; and the one with the highest is Sweden, with 373 general officers to each 100,000 men.

I read from the article:

Incidentally, the high ratio of generals to Servicemen obviously doesn't breed wars. Sweden, which has the most generals in relation to the size of its armed forces, has not been involved in a major war since 1814.

Mr. President, I have referred to what I am going to read from this article at other times on this floor and in discussions around the country. I read from the Army and Navy Journal article:

An earlier Journal survey showed that what Congress refers to as the "proliferation of top ranking officers" is small potatoes by at least one other significant criteria, the U.S. Civil Service structure. Civil Service executive suites are manned by more than four times as many "supergrades"—GS–16s, –17s, and –18s equivalent to general and flag rank—as are military headquarters. At a time late in 1970 when military strength totaled 11% more than Civil Service ranks (2.87 vs. 2.57-million), there were 5,586 GS–16s, –17s, and –18s on the U.S. payroll, compared with only 1,330 generals and flag officers. The Civil Service figure *excluded* 543 scientific and technical exports in the Department of Defense alone who are paid equivalent supergrade salaries by special acts of Congress, as well as 49 Presidential appointees in the $36,000-to-$60,000 bracket.

I point that out, Mr. President, just to show those who criticize the military that if they want to really be critical, we can start right in our own section of the Government, the legislative branch, and extend it to the administrative branch, where we find real proliferation of supergrades.

Mention was made in the introductory remarks of the Senator from Wisconsin about the support ratio. One would think, when listening to this, that he is referring to the number of general officers in support of troops. What support ratio means is the total number of men back of each fighting man on the front line, and I have to agree that the United States has the highest ratio of any armed forces in the world. Ours run about 8 to 1. We have eight men in back of the line for every man we have in front, acting in the combat role. But it does not relate to the subject.

This situation can be corrected by the military. I doubt that it will, because no army in the world treats its front line troops any better than we do, or even comes close to it; and I do not think it would be the inclination of the military or even of Congress to allow that to change.

The Senator mentioned Admiral Rickover. I have heard Admiral Rickover make the same statement before the Armed Services Committee year after year. But what Admiral Rickover is referring to—and specifically referring to—is the naval structure in the Pentagon, where I would agree that we could eliminate box after box after box, each with its public relations officer, and probably get a more efficient operation. This is what Admiral Rickover is aiming at—the great proliferation particularly of civilian strength in the naval department over there, not necessarily the admirals or captains.

I asked him in committee one day how long it would take him to get a weapons system if he woke up early one morning with the idea in mind, he being one of the few men in the Pentagon capable of dreaming up a weapons system, sketching it, and planning it.

He said:

It would take seven years, if it ever got through the 27 boxes that lie above me, any one of which can stop a weapons system without ever informing me or anyone above me about the change or why the change.

I agree completely with the need for the Pentagon to reorganize the civilian structure and to take a good look at the military structure of the organization charts and boxes of the Pentagon. To me, they are exceedingly overheavy.

Mr. President, I must oppose this amendment. As I have said, I would not have objected to the substitute—in fact, I hope the Senator would offer the substitution as another amendment at some other time. But I think this body should be placed on record as to whether we are going to oppose what I think is a very fine record, in that we are second with 54 generals and admirals per 100,000 men and are beaten by only one country, the Federal Republic of Germany.

So I hope that if this matter comes to a vote and is not withdrawn, the Members of the Senate will vote against it.

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

Mr. THURMOND. I yield to the distinguished Senator from Texas such time as he desires.

Mr. TOWER. Mr. President, I rise in opposition to the amendment to reduce arbitrarily the number of flag officers in the active military services. This subject, while of great concern, should be viewed in an orderly and judicious manner—for it is in this manner that Congress has addressed this problem for the past three decades.

Initially, the Officer Personnel Act of 1947 fixed the strengths of flag officers to levels needed in the relatively small active duty officer force envisioned at that time. In 1954 in recognition of the need to control the numbers of senior officers in the larger armed force which we have had to maintain since 1951, Congress enacted the Officer Grade Limitation Act which provided separate flag officer grade tables with varying strength scales for each of the services.

The services have maintained their flag officer strengths within the appropriate limits, and report them to Congress annually in accordance with the 1954 act.

The need for senior officers is based primarily on the missions of the service and the executive responsibilities that must be carried out, rather than on the gross size of the force. The number of top managers in civilian corporations does not expand or contract in direct proportion to increases and decreases in the work force. In recognition of the principle that rapid increases of senior executives to meet requirements is not feasible, the law provides that general officer strengths do not fluctuate by a constant percentage of the fluctuations in the total strength of the Armed Forces.

The flag officer strengths of the Services did not rise significantly during the buildup for the Vietnam war in relation to the total increase of the force. As the total strength of the force declines there should not be a disproportionate reduction in its executive leadership.

These established procedures are working as the Congress intended. The numbers of flag officers are decreasing as the force declines. For example, on June 30 of this year there were 1,294 flag officers on active duty with only 1,264 budgeted for 1974.

Since Congress once enacted laws to ensure that strengths of flag officers be related to need, why must we do so again? This amendment is a precipitous action—an arbitrary procedure without orderly study or hearings. It is a matter that should be taken up before the Committee on Armed Services.

Mr. President, you cannot approach this with a meat-ax-type mentality; it is something that must be done in an orderly way.

I thank the Senator from Arizona for his cogent remarks and I associate myself with everything he said.

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## AMENDMENT OF THE SMALL BUSINESS ACT (S. 1672)—VETO MESSAGE

Mr. MANSFIELD. Mr. President, there is a veto message at the desk. I ask unanimous consent that its reading be waived, that it be spread on the Journal and printed in the RECORD, and held temporarily at the desk until an agreement on its consideration can be worked out.

The PRESIDING OFFICER (Mr. BAYH). Without objection, it is so ordered.

The President's message is as follows:

*To the Senate of the United States:*

I am returning today without my approval S. 1672, a bill to amend the Small Business Act.

The stated purpose of this measure is to improve the legislative authority of the Small Business Administration, and I am in complete accord with that objective. Unfortunately, this legislation is also burdened with several extremely undesirable features—provisions which would represent a backward march for the Federal Government's disaster relief programs—and for that reason, I am compelled to veto it.

Last year our Nation experienced the worst series of natural disasters in recent

memory. I visited several of the affected areas and talked with the victims. Many of them pointed out problems they were having with Federal aid.

As a result of those discussions, I ordered a thorough review of all Federal disaster assistance programs, and earlier this year I proposed legislation that would fundamentally restructure them. The purpose of those proposals was simple: to help disaster victims in the fastest, most efficient and most humane way possible—and in a way that would target our assistance on those genuinely in need. The Federal Government has a clear responsibility to help disaster victims who cannot help themselves, especially low-income families, but those who have their own resources should not use the general taxpayer as a crutch.

If I were to sign this bill, we would turn our back on these objectives and reinstate practices that have proven unworthy in the past. In fact, this bill would reopen a leaky financial tap in the Federal Treasury which the Congress itself closed last April.

The provisions of S. 1672 which I find unacceptable are these:

—At a large and unnecessary expense to the taxpayer, this bill would provide federally subsidized loans and grants to all disaster victims regardless of economic need. A wealthy landowner, who could provide for himself through insurance or could easily obtain a private loan, would be entitled to a $2,500 free grant from the Government and an additional loan at only three percent interest. Alternatively, he could forgo the grant and obtain a loan for the full amount at only one percent interest. A poor family could qualify for the same aid under this bill, but it is unlikely they would require as large a loan as richer families. The net result would be greater Federal assistance for the well-to-do than the needy, and an even larger bill for the general taxpayer. That is not my idea of good government.

—The cost for the taxpayer of S. 1672 would be approximately $400 million in Federal spending for each $1 billion in loans. While we cannot precisely forecast future costs, we do know that if our disaster experiences in the next 12 months are the same as last year, this bill would add $800 million to the Federal budget.

—In addition, this bill would slow the Federal Government's ability to respond to disasters by creating an administrative nightmare for those agencies charged with providing assistance.

My continuing hope is that we can act this year to accomplish the much-needed reforms in our disaster assistance programs. The proposals I sent to the Congress earlier this year are designed to insure that the sincere compassion felt by all Americans for disaster victims can be translated into the most rapid, effective and equitable form of disaster assistance possible. To this end the Administration will continue to work with the Congress to enact these comprehensive reforms and, if need be, to enact a constructive, fiscally responsible and effective interim measure which would serve until more permanent reforms can be made. In the meantime, ongoing programs will continue to be of assistance to disaster victims and will not be affected by my disapproval of S. 1672.

RICHARD NIXON.

THE WHITE HOUSE, *September 22, 1973.*

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## DEPARTMENT OF DEFENSE APPROPRIATION AUTHORIZATION ACT, 1974

The Senate continued with the consideration of the bill (H.R. 9286) to authorize appropriations during the fiscal year 1974 for procurement of aircraft, missiles, naval vessels, tracked combat vehicles, torpedoes, and other weapons, and research, development, test and evaluation, for the Armed Forces, and to prescribe the authorized personnel strength for each active duty component and of the Selected Reserve of each reserve component of the Armed Forces, and the military training student loads, and for other purposes.

Mr. THURMOND. Mr. President, I rise in opposition to the amendment. I wish to commend the distinguished Senator from Arizona (Mr. GOLDWATER) and the distinguished Senator from Texas (Mr. TOWER) for their fine remarks on this subject.

Mr. President, this amendment to drastically cut our top military leadership has grave implications. I am not going to talk about the personal discouragement it will bring upon our officer corps—because it is an arbitrary and capricious action. What I want to talk about is the real danger to the effectiveness of the armed services posed by this amendment. It would remove 30 percent of our top military leadership—nearly 390 positions. I would like to know if the author of this amendment can identify 5 or 10 of the 390 positions he thinks can be eliminated? Although this amendment proposes to apply the reduction primarily to headquarters and support elements, operational units cannot help but be affected in such a drastic cut. For example, a study completed by the Department of Defense last year indicates that nearly half of a reduction of the magnitude proposed would involve command and plans and operational positions, since it is not possible to completely remove all top-level leadership in the support and resources management areas.

The reduction called for in this amendment would roll back flag-officer strength to approximately 900; about the same number of these officers we had in 1950—just before Korea. This action ignores the fact that our forces are 50 percent larger today. The amendment also ignores that fact and many other important considerations. It ignores the increasing sophistication and monetary investment in ships, aircraft and weapons system which demands the expertise, quality of leadership and judgment of a flag-rank officer.

Further, it ignores the organizational changes approved by Congress in the Defense Reorganization Act which required that the staff of the Secretary of Defense, the Organization of the Joint Chiefs of Staff and the unified command system be strengthened. These Agencies carry out the mandates of Congress in the management and control of our Armed Services, a far more complex and demanding job than at any time in our history.

It ignores the fact that the requirements for top leadership as in civilian enterprise are not in direct proportion to increases and decreases in the number of all personnel comprising the organization.

It ignores the fact that top management in the DOD is conservative when compared to the rest of Federal Government, private industry and armed services of other countries.

The CONGRESSIONAL RECORD of September 10, 1973, page 29043, contains an article from the Armed Forces Journal called to our attention by a member of the Armed Services Committee, Senator GOLDWATER. The article summarizes a worldwide survey made of military rank structure which places this matter in perspective. It shows that for every 100,000 active duty servicemen the United States has 54 generals and admirals. But, Sweden has 373, 7 times as many; the United Kingdom 186, 3½ times as many; and France 74, to mention a few. Fourteen countries responded fully to this survey and of these, eight had over twice the proportion of generals and admirals as the United States. Only one country, West Germany, had a smaller proportion, 47 per 100,000.

Mr. President, I submit that this is a very favorable comparison and indicates that our top military leadership is not out of balance as some Members would have us believe. It is the duty of Congress to critically examine the numbers of generals and admirals in our Military Establishment, but let us not put arbitrary restraints into the law, without full and careful hearings, when all indications are that the number is not excessive.

For all these reasons, I agree with the Secretary of Defense's report to Congress on officer grade limitations submitted just this last May, which states that:

> The existing statutory limitations on the number of active duty flag officers provide the minimum number necessary at this time to meet total defense requirements.

The Congress has provided permanent laws for the control of the number of flag officers. In addition, our distinguished chairman, Mr. STENNIS of Mississippi, has established what is known as a Stennis ceiling which holds the general and flag officer totals even below that allowed by law. This procedure is working and the number of flag officers are decreasing as the force declines.

Mr. President, I believe that the normal course of events will take the general and flag officer ceilings to their proper level and having utmost faith and confidence in our distinguished chairman, Mr. STENNIS, I would defer to his leadership in the management of the flag officer limitations.

The PRESIDING OFFICER (Mr. BAYH). Who yields time?

Mr. PROXMIRE. Mr. President, I understand that my time has been yielded back.

Mr. THURMOND. Mr. President, we have yielded back our time on this amendment.

Mr. PROXMIRE. Mr. President, I call up my amendment in the nature of a substitute, which is at the desk.

The PRESIDING OFFICER. The amendment will be stated.

The assistant legislative clerk read as follows:

On page 23, after line 24, it is proposed to insert a new section as follows:

305. Notwithstanding any other provision of law, the number of military personnel assigned on the date of enactment of this section to the headquarters listed below shall be reduced by not less than 5,500 on or before June 30, 1974:

Supreme Headquarters Allied Powers, Europe.
European Command.
United States Army, Europe.
V Corps.
VII Corps.
United States Air Force, Europe.
17th Air Force.
Commander-in-Chief United States Navy, Europe.
Readiness Command Headquarters.
CINCPAC, PACAF, CINCPAC Fleet, USARPAC, FMFPAC (all in Hawaii).
United Nations Command/Joint United States Forces.
8th United States Army Headquarters.
Korea I Corps.
North American Air Defense Command.
Continental Air Defense Command.
Air Force Aerospace Defense Command.
Weapon Systems Evaluation Group.

The PRESIDING OFFICER. Thirty minutes is allotted to the amendment in the nature of a substitute, 15 minutes to a side.

Mr. PROXMIRE. Mr. President, I do not expect to take my full time on the amendment.

What the committee proposes in its report, pages 134 and 135, is what I have incorporated into the amendment. In other words, I have given the committee language the force of law. It seems to me that this is a necessary approach. We know how very difficult it is to accomplish reductions. This is no criticism at all of the personnel involved in the Pentagon, but there is nothing harder than to reduce the number of personnel of this kind, and to do it only on the basis of the committee's recommendation is unlikely to be successful. If we make it a matter of law, we know that it will be done. The committee is very emphatic in its report, saying that they think such reductions are necessary and desirable to improve our military position.

On the basis of the committee's own reasoning and the fact that the committee has taken this position, I do hope that the manager of the bill will accept this proposal and make it a part of the law.

Let me read briefly from the committee report:

The committee called upon its experience over the past 2 years in reaching its decision. Initially the committee seriously considered establishing a fixed number of personnel reductions in each headquarters. Past experience has shown that unless this is done personnel reductions seldom are ever achieved. However, the committee finally decided to give the various commanding officers in the headquarters listed flexibility in deciding precisely where and in what numbers people should be reduced. The services are advised that this flexibility should not be construed as a means of avoiding the achievement of significant personnel reductions.

For example, the Army is requesting $22.2 billion this year. In our view, the highest priority in the Army is the combat readiness of its 13 divisions. Any other mission is clearly secondary. Therefore, unless the sizable personnel in Army headquarters are appreciably involved in accomplishing this primary mission their justification can and should be questioned.

With this background, the committee recommends a reduction of 5500 people (30%) in the following list of headquarters by June 30, 1974. This would bring assigned staffing down from 18,100 to 12,600. Authorized strengths should undergo comparable reductions. Other military commands should not assume reductions in their commands are not warranted. They should initiate positive action in line with the reductions discussed for the commands listed herein.

A little later:

One of the objectives sought by the committee is to materially reduce the number of studies and reports that has become a way of life in the defense establishment. This "paper war" must be sharply restricted. It is our hope that smaller headquarters staffs will have a favorable reaction in combating the "paper war," inasmuch as our experience has shown that sizable headquarters staffs generate burdensome "paperwork" requirements to justify their existence.

I consider this proposal to be a very substantial compromise. I earnestly hope that the manager of the bill will give this proposal serious and favorable consideration.

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

Mr. PROXMIRE. I yield.

Mr. SYMINGTON. As I understand the able Senator, he has now modified his amendment to conform to what the report of the committee currently says should be done. In other words, he wants to put into legislation the recommendations of the committee report. Is that correct?

Mr. PROXMIRE. The Senator is correct.

Mr. SYMINGTON. As I understand it, there are 105,000 authorizations included in the various command headquarters categories. Is it correct that the Senator has already put most of this information in the RECORD?

Mr. PROXMIRE. Yes.

Mr. SYMINGTON. One aspect that has worried me is the size of headquarters in Europe. As stated in the committee report, we felt 2,200 personnel could be eliminated. That 2,200 would be part of the recommended overall reduction of 5,500, which included European headquarters and all the other headquarters, correct?

Mr. PROXMIRE. That is correct.

Mr. SYMINGTON. All those headquarters that are out of the country.

Mr. PROXMIRE. That is correct.

Mr. SYMINGTON. Under those circumstances, I am impresed by the position taken by the able senior Senator from Wisconsin. We often recommend, but that recommendation is not recognized, as illustrated by reference to CONAD represented in the committee report. Now it has been done, however, and the military is frank to say it has not, in any way, offset their capacity.

Speaking for myself, of course, and not for the committee, inasmuch as the issue is to make practical recognition of what the committee recommends in its report, I will support the modified amendment of the Senator from Wisconsin.

Mr. PROXMIRE. I thank the Senator.

Mr. President, I reserve the remainder of my time.

Mr. THURMOND. Mr. President, I yield to the distinguished Senator from Virginia (Mr. HARRY F. BYRD, JR.) such time as he requires.

Mr. HARRY F. BYRD, JR. Mr. President, if I understand this proposal correctly, it would not save one dollar. It would not reduce by one individual the number which would be reduced by the bill itself.

I read now from page 20 of the legislation:

The end strength for active duty personnel prescribed in subsection (a) of this section for the fiscal year ending June 30, 1974, shall be reduced by 156,100.

In other words, the bill itself required a reduction of 156,100 persons in the armed services by the end of this fiscal year.

It goes further and says:

Such reduction shall be apportioned among the Army, Navy, Marine Corps, and Air Force in such manner as the Secretary of Defense shall prescribe, except that in applying any portion of such reduction to any military department, the reduction shall be applied to the maximum extent practicable to the support forces of such military department.

Then it goes on to say:

The Secretary of Defense shall report to the Congress within 60 days after the date of enactment——

The reductions and how he proposes to make those reductions.

The basic point, as I see it, in the amendment offered by the Senator from Wisconsin is, Are we going to attempt to determine on the floor of the Senate just where these reductions shall be made? It seems to me that what we ought to do is tell the Defense Department, "You must reduce your forces by 156,100 men by the end of this fiscal year," and then leave it to them to make the decisions as to where the cuts shall be made.

When this matter first came before the Armed Services Committee, the committee staff worked up detailed proposals as to where such a cut of 156,100 men could be made. The committee considered that, and it was the judgment of the committee as a whole that, instead of the committee attempting to tell the Defense Department where to make the cuts, the committee should recommend to the Senate and to the Congress that they adopt an overall total with which the Defense Department must live, but then give leeway to the Secretary of Defense to decide where the cuts can best be made.

As I see it, we do not want to sit here on the floor of the Senate, or even in committee, which has the facilities to go into detail on this matter, and try to

specify exactly where every man should be reduced.

I personally think that we have too many men in the Armed Services under our budgetary situation.

This week I personally discussed this subject with Secretary Schlesinger, who came to the office and I made my views known to him. While I do not quote personal conversations, and do not now, I will say my talks with him were satisfactory. I think he is a very able man. I think he recognizes the problems which face him as the new Secretary of Defense.

He has been in office only a short time. I think he ought to have an opportunity to work out these reductions which the Congress plans to place on him, unless the committee recommendation is overridden, and he ought to have an opportunity to make the reduction of 156,100 men where it will do the least damage to the Armed Services.

I cannot see what we would be gaining by adopting the Proxmire amendment other than writing into law here on the floor of the Senate the disposition of our military troops. I prefer to stand on the principle.

Mr. NUNN. Mr. President, will the Senator yield for a question?

Mr. HARRY F. BYRD, JR. I yield.

Mr. NUNN. Is it not true that the Armed Services Committee debated this language, as the Senator from Virginia has already pointed out? We did it with a great deal of scrutiny and went over the recommendations of the staff in arriving at an overall figure, but we thought it best to leave to the Secretary of Defense, rather than carry out the executive function in our committee, to try to decide where each cut would be made, and therefore we put the language into the report rather than in the legislation?

Mr. HARRY F. BYRD, JR. The Senator from Georgia is quite correct. He emphasizes the very important point that, while the committee has ideas of its own, and its own ideas coincide with the Senator from Wisconsin's, the committee's total judgment was that we would be doing our Nation a better service to let the determination as to exactly where these reductions should be made, be arrived at by the executive branch and the Secretary of Defense, who has the overall responsibility, rather than attempt here on the floor of the Senate, or for that matter in committee, to do it.

Mr. PROXMIRE. Mr. President, will the Senator yield very briefly so that I may request the yeas and nays?

Mr. HARRY F. BYRD, JR. I yield.

Mr. PROXMIRE. Mr. President, I ask for the yeas and nays.

The yeas and nays were ordered.

Mr. NUNN. Mr. President, will the Senator yield further?

Mr. HARRY F. BYRD, JR. I yield

Mr. NUNN. In other words, the Senator from Virginia is telling us we have in the committee report an illustration of what could be done and what we felt should be closely scrutinized, but we should not legislate either in committee or on the floor of the Senate, as he pointed out, with particularity the cuts, which would just take away the proper flexibility the department needs in order to determine properly its manpower requirements?

Mr. HARRY F. BYRD, JR. That is correct.

Mr. NUNN. So if we adopt this amendment, we would be going against what I think was the unanimous opinion of the committee. Is that correct?

Mr. HARRY F. BYRD, JR. Mr. President, I cannot remember whether the committee was unanimous. However, I think it was. I know that it was a majority of the committee.

Mr. NUNN. Mr. President, I cannot recall the exact number. However, it was a majority.

Mr. PROXMIRE It was not objected to, as I recall.

Mr. HARRY F. BYRD, JR. It was not objected to.

Mr. PROXMIRE. Mr. President, I agree with much of what the Senator has said. I commend the committee. We have had an enormous reduction, from 3.6 million down to 2.2 million, in the Armed Forces.

What we are trying to do is to take what the committee recommended in its report. The committee recommended a reduction of 156,000. We would provide that 5,500 be reduced in the staff of these overseas and domestic commands.

The committee thoroughly documents the fact that the commands overseas are overstaffed.

We know that the Pentagon has been explaining this year after year after year. The hardest thing in the world to do is to reduce the staff, because the admirals and the generals are the ones involved.

Mr. HARRY F. BYRD, JR. Mr. President, I do not think that the committee or the Congress has ever put a heavy reduction on the Pentagon and then told them how to do that.

Mr. PROXMIRE. The committee does that in the committee report.

Mr. HARRY F. BYRD, JR. No. May I say to the Senator from Wisconsin that the committee report gives the judgment of the committee as to where certain reductions can be made. We hope that the Department would follow as closely as possible the committee recommendation. However, when we get into the field of writing legislation on the floor of the Senate as to just where these reductions should be made, I think that we are going beyond our expertise. I am not sure that any of us can determine that.

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

Mr. HARRY F. BYRD, JR. Mr. President, I yield to the distinguished Senator from Missouri.

Mr. SYMINGTON. To the best of my recollection, this is what happened. First, we all agreed there should be a manpower reduction. It was turned over to the staff, and an extraordinary amount of hard work was done to determine where reductions should be made.

The staff recommended a reduction of 9 percent in the Navy, 9 percent in the Army, 6 percent in the Air Force, and 1.8 percent in the Marine Corps.

The staff asked why the Air Force reduction recommendation was not equivalent to the others. They pointed out the Air Force had already done work on personnel reductions and this was the way it came out.

This came before the committee and was passed unanimously. But later, at another meeting of the committee, a recommendation was made by several Senators that instead of following the staff, we should follow the Secretary of Defense and leave it up to him as to where he thought it would be best to make reductions.

Inasmuch as I was anxious to continue the unanimous aspect of what we were doing in the committee, as acting chairman I agreed, "Let us leave it up to the Secretary of Defense."

Then we put out from the staff what I consider to be one of the more able reports that I have seen since I have been a Member of the Senate, backing up our bill. At that time, however, I could not understand why there was a sudden desire to leave it up to the Secretary of Defense. I thought later I knew why this was, upon receiving a letter from the Chief of Naval Operations which said among other things that such a reduction would, and I quote, "make the United States hostage to Soviet good will."

Mr. President, that statement was too strong to take. The letter also had misstatements. I wrote then and pointed out, with the aid of the staff, where there were mistakes in the letter.

The distinguished Senator from Wisconsin, who everybody on the floor will agree has made substantial contribution to the taxpayers in this and other fields, then came in today with an amendment this morning. The amendment was too strong. I told him I could not accept it. Now, he has taken the report of the committee; and I value these reports. I respect what the staff has to say.

The Senator from Wisconsin said:

Then I will legislate what the committee report recommends.

With all due respect to my able and respected friend, the Senator from Virginia, I do not see anything wrong with now putting our money where our mouth was. That is what we are doing, in effect, in legislating this matter in this way.

It has not been my privilege to travel abroad with the able Senator from Virginia. But if there is any place where we are overstaffed in headquarters, it is abroad.

I had guessed that would be automatically taken care of. Something that worries me a great deal—and I doubt if there is anyone in this body who worries more than the Senator from Virginia—is further problems with the value of the dollar.

There is overstaffing in some headquarters; our report recommends that we make these reductions. Under the circumstances, and based on legislative history and this committee's history, I have taken the liberty to refer to this afternoon, I felt it in order to support the amendment of the Senator from Wisconsin.

Mr. HARRY F. BYRD, JR. Mr. President, I thank the Senator from Missouri. May I say in that connection that I felt the staff, as just expressed by the Senator from Missouri, did an excellent job in pointing out where the reductions can be made. It is a question of legislative policy. Does the Senate or does the Congress want to specify where these reduc-

tions shall be made, or would it be wiser for the Senate to put on an overall ceiling and demand a reduction of 156,000 men and then leave it up to the Secretary of Defense to make the decision as to where those men can best be reduced?

It seems to me as a matter of logic and as a businessman, that if I wanted a reduction in the number of staff on my newspaper, I would leave it up to the general manager and tell him how many to reduce. He will then do it where he thinks is best. I do not try to tell him that he should take 6 out of this department and 6 out of another department and 15 out of another department. I do not think as a businessman that that is a very wise thing to do.

Mr. NUNN. Mr. President, I recall that our committee report did contain the recommendation as to where the committee felt that the cuts should be made. However, we have a comprehensive report that does not pick out a particular place, but gives the overall feeling that the cuts should be made by illustrations. And if we want to get into the business of telling the Department of Defense where the cuts ought to be made on the basis of the committee report, we should not take only one portion of the report, but we should take the whole report. We are dealing with only 5,500 men out of 156,000 men.

The committee did not do that in the report. We had the staff make a comprehensive analysis which is contained on pages 129 to 147. The best thinking of the committee was to take the 5,500 men and impose the cut on that 5,500 men, but completely ignore the others.

The PRESIDING OFFICER. The Chair is advised by the Parliamentarian that the time of the opponents to the amendment has expired. The Senator from Wisconsin has 6 minutes remaining.

Mr. HARRY F. BYRD, JR. Mr. President, I would like to have a few minutes.

Mr. SYMINGTON. Mr. President, I ask unanimous consent that there be an additional 30 minutes, to be equally divided between the Senator from South Carolina and me.

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

Mr. HARRY F. BYRD, JR. Mr. President, would the Senator from South Carolina yield me 3 minutes?

Mr. STENNIS. Mr. President, would the Senator from South Carolina yield me 5 minutes?

Mr. THURMOND. Mr. President, I yield 3 minutes to the Senator from Virginia and will then yield 5 minutes to the Senator from Mississippi.

Mr. HARRY F. BYRD, JR. The Senator from Georgia, I think, is absolutely right. There are a number of recommendations dealing with this 156,000 cut, and I think if we are going to get into specifying where the cuts are to be, there are many areas the Senate would be interested in considering scattered all through this report.

I want to emphasize again that this amendment by the Senator from Wisconsin will not save $1—not $1. It will not reduce by one person the number of personnel the Army, Navy, Air Force, and Marines will have at the end of the fiscal year if this legislative recommendation of a cut of 156,000 men is made.

It is really a question of principle and of policy of the Congress. Do we want to specify on the floor of the Senate where these cuts shall come from, or is it wiser to say to the Secretary of Defense, "We demand that you reduce by 156,000 men, and you make a decision where best you can let those men go."?

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

Mr. HARRY F. BYRD, JR. Yes.

Mr. SYMINGTON. I have great respect for the Senator's opinion. He makes a point about comparing this to a matter of business. But when this measure goes to conference, where we know, based on past experience, we may have trouble with such an amendment, does he not think, when we point out heavily overstaffed headquarters that have little to do with security, if we point this out in practical fashion, it might help in obtaining some of the 156,000 reduction the committee decided upon?

Mr. HARRY F. BYRD, JR. Mr. President, I emphasize to the Senator from Missouri that I favor the reduction in these support forces and headquarters forces.

Mr. SYMINGTON. I understand, and am talking about its practical application later in the conference.

Mr. HARRY F. BYRD, JR. I do not think that makes too much difference; certainly not enough difference to breach the principle of whether we want to specify where the cuts are to come from.

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

Mr. HARRY F. BYRD, JR. I yield.

Mr. LONG. I am afraid the Senator might find we are not going to succeed in making reductions, even though we try. It has been my experience that the military does not agree that cuts should be made. They are naturally disposed to taking their cuts in ways where they know they are going to get their money back.

I can recall when I was working on the construction subcommittee——

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

Mr. SYMINGTON. Mr. President, I ask unanimous consent that time be considered as yielded as necessary so that we can discuss this proposal.

The PRESIDING OFFICER. Is there objection? The Chair hears none, and it is so ordered.

Mr. LONG. On the advice of some of the best engineers in the Corps of Engineers, I advised that they should not spend more than a certain amount per man on barracks at that time. Those engineers, who built a lot of these barracks, explained that they could set the joists a little bit farther apart, or find ways to make the room a little bit smaller, or cut a few corners in the costs—as contractors frequently do to make a profit for themselves, by the way—so that, in total, they could save about another 10 percent on barracks buildings. That is, they could either build it as big by cutting costs, or make the room a bit smaller, and build these buildings for less.

That is how the people advised me that these reductions in costs could be made. But then when I went around to see how they were doing it, most of them were doing it that way, but we found a commander of a naval base, leaving out the ceiling.

Imagine, you have the floor of the room above and the floor below, and nothing between the floor and where the ceiling is supposed to be, just leaving out the ceiling.

Why was he doing that? He was doing that because he knew it looks idiotic not to have a ceiling, and therefore he will leave out the whole ceiling, because he knew Congress would give him the money to put the ceilings in later.

Likewise, they know that if they take out the officers' club, they might have difficulty getting that back, or if they take out the club for the admiral, they might have difficulty getting that back, but if they take out a little beer hall for the enlisted man that is something Congress would restore, so that the officer gets his club but the enlisted man does not have anything. They know they can get it for the enlisted men. By taking out something essential, they know they can get it later on.

That is the game they always play on some of these across-the-board cuts. You cannot blame them; they do not think cuts should be made to begin with, so they will try frequently to take the cut in a way to assure that they will get the money later on.

When you try to cut down on the cost of an air base, they will leave the concrete off half the runways. They know that that base will never serve its purpose until that runway is long enough for modern planes to land. They could have saved the same thing by less space on the parking apron, which will probably not be filled up twice a year anyway. But they say, "Oh, no, don't cut the parking apron, cut the runway." That way, they know they will get their money back.

If you do not specify where the cuts are to come from, oftentimes these across-the-board cuts only mean a mere postponement from 1 year to the next of a certain item of spending.

Every time I ever went to Europe, if I had a military man with me, he was astounded to see all those headquarters over there, and would ask, "Why all the headquarters?" The only reason I could see for all the headquarters was that it was possible for more people to have a tour of duty, enjoying the advantages of the European atmosphere, with all the emoluments that go with it. This is obviously one area where I have never found anyone yet who knew anything about it who would not tell you that they have far more headquarters personnel than they need over there.

I can recall one time when I was in the service—I am sure this is an extreme example—but that day I was talking with someone, discussing his particular unit. I was a lieutenant at the time and he was a colonel, and I heard him say to another lieutenant, "I want to just invite you to guess how many officers of a certain rank we have in our unit." He said, "I will tell you right now, we have 15 privates, 3 corporals, 1 general, and how many colonels do you think we

have?" The other fellow said, "How many?"

He said, "A hundred and fifty."

Mr. President, 150 colonels in that one unit, with 15 privates. They did not have enough privates to carry the baggage around for the colonels. The whole thing was a fiasco.

But that is sort of in line with all these headquarters they have over there in Europe. You cannot blame them; it is nice and cool in the summertime, the climate is very pleasant. It might be a little unpleasant during the month of December, but they might find some reason to go down and visit their friends at Naples or Ischia during that period of time, where they have some villas on Capri and that sort of thing.

I think the Senator is right about being overstaffed in Europe; there is just no doubt about that.

Mr. HUMPHREY (laughing). Fifteen privates and 150 colonels?

Mr. STENNIS. Mr. President, will the Senator from South Carolina yield me some time?

Mr. THURMOND. How much does the Senator want?

Mr. STENNIS. Make it 5 minutes.

Mr. President, this is a matter that, so far as this bill is concerned, I have only gotten familiar with in the last 3 or 4 days. But I want to say this: I think the committee has done an excellent job in getting into this numbers business, the numerical armed strength and the required reduction, here, of 156,000 men, which, if carried out, will afford a saving of approximately $1.6 billion.

Now, if the Senate can get that written into law, that is a full day's work. In fact, it is a full year's work.

I believe that this amendment, with all deference here, will encumber this reduction picture as it goes into conference. I believe the committee, in its judgment, picked a figure and then picked a method, the best method, of making the reductions and put the responsibility directly on the head of the DOD. This will be mandatory if it becomes law. I think it is a wholesome step forward, but it is a severe cut to start with, severe for 1 year under any circumstances, in view of the other adoption.

I think it is severe enough that 4 or 5 months of this fiscal year will have passed before the bill becomes law, leaving a very short time to make the reduction of the 156,000 men. That is a matter of judgment.

I am familiar enough with the general problem to speak in terms of a warning: Do not go too far on this thing. Put the responsibility on the Secretary. This report does that. But do not write it into hard law and thereby give them an excuse for not being able to comply with all of it without seriously disrupting some of the essential units.

As to action that will go a long way towards taking care of the headquarters problem, and it is a problem—there is no doubt about it—we cannot just be careless with the skill and talent that we have left in the services. We may have a few too many of these officers but sometimes we have to have too many to have enough, should something happen.

So I think that the committee has done an excellent job. I deserve no credit for it whatsoever, of course. I do have the subject on my mind, enough that through the chief of staff of the committee I put on the committee staff an unusually competent man in this field of personnel. This 156,000 is partly a result of his quick work—he has been there only a few months.

Again, this is the most difficult subject to be found in all the military picture—that of personnel. It is the most difficult to deal with. Former Senator Russell put me on a subcommittee 15 or 16 years ago to take a look at the general officers, and we made a recommendation that put a ceiling on them, lower than the law required at that time. That shows the surveillance we were exercising then. We stuck to it and did not let them go beyond that ceiling except with special justification.

But when we got into the war, sending forth our men into battle to die every day, I relaxed that formula for my part. Now, except for the Navy, that lowered ceiling of the committee is not applicable anymore.

So, again, with all good faith here, I warn that this amendment will smear up. I am afraid, a very fine provision that is already in the bill.

It will not save one dollar. It will not reduce the total number of men that we will eliminate by as much as one. So, I think we had better leave it—and I have no personal interest in this—I think that we had better leave a mighty good job, well done, alone. Then wait. If they do not do something reasonable about this whole matter, including the problem the Senator has brought up in his amendment, then we will have time to act. Here, we are setting forth, with this 156,000, on as big a job amendment as can be done safely within the 8 months that will be left.

Several Senators addressed the Chair.

Mr. HUMPHREY. Mr. President, I wanted to ask the distinguished Senator, what way do we have to get assurance that the point the Senator from Wisconsin is seeking to achieve will really take place?

May I say most respectfully that I have even watched the President trying to reduce officers in our legations, embassies, and military missions, with very little success. I am torn by the principle which the Senator from Virginia has so ably enunciated and, regrettably, the facts that face us in terms of our many overseas missions.

If there were some way that we could reconcile the differences where, after a period of time, let us say six months, the Secretary of Defense could demonstrate to Congress that he had made the reductions, then I think we might be on some safe ground.

So I ask the Senator, I wonder in what way we could be assured that the Secretary of Defense, if the principle of the Senator from Virginia is carried out, namely, to leave the overall cut of 156,000 in, with the committee report backing it up, what assurance do we have that the Secretary of Defense will achieve the goals of the report as outlined more specifically in the amendment of the Senator from Wisconsin?

Mr. STENNIS. Let me be brief—I do not wish to take more time of the Senate—but answering the Senator's question, page 20 of the bill states in part:

> The Secretary of Defense shall report to the Congress within 60 days after the date of enactment of this Act on the manner in which this reduction is to be apportioned among the military departments and among the mission categories described in the Military Manpower Requirements Report. This report shall include the rationale for each reduction.

So, the mandate is there. Whoever prepared the bill on this subject knew what he was trying to do. He knew that ways out which our friend has so eloquently called our attention to, that is, the Senator from Louisiana (Mr. LONG), and has closed that door, as I see it. Then, of course, we have the report now, recommending to the committee and to the Senate that if it stands, that the named headquarters be considered.

So, I warn against rushing, against any rash action. We filled up a lot of the officers who are holding the nonprimary military positions ourselves—Congress did. I was here right after World War II, and the idea was then that we had to have someone who was well versed in these matters, and we fell back on these men. They liked it. They liked it and they still like it. This mandate will do more good than anything we can write in the form of law.

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

Mr. STENNIS. I yield.

Mr. SYMINGTON. Everyone knows the great respect in this body that the able Senator from Mississippi enjoys. No one in the Senate has more knowledge of the military, probably no one as much knowledge as he. I was much impressed with what the Senator from Louisiana (Mr. LONG), in his somewhat humorous but nevertheless very effective fashion, pointed out about certain aspects of our troops abroad.

I heard the distinguished Senator from Mississippi the other day on his Face the Nation show and he did his usually superb job. At that time, as I remember it, he felt that the 156,000 personnel reduction situation should be taken in three bites—that is, taken over 3 years and not next year. That was the only part of the program where I disagreed with my chairman.

I feel, after careful study, that it can be taken care of now if done right. That is one of the reasons, because of the telecast—in which the chairman stated he thought the reduction was a little strong, and that perhaps we should do it in 3 years instead of 1. So I thought we could get something out of this amendment. I thought the Proxmire amendment, putting into law the suggestions of the committee, sounded pretty good to me. I think it is sound, his modified amendment.

We started out with a recommended reduction of 156,000. If we divide that into 3 years, we get some 50,000. When it come to straight legislation, especially considering illustrations the able senior

Senator from Louisiana gave—and I spent a few years myself in the Pentagon, I would like to see 5,500 actually legislated the way things are going; in the law, not just a Senate recommendation.

Mr. STENNIS. I thank the Senator. We are close together. I stand on 156,000 this year. That is the committee judgment. If it had been left up to me, I would have considered stretching it out over more than 8 months. I do not know just how far. It is a question of judgment.

Mr. SYMINGTON. The chairman is very gracious. I am impressed with what he has said, and almost desire to withdraw my observation. But I did believe he wanted the 3 years; and I know from experience his capacity to influence this body on any subject, let alone the military. I also wanted however, to make my position clear.

Mr. TOWER. Mr. President, I point out that a great deal of consolidation and reduction in force already has taken place in our command structures in Europe. The Air Force has set a particularly good example in this connection. It has consolidated quite a number of its activities.

I know, too, that the command of the U.S. Air Force-Europe moved out of Wiesbaden, which is the old spa of the Kaisers, a great resort town, and moved to Ramstein, which could hardly be considered a garden spot, for the sake of consolidation and reduction in force and to save money. They combined with the Fourth Allied Tactical Air Force Command there, which is a NATO operation. They are now on the runway, in the grease, with the jocks who are actually flying the airplanes.

This is an example of what has been going on and is going on; and I think it would be inadvisable for us to adopt this meat-ax approach even though we make some specific recommendations in the committee report.

Mr. THURMOND. Mr. President, following up on what the distinguished Senator from Mississippi has said about the recommendation here, I invite the attention of the Senate to this, also: The Defense Department has to make this report. They have to keep the Committee on Armed Services informed.

This report shall include the numbers by rank by which each headquarters was reduced. It should also show the precise reductions in the officer force structure achieved and planned to be achieved during the fiscal year, inasmuch as it is the committee's intention that the positions abolished or reduced shall not be laterally transferred elsewhere in the Defense Department.

Mr. President, the Defense Department is on the spot in this matter. They have to take action. But the question is whether we are going to tie their hands to this place and to that place or are going to give them the flexibility to work it out in a practical way, as the distinguished Senator from Mississippi has said should be done.

Mr. PROXMIRE. Mr. President, a great deal of reliance has been placed by the opponents of this amendment on the fact that the Pentagon will be required to report in 60 days on action they have taken in the 156,000 reduction. What happens when the Pentagon makes their report and they have not reduced these headquarters? We have lost another year.

What is the difference between mandating by law a reduction of 156,000 and then also mandating by law a reduction of 5,500 in the headquarters staffs at various levels around the world which the committee has documented are overstaffed? That is all I am asking for.

The distinguished Senator from Virginia has properly pointed out that this is not an economy amendment. It will not save a dollar. That is not what I am interested in. I am interested in combat readiness. If we are going to get a reduction of 156,000 men, we ought at least to have a reduction of 5,500 in staff at these overseas headquarters. That is what this amendment requires.

This is not the proposal of a Senator who is not on the Armed Services Committee. This is the committee recommendation. It is a matter of whether or not the Senate feels that this recommendation is sufficiently significant to make it a law.

We know that since the end of the Vietnam war, we have had a very massive reduction in military manpower, a tremendous reduction in our combat forces—a reduction from 3.6 million all the way down to approximately 2.2 million. But how much of a reduction has there been in the staff headquarters?

As the Senator from Louisiana pointed out so well, the fact is that those are the attractive jobs, those are the jobs that the generals and the admirals like, and they take their staffs with them when they go there.

Unless we make this a matter of law, that 156,000 rdeuction is not going to be reflected proportionately in those nice, attractive jobs around the world which the generals and the admirals want.

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

Mr. PROXMIRE. I yield.

Mr. LONG. When I was on the Armed Services Committee, which was a long time ago—about 20 years—it was my privilege to go over there and take a look at that situation. They were overstaffed at that time, and we so reported.

Everybody who has looked at the situation for 20 years has been reporting it. How long do we have to report that these people are overstaffed ?

One reason for the situation is to keep billets for more colonels, more generals, more admirals, more Navy captains, more of the top ranking officers. By letting them be overstaffed in these headquarters, they can justify more top brass than they have any use for.

We have been recommending for 20 years that they be cut back, and very little has been done.

Mr. PROXMIRE. That is exactly what my amendment attempts to do.

Mr. President, the Senator from Georgia has raised a proper point and one we ought to consider—whether we should go into this detail in legislating on this kind of bill or should leave it to the discretion of the Pentagon, whether their judgment might be better.

The fact is that we do legislate ceilings and numbers on weapons systems to defend this country that are enormously important, a matter of high technical judgment. We take the responsibility. We bite the bullet. Certainly, if we are going to do that, we ought to have the wisdom to be able to legislate on the size of these staffs overseas, after having a documented report submitted to us. That is all this amendment proposes.

Mr. THURMOND. Mr. President, I yield back the remainder of my time.

Mr. PROXMIRE. I yield back the remainder of my time.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Wisconsin. On this question the yeas and nays have been ordered, and the clerk will call the roll.

The legislative clerk called the roll.

Mr. ROBERT C. BYRD. I announce that the Senator from Texas (Mr. BENTSEN), the Senator from North Dakota (Mr. BURDICK), the Senator from Florida (Mr. CHILES), the Senator from Mississippi (Mr. EASTLAND), the Senator from Michigan (Mr. HART), the Senator from Colorado (Mr. HASKELL), the Senator from Kentucky (Mr. HUDDLESTON), the Senator from Massachusetts (Mr. KENNEDY), the Senator from Utah (Mr. Moss), the Senator from Iowa (Mr. HUGHES), and the Senator from Connecticut (Mr. RIBICOFF) are necessarily absent.

I further announce that, if present and voting, the Senator from Connecticut (Mr. RIBICOFF) would vote "yea."

Mr. GRIFFIN. I announce that the Senator from Oklahoma (Mr. BARTLETT), the Senator from Tennessee (Mr. BROCK), the Senator from New York (Mr. BUCKLEY), the Senators from Nebraska (Mr. CURTIS and Mr. HRUSKA), the Senator from Colorado (Mr. DOMINICK), the Senator from Florida (Mr. GURNEY), the Senator from Oregon (Mr. HATFIELD), the Senator from Maryland (Mr. MATHIAS), the Senator from Illinois (Mr. PERCY), the Senator from Ohio (Mr. SAXBE), and the Senator from Connecticut (Mr. WEICKER) are necessarily absent.

I further announce that the Senator from Utah (Mr. BENNETT), and the Senator from Ohio (Mr. TAFT) are absent on official business.

I also announce that the Senator from Oklahoma (Mr. BELLMON) and the Senator from Kansas (Mr. PEARSON) are absent because of illness.

On this vote, the Senator from Illinois (Mr. PERCY) is paired with the Senator from Connecticut (Mr. WEICKER). If present and voting, the Senator from Illinois would vote "yea" and the Senator from Connecticut would vote "nay."

On this vote, the Senator from Oregon (Mr. HATFIELD) is paired with the Senator from Nebraska (Mr. CURTIS). If present and voting, the Senator from Oregon would vote "yea" and the Senator from Nebraska would vote "nay."

I further announce that the Senator from New Hampshire (Mr. COTTON) is absent because of illness in his family.

The result was announced—yeas 31, nays 41, as follows:

[No. 409 Leg.]

YEAS—31

| | | |
|---|---|---|
| Abourezk | Gravel | Montoya |
| Bayh | Hartke | Nelson |
| Bible | Hathaway | Pell |
| Biden | Hollings | Proxmire |
| Byrd, Robert C. | Humphrey | Randolph |
| Case | Inouye | Roth |
| Church | Long | Stevenson |
| Clark | Mansfield | Symington |
| Cranston | McGovern | Williams |
| Eagleton | Metcalf | |
| Fulbright | Mondale | |

NAYS—41

| | | |
|---|---|---|
| Aiken | Goldwater | Packwood |
| Allen | Griffin | Pastore |
| Baker | Hansen | Schweiker |
| Beall | Helms | Scott, Pa. |
| Brooke | Jackson | Scott, Va. |
| Byrd, Harry F., Jr. | Javits | Sparkman |
| | Johnston | Stafford |
| Cannon | Magnuson | Stennis |
| Cook | McClellan | Stevens |
| Dole | McClure | Talmadge |
| Domenici | McGee | Thurmond |
| Ervin | McIntyre | Tower |
| Fannin | Muskie | Tunney |
| Fong | Nunn | Young |

NOT VOTING—28

| | | |
|---|---|---|
| Bartlett | Dominick | Mathias |
| Bellmon | Eastland | Moss |
| Bennett | Gurney | Pearson |
| Bentsen | Hart | Percy |
| Brock | Haskell | Ribicoff |
| Buckley | Hatfield | Saxbe |
| Burdick | Hruska | Taft |
| Chiles | Huddleston | Weicker |
| Cotton | Hughes | |
| Curtis | Kennedy | |

So Mr. PROXMIRE's amendment was rejected.

Mr. THURMOND. Mr. President, I move to reconsider the vote by which the amendment was rejected.

Mr. TOWER. Mr. President, I move to lay that motion on the table.

The motion to lay on the table was agreed to.

The PRESIDING OFFICER. The question now is on amendment No. 513.

Mr. PROXMIRE. Mr. President, I ask unanimous consent that the order for the yeas and nays be withdrawn.

The PRESIDING OFFICER. The yeas and nays were never ordered.

Mr. PROXMIRE. I thought they were ordered. I beg the Chair's pardon.

The PRESIDING OFFICER. The question is on agreeing to the amendment (putting the question).

The amendment was rejected.

Mr. HUMPHREY. Mr. President, I call up my amendment, which is at the desk. May I say, for the information of the Senate, that I shall not be seeking a rollcall vote on this amendment. I have talked with both the manager of the bill and the ranking minority Member.

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

Mr. HUMPHREY. I yield.

Mr. MANSFIELD. That, of course, is not insurance that there will not be a rollcall vote, because while I would agree with the Senator from Minnesota, any Senator can ask for a rollcall vote, and on Saturday afternoon no one knows what is going to happen.

Mr. HUMPHREY. The leader is so right.

Mr. President, the amendment reads as follows:

CONSERVATION OF PETROLEUM RESOURCES BY THE DEPARTMENT OF DEFENSE

It is sense of the Congress that prompt and effective action must be taken by the Department of Defense to conserve important petroleum resources. The Secretary of Defense therefore is directed, consistent with readiness and training requirements, to institute conservation measures to eliminate all nonessential use of jet fuel, heating oil, diesel fuel, and other petroleum products. Not later than thirty days after the enactment of this Act the Secretary of Defense shall report to the Congress on the steps being taken by the Department of Defense to conserve petroleum resources and specifically jet fuel, heating oil, and diesel fuel. Such reports shall include the total volume of each type of petroleum product consumed in the United States and worldwide by the Department of Defense; the cost of such products; the volume of reserves maintained for use; reductions in use achieved or ordered; and a recommendation for the further reduction in use and proper allocation of such products.

Mr. HUMPHREY. The whole purpose of the amendment, since the Department of Defense is the largest user of what we call fuel oil, and in light of the fact that we are facing a serious, critical fuel oil shortage, particularly in the Northeastern part of the country, as well as in the upper Midwest and other parts, is merely to instruct the Secretary of Defense to take measures which will conserve fuel oil and jet fuel, and report to Congress promptly—indeed, within 30 days—the measures that have been taken for the conservation of this resource.

Mr. JAVITS. Mr. President, will the Senator from Minnesota yield?

Mr. HUMPHREY. I yield.

Mr. JAVITS. Mr. President, I believe this is a splendid amendment. I hope that the Senator from Minnesota will tack it on to every departmental bill we have before us to which it can properly, under the procedure, be attached. This is the way in which to make a contribution to correcting the energy crisis. I congratulate the Senator for offering the amendment.

Mr. HUMPHREY. I thank the Senator from New York.

Mr. THURMOND. Mr. President, the amendment appears to have considerable merit. We will accept it on this side.

Mr. RANDOLPH. Mr. President, will the Senator from Minnesota yield?

Mr. HUMPHREY. I yield.

Mr. RANDOLPH. I wish to ask a question of the able Senator from Minnesota. I, of course, have not had an opportunity to read the amendment. Perhaps it was read, and I did not hear it.

Mr. HUMPHREY. I was reading it as the Senator entered the Chamber.

Mr. RANDOLPH. I heard the Senator speak of jet fuel. Would the Senator clarify that statement for me?

Mr. HUMPHREY. Jet fuel is very similar to kerosene——

Mr. RANDOLPH. Yes, I understand that.

Mr. HUMPHREY. It is very similar to heating oil. All we say is, in effect, "Mr. Secretary, take whatever steps you can, consistent with the training and readiness of the Air Force, to conserve that fuel which the Department of Defense uses."

Mr. RANDOLPH. I [illegible] that. The reason I asked the question is not that I do not understand the ingredients which go into jet fuel. I use this occasion to say that on November 6, 1943, I flew in a plane from Morgantown, W. Va., to Washington National Airport. The plane was fueled with aviation gasoline processed from West Virginia coal. This was the first such flight of aircraft powered by gasoline made from coal.

I note that occasion to stress that, beginning in the 1940's, ve offered proposed legislation to use fully coal and oil shale, and these pilot projects were found to be successful under the research programs.

A few years later, the American people and Congress were lulled into a sense of false security, feeling that there was no possible crisis in the United States from the standpoint of fuels and energy. So the programs stopped. They ended.

Then, beginning a few years later, we came to a realization—at least an awareness—on the part of a greater number of people of the seriousness of the situation.

Not only is our fuels situation a crisis—I say to the Senator from Minnesota and the other Members of the Senate—it can become a chaotic condition, partially because it can affect the survival of the economic system which has been the strength of the country.

It is clear that the energy crisis is no illusion. It is a very real problem and it is going to be with us for a long time. To live with it, and eventually overcome it, will require total dedication of our people; cooperative and affirmative action at all levels of government; and a significant investment of money.

In the past, our Nation has been accustomed to a fuel abundance and the early signs of energy shortages which are now upon us were ignored. The basic fact is that our country's appetite for fuel is enormous. This demand has accelerated much faster than our ability to produce and secure the products necessary to energize this country. America, with only 6 percent of the world's population, consumes 33 percent of the world's energy and the demand is continuing to grow.

Our increasing energy requirements have been stated many, many times during recent months. Yet, I feel it is beneficial to reemphasize them, so that the energy crisis can be placed in proper perspective. It is startling to note that in 1960, our energy demands when converted to a common base in terms of oil or a so-called "oil equivalent" were 21 million barrels of oil per day. In 1970, this figure had reached 34 million barrels per day and is projected to increase to 48 million by 1980.

Even more revealing is the per capita energy demand in oil equivalent. In 1960, it was 44 barrels per person per year; in 1970, it was 60 barrels; and for 1980, according to current estimates it will be 77 barrels of oil per person per year.

In the particularly critical area of refined products, where fuel shortages have been dramatized, America's requirements in 1960 were 10 million barrels per day. By 1970 this figure had increased to 15. Estimates for 1975 and 1980 show increases to 20 and then 23 million barrels of oil.

Since our discussion focused earlier on jet fuel, I believe it is important to stress the fantastic increases in consumption in this area. Usage of jet fuel in 1960 was 34,000 barrels per day. By 1972, this usage had jumped to 195,000 barrels per day, an increase of over 570 percent.

Mr. President, today 96 percent of our total energy comes from traditional fossil fuel sources of which petroleum is 43 percent; natural gas, 33 percent; coal 20 percent; and the remaining 4 percent is nuclear energy. The critical area of concern at the present time is for crude oil and refined products. Basic supplies for 25 percent of these liquid fuels are presently dependent on Middle East sources. This is expected to increase to 50 percent between 1980 and 1985. There are many pros and cons regarding this trend, but one element is certainly clear—it is not sufficient to just import crude oil. There must be the domestic refinery capacity to refine it into usable form. Our current problem stems from the fact that we do not have sufficient domestic refinery capacity to do the job that is needed.

In January of this year, our Nation was in a position of importing 2.5 million barrels a day of refined products. By 1975, we will have to increase this importation to 4.8 million barrels per day. One of the opportunities to alleviate this projected dependence on importation of refined products in addition to crude oil would be through conservation measures. The administration has belatedly advocated conservation practices in both private industry and Government, but their program falls far short of what is required for a comprehensive program. Thus, it is necessary for the Congress to take affirmative action to initiate conservation measures. The pending amendment is directed toward this vital objective.

I firmly believe that our Nation over the short term can achieve great savings in the use of fuel through a comprehensive energy conservation program. In the effort to conserve no facet of our society should be exempted. A recent report by the Office of Emergency Preparedness suggests that for the entire U.S. economy projected demand for 1980 could be reduced by one-sixth—equal to 7.3 million barrels of oil per day—through adherence to a comprehensive conservation program.

It is obvious, Mr. President, that solutions to the energy crisis must be a priority issue and that positive Federal initiatives in energy conservation and development of new and necessary energy technologies must be stressed. Our Senate national fuels and energy policy study, on which I have the responsibility of serving, has developed a comprehensive energy conservation measure which has been ordered reported by the Interior Committee. Additionally, I call attention to my amendment to the Fuels Allocation Act, adopted by the Senate, calling upon the States to reduce speed limits on interstate highways by 10 miles per hour in order to conserve gasoline. The response to this proposal by the Governors of the States has been encouraging.

Finally, Mr. President, I would recall that on January 16, in Senate remarks, I enunciated 26 proposals for consideration in the development of a national fuels and energy policy. This was an attempt to provide a framework for evaluation of their relative merits as essential elements of national policy.

Included in my proposals were steps to foster energy conservation practices nationally. I noted that we should:

Upgrade the 1971 FHA home insulation standard.

Establish Federal guidelines for the incorporation of energy conservation practices in new buildings—mandatory for new Federal and federally insured buildings and homes. The Senate Public Works Subcommittee on Buildings and Grounds will study this aspect in detail this year.

Establish a national program of consumer education to foster more efficient use of energy in our daily lives.

Develop and publish Federal guidelines for the labeling of electrical equipment to reflect efficiency of energy utilization.

Initiate comprehensive national review of the potential for energy conservation within the transportation sector of our economy, hopefully, to lead to the adoption of Federal policies for fostering energy conservation in this end use.

It is important, in my judgment, that we constantly stress the fuels and energy crisis confronting our country and review the solutions being proposed. A constant discussion of these issues is necessary if we are to cope with this critical problem.

I congratulate the Senator from Minnesota for offering the amendment. I believe it is an excellent amendment. I join with the Senator from New York (Mr. JAVITS) in saying that it is an amendment which, perhaps, could well be included in other legislative measures.

If, in the opinion of my friend, the Senator from Minnesota, it would be appropriate to include other names as cosponsors, I should like to be one of those included.

Mr. JAVITS. Mr. President, will the Senator from Minnesota also add my name as a cosponsor?

Mr. HUMPHREY. Mr. President, I ask unanimous consent that the names of the distinguished Senator from West Virginia (Mr. RANDOLPH) and the distinguished Senator from New York (Mr. JAVITS) be added as cosponsors of my amendment.

I congratulate the Senator from West Virginia for his leadership in the matter of energy resources.

I point out that this amendment is in part a result of the work of the subcommittee of the Joint Economic Committee on which the Senator from New York serves.

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

Mr. HUMPHREY. Mr. President, I ask unanimous consent to have printed in the RECORD an editorial from the Washington Post of this morning entitled "Rationing Fuel Oil," an article relating to propane gas, and a letter which I have addressed to the President of the United States calling for an immediate mandatory allocation program for home heating and fuel oil, and for propane gas.

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

SEPTEMBER 22, 1973.

The PRESIDENT,
*The White House,*
*Washington, D.C.*

DEAR MR. PRESIDENT: I urge you to institute immediately a mandatory allocation program for home heating and fuel oil, and for propane gas.

As Chairman of the Senate Consumer Economics Subcommittee, I have urged this action since last May.

Our subcommittee has received testimony, in hearings last May and June, and again this week, from Governors, local government and school officials, representatives of consumer groups, fuel producers, distributors and retailers, scientific experts, economists and top officials of the Administration.

The overwhelming opinion expressed at our hearings, as well as at those of other committees, is that mandatory allocation of propane, home heating oil and diesel oil is urgently needed to avoid severe hardships for many people under the best conditions this winter, and possible disaster under bad conditions.

I introduced legislation to require a mandatory allocation system, S.J. Res. 98, on April 18, 1973.

The Congress enacted authority for you to institute such a system in the Economic Stabilization Act approved on April 30, 1973. With my support, the Senate overwhelmingly adopted Jackson's bill, S. 1570, the Emergency Fuels and Energy Allocation Act, by 80 to 10 on June 5, 1973, to require the establishment of mandatory allocation.

September is now upon us. The heating season already is beginning in large parts of the United States. Yet fuel users still cannot get firm contracts from suppliers. Some persons in possession of supplies are hoarding them in hopes of higher future prices, and black marketing is breaking out in the desperate scramble to get fuel.

The need for mandatory supply allocation is made unambiguously clear and compelling, moreover, by recent forecasts for the coming winter by congressional committees and executive agencies, as well as by private sources. These forecasts are unanimous in concluding that the fuel outlook is perilous and could become very critical if fortune is not consistently on our side.

There is more than a 50 percent chance that events of this winter will bring on serious shortages of at least regional magnitude. There is a very significant risk of shortages of national scope. Without mandatory supply allocation, these shortages could quickly hobble the United States economy, disrupt essential public institutions such as education, and cause widespread hardship for homeowners who heat with oil. Economic disruption would tend to spread both inside and outside the areas immediately affected by lack of fuel.

Moreover, we are firmly of the view that the allocation system adopted should assume that normal supplies are channeled through independent fuel dealers whose continued services are vital for efficient distribution.

Each day's delay increases the chances of unnecessary hardship for many people. Mr. President, it is essential that you act now, either under your existing authority in the Economic Stabilization Act, or through urging immediate approval by the House of Representatives of the Senate passed bill, S. 1570.

Sincerely,

HUBERT H. HUMPHREY.

ALLOCATION OF PROPANE IS PLANNED

The White House plans to allocate propane and ban industrial switching to other scarce fuels, an informed source says.

There are strong hints that mandatory allocation may soon follow for home heating oil and diesel fuel.

Of the three fuel-allocation plans proposed in August by John A. Love, director of the Energy Policy Office, two have already been endorsed, the source said, and Love made it clear that prospects for the third—allocation of heating oil and other fuels—are increasing daily.

Love revealed Wednesday, in a news conference remark, his decision to ask the President to impose a mandatory wholesale distribution system, or "allocation," on propane.

The proclamation is expected within a matter of days.

This source also revealed another decision: to proceed with the administration's fuel-switching proposal, aimed at preventing power plants and other industries from abandoning abundant, high-sulfur fuels with environmental problems for scarce, low-sulfur fuels that carry lower clean-up costs.

A proclamation on this plan, too, was expected within days.

There was less certainty about the general fuel-allocation proposal, but the uncertainty seemed to center on which fuels must be allocated.

The fuel-allocation proposal would require suppliers to distribute petroleum fuels to their customers in the same proportion as they did in the past, after setting aside 10 per cent for assignment by the states to priority uses.

Top priority in fuel distribution would go to food production and processing, followed by operations of the fuel industry.

The priorities would then descend through health and sanitation, police, firefighting and emergency services, public transportation, freight transportation, public utilities and telecommunications.

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RATIONING FUEL OIL

President Nixon's fuel oil policy, at the moment, amounts to little more than a fervent hope for a warm winter. But in Congress and throughout Mr. Nixon's administration, there is now a widening consensus that drastic measures are going to be necessary to cut down the rate at which the country burns oil during the coming months. The President himself has been talking entirely in terms of large plans to expand fuel supplies in the latter 1970s. But those large plans will not help the country this winter. For this winter, it is increasingly clear that we are going to have to have a federal program of enforced fuel allocation. That means, in one sense or another rationing.

Two studies published this week set out the dimensions of the coming shortages. One was drafted by the Interior Department for the White House, the other by the Joint Economic Committee's staff for Sen. Hubert H. Humphrey (D-Minn.). Both emphasize the unpleasant truth that the scale of these shortages now depends entirely upon circumstances that the government cannot control. The weather is one imponderable. Another is the willingness of other countries to export fuel oil to us. The Interior Department says that, with normal weather, the country will need to import 650,000 barrels a day of refined fuel oil throughout the winter. But the department finds only about 550,000 barrels is likely to be available. There will be even less if the winter in Europe is cold or if the Arab countries curtail shipments.

The immediate trouble is not a lack of crude oil, but of the refined product that we use for heating and diesel fuel. Demand for oil products in this country has now far outgrown the capacity of the American refineries. That is why we are currently dependent on other countries' refineries, particularly the European'. But Europe is now bitterly accusing the United States of aggravating their very serious inflation by bidding up the price of their oil. Last year we imported fuel from western Europe at the rate of 13,000 barrels a day. In the first three months of this year we were importing it at a rate of 168,000 barrels a day. The more we buy, the higher the price goes and the more likely that the Common Market will impose export restrictions to protect its own consumers. Both Canada and Belgium are already restricting exports of refined products to the United States, and there have been warnings that other exporting countries are prepared to do the same.

Europe is, in turn, heavily dependent on crude oil from the American-owned wells that the Libyan government has now confiscated. There is a prospect of a long legal struggle in which the American companies attempt to prevent Libya from selling the oil. Two companies, Texaco and Standard of California, have now gone into the Italian courts to recover shipments that, they claim, were shipped from their properties to refineries in Sardinia. If there is a serious disruption in the flow of this crude oil from Africa to Europe, aggravating the shortages in Europe, European restrictions on fuel oil exports will become probable to the point of certainty.

That is why this country urgently needs a mandatory system to allocate fuel oil. It would obviously be wiser to impose allocations immediately, rather than waiting for cold weather and the arrival of actual hardship. Whether President Nixon is prepared to move fast enough and strongly enough is, unfortunately, open to doubt. All of his comments over the past month have indicated a fundamental failure to grasp the dimensions of the emergency that looms before us. But many of the men around him, within his administration, perceive it fully. The only real question is whether the administration proceeds with mandatory allocation before Congress enacts the bill drafted by Sen. Henry M. Jackson (D-Wash.) to force it.

The Jackson bill, passed by the Senate and now in the House, would do a great deal more than merely ensure supplies to independent dealers. It would enforce rationing at the wholesale level. It would also establish an order of priorities, with home heating and farming at the top. But, to work effectively, any allocation system is going to have to be accompanied by conservation. We are going to have to cut back the amount of oil that we are accustomed to burn to heat our buildings. Americans saved themselves from a major gasoline shortage last summer by voluntary conservation. If they turn down their thermostats this fall, perhaps they can spare themselves the endless headaches of formal rationing to consumers. It is an open question whether voluntary cooperation will be enough, and the answer probably depends on the severity of the weather.

But it would be highly dangerous to assume that we are dealing merely with a short-term crisis that is going to be resolved, one way or another, over the next few months. The necessity to restrict fuel consumption in this country is going to be with us for some years to come. John A. Love, the President's adviser on energy, recently noted that no new American refineries would come into production this year or next. He put the case accurately when he recently said, ". . . pushing as hard as we can for increased domestic production, increased imports, and a crash program of research and development, the very real possibility—almost a certainty—is that the only near term solution is to dampen the increase in demand." The Joint Economic Committee's staff study adds a well-founded warning: ". . . the public must recognize that fuel shortages will tend to get progressively worse for a number of years, and that conservation of oil, gas and electricity in all uses is the order of the future."

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Minnesota (putting the question).

The amendment was agreed to.

Mr. HUMPHREY. Mr. President, I send to the desk an amendment and ask for its immediate consideration.

The PRESIDING OFFICER. The clerk will report the amendment.

The legislative clerk proceeded to state the amendment.

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

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

The amendment is as follows:

At the appropriate place in the bill, insert the following new section, and renumber the following sections accordingly:

"SEC. —. In accordance with the provisions of Senate Resolution 324 (87th Congress, 2nd Session), expressing the willingness of the Senate to cooperate in a nationwide competitive high school Senate youth program and directing the Senate Committee on Rules and Administration to make the necessary arrangements to establish the program, the Secretary of Defense is hereby authorized and directed to provide such escort, briefing, musical organization and color guard, and other supportive services and courtesies as may be requested and appropriate, and without additional expense to the Federal Government, during a one week period in the annual operation of this program in Washington, D.C."

Mr. HUMPHREY. Mr. President, this amendment requires no additional authorization of funds. It simply clarifies the intent of the Senate, in the passage of Senate Resolution 324 (87th Congress, second session) relating to the establishment of the U.S. Senate youth program, that certain supportive services and courtesies be provided to assure the safety of high school delegates participating in this program during a 1-week period each year in Washington, D.C., and to make this a significant and educational experience for these young people.

During the 11-year operation of the U.S. Senate youth program, the Department of Defense has traditionally been requested to designate personnel as escort officers for these young people, and to provide for a departmental briefing as well as separate meetings with departmental officials. In addition, the Department has been asked to arrange for program presentations by the several musical organizations of the armed services, and for ceremonies for the presentation and retirement of the colors.

The Department, through the Office of the Assistant Secretary of Defense for Public Affairs, has cooperated fully in meeting these requests, recognizing the status of this program as approved and supported by the Senate, as well as the importance of enabling youth to gain further insights into our national security policies.

However, increasing demands have been made on the Department of Defense in recent years in meeting requests by other groups for similar services. Such requests are entirely appropriate, but it is now necessary and advisable to provide the Department with explicit authoriza-

tion to meet such requests for the U.S. Senate youth program.

My amendment will provide the Department of Defense with a clear directive for the provision of appropriate services for the Senate youth program, and without additional expense to the Federal Government. I believe this statutory requirement will be of assistance to the Department and will help to assure the continued high standards of the Senate youth program for the safety and conduct of high school delegates, as well as continuing to make this program a major educational experience in the lives of these young people.

Mr. TOWER. Mr. President, the Senator from Minnesota discussed this with the Senator from South Carolina and me. We are prepared to accept the amendment.

Mr. HUMPHREY. Mr. President, I thank the Senators. Most of the Members of this body have served at one time or another as sponsors of the youth program.

Mr. THURMOND. Mr. President, nothing is more important to our country than youth. This amendment is calculated to take care of youth.

Mr. HUMPHREY. The Senator is correct.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Minnesota (putting the question).

The amendment was agreed to.

QUORUM CALL

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

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

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

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

Mr. CRANSTON. Mr. President, I call up amendment No. 527.

The PRESIDING OFFICER. The clerk will report the amendment.

The legislative clerk proceeded to state the amendment.

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

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

The amendment is as follows:

At the approopriate place in the bill insert a new section as follows:

SEC.—. (a) The Secretary of Defense shall take such action as may be necessary to reduce, by not less than 40 per centum, the number of military forces of the United States assigned to duty in foreign countries on March 1, 1973. Such reduction shall be completed not later than June 30, 1976; and not less than one-fourth of the total reduction required to be made shall be completed prior to July 1, 1974, and not less than one-half of such total reduction shall be completed prior to July 1, 1975.

(b) Notwithstanding any other provision of law, no funds may be expended on or after July 1, 1974, to support or maintain military forces of the United States assigned to duty in foreign countries if the number of such forces so assigned to such duty on or after such date exceeds a number equal to the number of such forces assigned to such duty on March 1, 1973, reduced by such number as necessary to comply with the provisions of subsection (a) of this section.

(c) As used in this section, the term "military forces of the United States" shall not include personnel assigned to duty aboard naval vessels of the United States.

Mr. CRANSTON. Mr. President, this is a measure designed to cut back on the level of land-based U.S. troops stationed on foreign soil, beginning this year and continuing in fiscal year 1975 and fiscal year 1976.

The cuts would be worldwide. Total discretion would be given to the President as to where to cut.

Naval personnel assigned to the fleets are excluded from the cuts, even if they are homeported overseas.

Mr. President, I will state the main arguments for doing this.

First. The total direct and indirect cost of maintaining overseas troops—including backup, logistics, et cetera is roughly $30 billion a year. The balance-of-payments cost is roughly $4.9 billion a year, eroding the dollar and contributing to inflation.

Second. There are roughly 475,000 nonfleet personnel stationed in foreign countries, only half of whom are in Europe. They man 1,963 bases in 34 countries. The Defense Department directly or indirectly employs 167,000 foreign nationals to support them.

In general, this pattern became established during the cold war, at a time when our allies were poor and relatively defenseless. Vast U.S. military and economic aid programs, plus general détente, makes deployment on such a massive scale obsolete. Purpose of overseas deployment was originally to permit allies to develop their own economy and defense under U.S. protection; deployment was never intended to be permanent.

Third. Cuts could be made in support forces rather than primarily in combat strength. U.S. tooth-to-tail ratio is heavily imbalanced. If necessary, allies could fulfill more support functions.

Fourth. Bases often cause political frictions and anti-American sentiment in host countries. The presence of U.S. troops favors military rather than diplomatic options whenever hostilities break out nearby.

Fifth. There is no threat in Asia that justifies maintaining, for example, 60,000 troops in Japan and Okinawa; 40,000 in Thailand; 40,000 in Korea; 15,000 in the Philippines; and 6,000 in Taiwan.

Sixth. Greater transport and mobile force capacity of U.S. forces permits rapid response to crisis. Forward-based deployment is unnecessary in many cases.

Seventh. The amendment is fully consistent with the manpower cut authorized by the Senate Armed Services Committee. But the amendment does not call for the automatic deactivation of all returning troops. Because of projected shortfalls in recruitment for the volunteer services, the question of deactivation is likely to take care of itself.

Eighth. President Nixon is correct in charging that Congress is presently running $6 billion above his $268.7 billion budget ceiling. Cuts are needed in the defense budget to protect funding for vital domestic programs neglected through the Vietnam years.

AMENDMENT NO. 538

Mr. MANSFIELD. Mr. President, I send to the desk an amendment to the amendment of the distinguished Senator from California.

The PRESIDING OFFICER. The amendment will be stated.

The legislative clerk read the amendment, in part, as follows:

In lieu of the language proposed to be inserted, insert the following:

SEC. . (a) The Secretary of Defense shall take such action as may be necessary to reduce, by not less than 50 per centum, the number of military forces of the United States assigned to duty in foreign countries on March 1, 1973. Such reduction shall be completed not later than June 30, 1976; and not less than one-fourth of the total reduction required to be made shall be completed prior to July 1, 1974, and not less than one-half of such total reduction shall be completed prior to July 1, 1975.

(b) Notwithstanding any other provision of law, no funds may be expended on or after July 1, 1974, to support or maintain military forces of the United States assigned to duty in foreign countries if the number of such forces so assigned to such duty on or after such date exceeds a number equal to the number of such forces assigned to such duty on March 1, 1973, reduced by such number as necessary to comply with the provisions of subsection (a) of this section.

Mr. MANSFIELD. Mr. President, I do not intend to discuss this amendment this afternoon, except to state that this is the amendment which seeks to bring about a reduction by half, over a 3-year period, of all the forces overseas. I shall have more to say on it Monday.

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

Mr. MANSFIELD. Yes. May I say before I yield that I read with interest the Javits-Harlech communique which was issued a few days ago relative to the retention of our troops in Europe. This applies to our troops overseas.

Mr. JAVITS. How kind of the Senator to have given it his attention. I just want to be sure that we all understand that this is what is generally called the Mansfield amendment, which I wish to emphasize because of its great importance.

Mr. CRANSTON. Mr. President, I would like to point out that the Mansfield amendment in its present form is substantially different from its earlier form. It does not mandate any cut in European troops; it applies to troops stationed all over the world.

Mr. MANSFIELD. Mr. President, there was a part of the amendment which was not read because I held it here. I wish the clerk would read it.

The legislative clerk read as follows:

(c) As used in this section, the term "military forces of the United States" shall not include personnel assigned to duty aboard naval vessels of the United States.

Mr. MANSFIELD. 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. HARRY F. BYRD, JR. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

## TIGHTENING THE BELT IN ILLINOIS

Mr. HARRY F. BYRD, JR. Mr. President, on September 19 the distinguished Governor of Illinois, Gov. Dan Walker, was awarded a citation here in Washington by the National Taxpayers Union. I was on the same program with him, and likewise received a citation from the National Taxpayers Union.

I was much impressed with Governor Walker. I know nothing about the politics of Illinois, but I was interested in his comments.

He stated that in his budget message he was able to ask for appropriations $617 million less than the appropriation requests of the year before. He stated also that he will provide the people of his State with $110 million in tax relief.

Both of those are certainly steps in the right direction. I ask unanimous consent that the text of Governor Walker's speech to the National Taxpayers Union be printed in the RECORD at this point.

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

REMARKS BY GOV. DAN WALKER

It's a privilege to be in the company of Ernest Fitzgerald and Senator Proxmire. You're the men who have made the phrase "cost-overrun" household words.

We in Illinois have cost overruns, too. We aren't building planes. But we do have government overruns.

And the letters I'm getting and the remarks of people I meet—especially in the smaller towns—show me that the word is getting through. People don't send tax dollars off to Springfield or Washington to line the pockets of the contractors. They want economy.

Some of you are businessmen. You know about economy. And you know that state government has a tradition of waste. There are careless spenders in both parties. Illinois has been no exception.

We're trying to change the tradition. In Illinois we're trying to run state government as if we had to turn a profit. In a few years, I want to be able to say that our data-processing systems are as efficient as those which private firms have been using for years. I want to tell you that our payrolls are lean. That we've eliminated the useless triplicate forms and four-color reports and middle-management paper shufflers which would make private business go under.

It's going to take time. We're changing what has been a way of life for public officials in Illinois.

It's a system where the chief executive was chauffered everywhere in limousines and had his picture hung on every wall.

It's a system where the political plus lay in bloating state payrolls with your political supporters so you could crack the whip for money or precinct work at election time.

It's a system which saw that contracts were written so they could go to big campaign contributors; which saw the pork-barrelling of election years. The Governor could travel around the state and win votes by handing out money for airports or roads. And it didn't matter if the airports weren't needed or if the roads would be untravelled.

For state departments in Illinois, there was the law of the annual increase—and a state budget which had tripled in the last four years from $2.4 to $7.6 billion.

I'm happy to say that we are making some changes. And I'm going to brag a little to you.

The state payroll is down by over 3,000 positions since I took office on January 8. And in the process, we've created effective departments with fewer layers of bureaucracy and more money for the good programs.

In my budget message I was able to ask for appropriations $617 million less than the appropriations request of the year before—the first such decrease in 23 years. And this week I amended a bill which will provide $110 million of tax relief for people.

We've instituted two techniques which those of you with management training will recognize as staples of good management:

Management by objective. We are forcing the agencies and departments in the executive branch to formulate goals in writing for each of their programs—and to include ways to measure whether they are being reached.

Zero-base budgeting. Each year, every program in state government will be thoroughly reviewed and ranked in order of priority for funding.

For too long government has hired managers and put them under no pressure to find ways to measure whether they are reaching their goals. Some don't even know what goals to shoot for. This will not be the case in Illinois.

We're making some other changes, too. We're going into the business world and recruiting some of the most capable, top-ranking executives to serve in volunteer task forces.

One such task force, working with the Department of Public Aid, found a simple and effective way to determine the ineligible recipients of public aid. They will save the state about $10 million this year alone.

Last month we auctioned off the last of the limousines owned by the Governor's Office. I'm using a Chevy and it's a pretty good car. It gets me where I want to go and it's cheap. This is a symbolic change. But it's a symbol of some very real and far-reaching changes going on in every agency and department in the executive branch. They are changes which don't make headlines. But they are changes which will make a difference—not only to every taxpayer but to every citizen served by state government in Illinois.

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## DEPARTMENT OF DEFENSE APPROPRIATION AUTHORIZATION ACT, 1974

The Senate continued with the consideration of the bill (H.R. 9286) to authorize appropriations during the fiscal year 1974 for procurement of aircraft, missiles, naval vessels, tracked combat vehicles, torpedoes, and other weapons, and research, development, test and evaluation, for the Armed Forces, and to prescribe the authorized personnel strength for each active duty component and of the Selected Reserve of each reserve component of the Armed Forces, and the military training student loads, and for other purposes.

THE TRIDENT SUBMARINE PROGRAM

Mr. TUNNEY. Mr. President, in the next week we will be debating the question of funding the Trident submarine and missile program. This issue has generated a tremendous amount of interest in the press, the Congress, and the executive branch. We all need to have as much information as we can in order to make a wise judgment on the merits of this program, and the present speeded-up schedule on which it is proceeding.

I am very pleased to see that the Members of Congress for Peace Through Law has issued a research report on the Trident submarine program. This report was very ably prepared by my colleague, the Senator from South Dakota (Mr. ABOUREZK). This report contains a great deal of useful information, and succinctly sets forth the choices before the Senate with respect to this program. I hope this report will be helpful to my colleagues during the next week.

Mr. President, I request unanimous consent for the printing of the MCPL research report.

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

REPORT ON THE TRIDENT SUBMARINE PROGRAM

(A research paper prepared by Senator JAMES ABOUREZK for consideration by the Military Spending, Arms Control and Disarmament Committee; Congressman LES ASPIN, chairman; Senator EDWARD W. BROOKE, vice-chairman of Members of Congress for Peace through Law)

SUMMARY AND CONCLUSIONS

Since the initial proposal for a Trident submarine and missile system, two prior MCPL reports have supported the program as a replacement for the U.S. Polaris/Poseidon sea-based deterrent force.* A "blue-water" deterrent provides the highest confidence of survivability of any strategic offensive weapons system.

In the interim, however, the Department of Defense has drastically accelerated the hull program, delayed the development of the Trident I missile, and by-passed the quicker and more cost-effective option of installing this missile in existing ballistic missile submarine hulls. These alterations in the program have been hypothecated on a possible sudden Soviet breakthrough in anti-submarine warfare (ASW) technology and on inflated estimates of the growth of the Soviet submarine forces.

The foregoing rationale, based as it is on remote contingencies and non-existent build-ups, is not a convincing argument for an accelerated Trident program. It is further undermined by the Defense Department's own decision to forego the original plan to fit the Trident I missile in present hulls at an earlier date than it is possible to fit the Trident I missile in the new Trident hulls when they are completed.

The various justifications for accelerating Trident and the factors bearing on its development are analyzed in subsequent portions of this study. From this analysis, it is concluded that, while desirable as an eventual replacement for the Polaris/Poseidon fleet, there presently exists no compelling reason to commit substantial resources to production of this system before the early 1980s. There is, however, adequate justification for taking the precautionary measure of an interim upgrade of the existing sea-based deterrent through the installation of the Trident I missile in hulls now available.

These conclusions rest on the following findings:

1. There is no immediate or near-term need for a Trident as a hedge against an extremely remote possibility of a Soviet ASW breakthrough.

2. The Trident II missile is not now needed to counter Soviet ABMs, in light of the treaty limiting ballistic missile defenses in the Soviet Union and the United States.

3. The expansion of the Soviet ballistic missile submarine force presents no threat to the U.S. counterpart and is thus irrelevant to the need for Trident. The Soviet attack submarine force, while also increasing at a less-than-expected rate, remains substantially smaller than its U.S. equivalent. It is subject to long-standing constraints on ASW technology and presents no

* Cf. MCPL Research Reports on ULMS which appeared in the *Congressional Record*, vol. 118, pt. 9, p. 11908.

meaningful threat to the U.S. ballistic missile submarines.

4. The existing Polaris/Poseidon force will remain a highly survivable sea-based deterrent well into the 1980s, capable of delivering over 5,000 nuclear warheads in the 50 kiloton range on any adversary; the first replacements for existing submarines will not be required before the 1985–1990 time frame.

5. Many of the advantages of the Trident program, including the Trident I missile and certain quiet-running features, can be incorporated in the existing Poseidon fleet, thus providing adequate safeguards against a greater-than-expected ASW threat but at a much lower price.

6. The Trident submarine system does not possess any advantages over present analogous submarines which are sufficient to justify the spending of four to five times as much per submarine, using conservative estimates of the anticipated program costs.

7. The Trident program, as presently accelerated, shows a potential for cost-growth of truly epic proportions.

8. The Trident program, if pursued now in advance of a tangible ASW threat, may represent an irreversible commitment to the wrong system or system components. Acceleration limits U.S. flexibility in meeting a wide range of possible threats, flexibility which may only be repurchased through expensive design changes at a later date.

9. The Trident system has a major flaw in comparison to the present deterrent force; it involves the concentration of more missiles in fewer platforms, thus making it more vulnerable from a purely numerical standpoint. If, as seems probable, the cost of each Trident submarine makes procurement of a large fleet prohibitively expensive, then the U.S. could be aiding a potential enemy by offering a smaller number of targets for strategic ASW.

10. The decision to base the initial complement of Trident submarines on a facility to be constructed at Bangor, Washington may entail serious limitations on the survivability of the system, subjecting it to the kinds of easily-mined or easily-reconnoitered bottlenecks (Juan de Fuca Straits) which have historically plagued the Soviet submarine and surface forces.

11. The accelerated program, timed to permit deployment immediately after termination of the Interim Agreement on Strategic Offensive Weapons, makes it appear that the U.S.-U.S.S.R. discussions of permanent limitations in SALT II are in bad faith. This "crash" program, then, offers great potential for abrogation of the agreement and reopening a new round in the still barely controlled strategic arms race.

RECOMMENDATIONS

In light of the foregoing considerations, it is recommended that:

1. The $535 million requested in the DoD FY 1974 budget for research, development, test and evaluation (RDT&E) of the Trident I missile be approved and that the Navy resume its original plan to fit this missile into the current U.S. fleet beginning in 1978.

2. A sum of $150 million be appropriated for FY 1974 for the Trident submarine; further, that the Navy revise its schedule to permit continued development of a single "lead ship" (in which there is already a substantial investment) with an initial operating capability (IOC) of 1980, instead of the presently planned development of four Trident submarines with an IOC of 1978. This change to a more orderly development and production schedule should allow the Navy to capture all technological advances without being subject to the price penalties which result from making retroactive changes and from pursuing new technology under the pressure of time. At the same time, this approach would permit the Navy more flexibility in responding to changes in the ASW picture.

3. The Department of Defense conduct for the Congress an in-depth review of alternative locations for future Trident submarine bases and that, in the meantime, the $182 million currently requested for site development and military construction (MILCON) at the Bangor, Washington location be deferred.

4. The Navy continue to accord high priority to its current "SSBN Defense" program in order to identify possible ASW threats and develop countermeasures against them.

TRIDENT DESCRIPTION AND MISSION

Trident is the Navy's proposal for an improved submarine and associated ballistic missile to replace the present 41-boat Polaris/Poseidon fleet.

The mission of Trident would be identical to that of the current ballistic missile submarine force: to provide an invulnerable, sea-based offensive nuclear weapon system for strategic deterrence against attack by another nuclear power.

The Trident program has three components: (1) the Trident submarine, a missile-launching platform approximately 500 feet in overall length and displacing 16,000 tons, nearly twice the size of the existing Polaris/Poseidon submarines; (2) the Trident I or C–4 missile with a range of 4,500 to 5,000 nautical miles and approximately the same payload and accuracy of the Poseidon C–3 missile; and (3) a follow-on Trident II or D–4 missile with a range of 5,000 to 6,000 nautical miles and with greater payload and accuracy than its predecessors.

The Trident program was in part an outgrowth of a two-year Department of Defense study, entitled STRAT–X, into "future ballistic missile basing concepts and missile performance characteristics required to counter *potential* Soviet strategic forces and ABM *proliferation*" (emphasis added). Trident first emerged under the name Undersea Long-range Missile System (ULMS) in the research and development section of the Navy's FY 1969 budget request, where $5.4 million was requested for feasibility studies.

The design concept for Trident calls for:

1. 24 vertical launch tubes penetrating the main pressure hull (instead of the 16 tubes in current Polaris/Poseidon hulls).

2. a larger nuclear power plant permitting the submarine to operate in larger ocean areas and to undertake longer patrols, with the goal of:

a) frustrating ASW measures of assumed adversaries and

b) allowing the submarine to be based on U.S. ports, thereby eliminating the need for foreign port facilities and forward based submarine tenders.

3. a very quiet-running propulsion system, in order to make detection more difficult.

4. a larger, longer-range missile with "various features designed to make it very difficult for ABMs to shoot it down." One such feature would be an increase in the number of multiple, independently-targeted re-entry vehicle (MIRV) warheads, as many as 20 to 24 on each missile. Another would be the inclusion of decoys or other penetration aids, such as the "ABM evader" warhead unveiled by the Department of Defense in 1972 and called MARV (maneuverable re-entry vehicle).

The original time-phasing for Trident, then still known as ULMS, was as follows:

ULMS I Missile—1977–1978;

ULMS Submarine—1980; and

ULMS II Missile—early 1980s.

Original plans called for the ULMS I missile to be retroactively fitted or "retrofitted" into existing Polaris/Poseidon hulls to increase their operating range until the newer submarine and still longer-range missile should come into service.

CURRENT STATUS OF THE TRIDENT PROGRAM

Projected funding for ULMS for fiscal 1973 was set at $400 million, with the bulk of these funds allocated for development of the new missiles. Sufficient funds for submarine development were provided to support a 1980 initial deployment date.

In December of 1971, however, the Defense Department decided to shorten the submarine development schedule by nearly three years, calling for deployment in late 1978.

Shortly thereafter, Secretary of Defense Melvin Laird defended the acceleration decision in his FY 1972 Posture Statement:

The Y-class ballistic submarine force of the Soviet Union *could* be as large as our Polaris/Poseidon force by the end of next year (1973), rather than in 1974 as I predicted last year. (Emphasis added.)

Mr. Laird did not explain why such an increase in the Soviet ballistic missile submarine force, which is not aimed at U.S. submarines, should occasion an acceleration of the American sea-based deterrent improvement program, already substantially ahead of the Soviet SLBM fleet.

Director of Defense Research and Engineering, Dr. John S. Foster, Jr., offered testimony of greater relevance to the effect that "we cannot identify any developments today that indicate a a Soviet threat to our sea-based missile deterrent." However, he did testify that the "Soviets have expressed an interest in developing a strategic ASW force . . ."

On the basis of this Soviet expression of "interest," for which no documentary evidence was adduced, FY 1973 funding for ULMS was set at $942 million and an additional $35 million was requested in the DoD supplemental appropriation for fiscal year 1972.

After a battle in the Research and Development Subcommittee of the Senate Armed Services Committee and another fight on the Senate floor, wherein debate centered on the issue of acceleration, the impact of the program on the Strategic Arms Limitation Talks (SALT), and the need for Trident in the nineteen-seventies, a total of $852.9 million was appropriated to the program for FY 1973.

On January 8, 1973, in conjunction with the plans for an accelerated development of the Trident hull, the Navy confirmed that it had changed the original plans for missile deployment to make this event coincide with deployment of the submarine. This meant a delay of nearly a year in the production of the Trident I missile. Additionally, the plan to install or retrofit the Trident I missile into present Poseidon submarines was reduced to the level of a contingency alternative or "backfit option," which could be pursued if future conditions warranted.

Rear Admiral Robert Kaufman, Director of the Strategic Submarine Division and Trident Program Coordinator, offered the following reason for the revised schedule:

"A change in the appearance of the Trident missile . . . was dictated by fiscal reasons during the past year. The Department of Defense has . . . elected to have the Trident I missile operational capability match that of the submarine that is, 1978. This lowers fiscal needs somewhat in the next years to permit applying funds to other very high priority programs."

The FY 1974 budget requests nearly one and three-quarters billion dollars—almost double previous program expenditures to date—to implement the revised Trident schedule in the coming fiscal year, yet Admiral Kaufman claims the decision to delay Trident I missile development is attributable to "fiscal reasons." The altered schedule is now as follows:

Trident I Missile—1978;

Trident Submarine—1978;

Retrofit of Trident I in Poseidon hulls—optional; and

Trident II Missile—not determined.

STATUS OF THE POLARIS/POSEIDON FORCE

At present, the U.S. sea-based deterrent force consists of 41 Polaris or Poseidon nuclear-powered submarines each containing 16 ballistic missiles, for a total of 656 missiles. The first three Polaris submarines were authorized in a supplemental appropriation in 1958, with an operational date set for 1960. The entire 41-boat fleet was completed in 1967.

Under an ongoing program, 31 Polaris/Poseidon submarines are being converted to carry the MIRVed Poseidon missile, capable of launching 10 independently-targeted warheads apiece. This program is the latest in a series of steps which have continually upgraded the missile capability of the Polaris/Poseidon force as regards payloads, range, accuracy, and penetrability.

The status of the current conversion program in mid-1973 was as follows:

| Submarine/missile: | *Number nuclear weapons* |
|---|---|
| 15 Polaris (A–2 and A–3 missiles) | 560 |
| 17 Poseidon (C–3 missile with MIRV's) | 2,720 |
| 9 Poseidon (being converted to C–3 with MIRV) | 1,440 |
| Total (41) | 4,720 |

When completed in 1976, at a total cost of $6 billion, the Poseidon conversion program will provide the U.S. with a sea-based deterrent force of nearly 5,500 nuclear warheads, most of which will be separately-targetable, assuming ten MIRVs per Poseidon missile.

Design specifications for this SLBM (submarine-launched ballistic missile) force called for a hull life of 25 to 30 years. Though they possess a very high (but classified) speed for a submersible, ballistic missile submarines, while on patrol or in transit to and from patrol areas, are normally run at relatively shallow depths and at slow speeds to ensure quiet operation. This form of operation permits minimum stress on submarine hull and launching systems Moreover, the boats in the Polaris/Poseidon fleet are subjected to rigorous scrutiny between patrols, either at US yards, overseas bases, or from submarine tenders deployed near their operating areas, as at Holy Loch, Scotland. Complete overhauls are conducted every five to six years (more often, if warranted) to ensure the submarines remain in peak operating condition.

These precautions, plus the experience with the longevity of earlier submarine hulls many of which have achieved a 30-year lifespan after operating under adverse conditions, provide high confidence that the Polaris/Poseidon fleet will meet and perhaps surpass its designed life expectancy.

The Navy, in testimony before the Congress, has repeatedly emphasized the reliability of the Polaris/Poseidon hulls and has given further confirmation of this reliability in proposing that these hulls should be used to carry the submarine-launched cruise missiles (SLCMs) for which monies are now being requested.

Hence, the earliest of the Polaris vessels will not have to be retired until around 1990, seventeen years in the future. The last-built of the SLBM force would not require retirement until 1997, nearly a quarter-century away.

Upon completion of the aforementioned conversion program, 31 of the Polaris/Poseidon submarines will carry MIRVed C–3 missiles with a range of about 2,500 nautical miles. The range of the Poseidon missiles can be extended by accepting reductions in payload and accuracy. However, in first taking steps to upgrade the missile capability of the sea-based deterrent, the Department of Defense opted for greater accuracy, including a circular error probability (CEP) of less than 2,500 feet.* They also chose a larger number of warheads per missile. The remainder of the force will have the Polaris A–3 "triplet" system, a multiple re-entry vehicle (MRV) with three nuclear weapons—less accurate, smaller payload system of the same range as the Poseidon.

The size of the Polaris/Poseidon fleet permits deployment at any one time of 18–20 submarines in the Arctic-North Atlantic-Mediterranean area and five to seven submarines in the Pacific. The remaining boats are in the yard, tied up at tenders, in homeports, conducting refresher training, or in transit to or from patrol areas.

Military planners tend to use conservative calculations in assessing the percentage of SLBMs which could be launched against the Soviet Union on short notice. This conservatism stems in part from the difficulties of communicating with submerged vessels (though great strides have been made in this area in the Polaris/Poseidon program), from possible malfunctions of delicate guidance systems, and from the relative difficulty (as contrasted with land-based missiles) of launching missiles from beneath the seas.

Nevertheless, assuming that less than half of the SLBM fleet is on station and using the Department of Defense estimate of 85% to 95% reliability, it has been estimated that the U.S. sea-based deterrent force alone could destroy some 2,000 Soviet targets or *219 of the Soviet Union's cities nine times over.*

In May, 1973, Poseidon program chief, Rear Admiral Levering Smith, reported to the Senate Armed Services Committee that 58% of the Poseidon missiles had failed recent operational tests, reportedly causing the Navy to order the recall of selected deployed missiles for component testing.

Officials of the Defense Department, however, subsequently stated that the missile was essentially sound, that it required certain improvements to enhance the probability of hitting designated targets, and that the program was not unlike the Minuteman II missiles, which required post-deployment improvements.

In August, 1973, Secretary of Defense James E. Schlesinger expressed similar confidence regarding the Poseidon program, stating that there "has been no significant weakening of the U.S. deterrent" as a result of the test deficiencies and that Pentagon officials were "not deeply concerned."

Should the test deficiencies prove to be serious, however, the U.S. sea-based deterrent, even at a reduced probability of sure "hits," remains sufficient to destroy an unacceptable proportion of the Soviet Union's cities and military targets. If the U.S. should desire to increase this probability, then the prudent course is to revert to the original program of readying the improved Trident I missile for fitting in the Poseidon hulls.

Yet besides the sea-based capability, the U.S. strategic offensive forces include 54 liquid-fuel Titan missiles, 450 Minuteman II missiles with a single warhead apiece, and 550 Minuteman III missiles with three warheads apiece, for a total of 2,154 warheads on land-based intercontinental ballistic missiles. Should the Defense Department carry out its plans to MIRV all Minuteman II missiles, this total will climb to 3,504 warheads. Finally, the U.S. deterrent "Triad" includes a bomber force of long-range B–52 and FB–111 bombers and funds are being requested to provide this air fleet with 1,500 nuclear-tipped Short-range Attack Missiles (SRAMs) by the mid-Seventies. In sum, the U.S. has many times over the capacity to wreak unacceptable destruction on the Soviet Union, whether or not the Poseidon missile lives up to reliability criteria.

THE THREAT TO THE U.S. SEA-BASED DETERRENT

The Department of Defense has sought to justify the immediate need for Trident on three related grounds:

1. To counter the growth of the Soviet submarine force, including both nuclear-powered ballistic missile submarines and nuclear-powered attack submarines.

2. To hedge against a hypothetical breakthrough in ASW technology.

3. To maintain an invulnerable and therefore credible nuclear deterrent force at sea.

THE "SUBMARINE GAP"

As of mid-1972, the Soviet Union had 31 ballistic missile submarines in service, the largest of which had 16 launch tubes. Though the Soviets have tested an SLBM with a range estimated at 4,000 nautical miles, it has not been deployed in its strategic submarine force, which carries, missiles with a range of 1,300 to 1,500 nautical miles.

The Soviets do not have an MRV or MIRV capability for their shorter-range, submarine-launched missiles. Their submarines, due in part to the lack of overseas bases and consequent long time to station, are deployed outside of adjacent waters only three to five at a time—with two normally near Bermuda, one near Nova Scotia and one in the Pacific. Another is often deployed in the Mediterranean. The "on-station" submarines are customarily rotated on a fairly regular basis.

At the SALT hearings before the Senate in August, 1972, Chief of Naval Operations, Admiral Elmo Zumwalt, noted that the Soviets could have 84 to 88 ballistic missile submarines, based on a production rate of 7 to 9 per year, at the end of the five-year Interim Agreement on Strategic Offensive Weapons in 1977, though this agreement limits the U.S.S.R. to 62 such submarines.

In his February, 1973, military posture statement, Admiral Thomas Moorer, Chairman of the Joint Chiefs of Staff, estimated that the Soviet ballistic missile submarine force would number only 34 by mid-1973, indicating a production rate of half that projected by Admiral Zumwalt six months earlier. In other words, the Russians built only 35% of the submarines expected.

Not only is the Soviet ballistic missile submarine force substantially less, both qualitatively and quantitatively, than that of the U.S., it is not increasing at the rate foretold by U.S. military chiefs. In short, it seems that the anticipated "submarine gap," like the bomber gap of the nineteen-fifties and the "missile gap" of the nineteen-sixties will not materialize.

This submarine gap is not likely to materialize primarily because it is based, like the earlier gaps, on self-serving intelligence estimates, estimates which rely more on the potential capacity of Soviet shipyards than on actual construction rates. Estimates of this kind, which emphasize what could happen rather than what is likely to happen, have become so commonplace as to evoke even the criticisms of the former chief of national estimates at the Defense Intelligence Agency, Major General Daniel O. Graham, now with the C.I.A.*

More to the point, however, is the fact that there is no close relationship between the size of the Soviet SLBM force and the size of the U.S. SLBM force. The Soviet ballistic missile submarine fleet, in the unlikely event that it surpassed its U.S. counterpart in quality or quantity of deliverable weapons, could in no way jeopardize the survivability of the U.S. Polaris/Poseidon force, since the two nations do not deploy their missile-carrying submarines to do battle with one another in the ocean deeps. Thus, the argument for building and accelerating Trident because of the Soviet SLBM fleet is based on invalid data and an illogical comparison. To the extent that there is a relationship between the two SLBM forces, it is primarily psychological.

As regards the Soviet attack submarines, this force has always been a large one, mainly because of the adoption of an "undersea

* CEP=the radius of a circle centered at the target in which 50% of $n$ warheads would fall, where $n$ represents a very large number.

*See the article by General Graham, "Estimating the Threat: A Soldier's Job," *Army* magazine, April, 1973.

fleet" strategy by the Soviet Navy in the years following World War II. In the intervening decades, the U.S.S.R. has built hundreds of attack submarines, far more than the U.S., with most of them diesel-powered and many of them carrying cruise missiles (similar to the U.S. Navy's old Regulus) which are ineffective against other submarines. In addressing the threat posed by attack submarines to our nuclear, sea-based deterrent, it is necessary to consider only those Soviet attack submarines which are nuclear-powered and capable of launching weapons effective (in theory, at least) against other submarines.

Of this kind of submarine, the Soviet Union has only 34. The U.S., on the other hand, has 56 nuclear-powered attack submarines (SSNs), with another series under construction. Thus, at the present time, the Soviet Navy does not possess even enough attack submarines to equal the size of the 41-boat Polaris/Poseidon fleet and it is outmatched by the American SSNs which could be sent to interdict Soviet attack submarines.

ASW TECHNOLOGY

The sheer numbers of attack submarines, however, are relatively meaningless by themselves. Of more critical importance are the means which they or other weapons systems possess for the detection, tracking, and destruction of hostile submarines.

Historically, the problem of anti-submarine warfare has been one of the most difficult to face military planners and technical specialists. First confronted by both the Axis and Allied navies in World War II, anti-submarine warfare has been a problem in search of a breakthrough for over three decades.

In this period, the U.S. Navy, which continues to lead the world search for ASW solutions, has spent billions of dollars in pursuit of improved methods for detecting and destroying enemy submarines. It has established research and development laboratories and training centers with the single mission of improving ASW hardware and techniques. It has built DASH (drone anti-submarine helicopter), ASROC (anti-submarine rocket), Hedgehog, and a series of improved depth charges and torpedoes, culminating in the Mark 48 torpedo, to name but a few of the ASW weapons. It has developed improved sensor systems, including MAD (magnetic anomaly detector), Sonobuoys, and new generation sonars. And it has developed special task formations, such as the old Hunter-Killer group known as Task Force Alfa, and a variety of ASW tactical doctrines.

While this extensive pursuit of the will-o-the-wisp of ASW has brought many advances, the improvements in submarine performance have more than outpaced improvements in ASW hardware and doctrine. The high submerged speeds, the long underwater endurance, the deep-diving ability, and the quiet-running capacity of modern nuclear-powered submarines continue to stymie the best efforts of ASW specialists to overcome them. In conducting exercise operations against our own nuclear submarines, U.S. ASW forces have succeeded generally only when there was a failure in one of the systems of the pursued submarine.

The ASW problem as it is rightly called, can be broken into three component parts: (1) detection, (2) tracking, and (3) destruction. Each of these constituent elements forms a knotty problem in its own right. The sheer expanse of the earth's ocean surfaces makes detection highly problematical, except where a submarine can be picked up and trailed as it leaves port. Once detected, an unidentified submarine must be tracked, for purposes of "shadowing" it, of identifying it, of getting into position to launch weapons against it, or of keeping it under surveillance until assistance can be summoned.

Tracking is difficult for aircraft or surface vessels because of the speed and maneuverability of modern submarines and because of distortions imposed on surface sensors by the acoustical and electromagnetic properties of the ocean depths. For similar reasons, successfully targeting a submarine with weapons now available, including the new Mark 48 nuclear homing torpedo, is a very chancy matter.

Frustrations over the difficulties of ASW has driven Navy officials to design a system for prepositioning of remotely launched Mark 48 torpedoes near the ocean floor at the points of egress from Soviet home waters, though this system, called Captor, would raise serious questions about violation of rights of passage in international waters and violation of the Seabed Treaty. If deployed, such torpedoes could be automatically released to interfere with the deployment of Soviet submarines in the event of war.

Closer to home, the Navy has for many years maintained a sensor system known as SOSUS on the continental shelf, but this provides a detection capability with relatively limited reach, though it is now being upgraded.

Some of the detection systems now in use or under consideration are reviewed briefly below:

*Sonar.* The sensor system of the greatest practical utility remains sonar detection, either active or passive. Active sonar transmits a pulsed beam through the water for a direct range of 10 to 15 miles and, upon striking an object, the beam is reflected back to the emitting equipment, permitting determination of the bearing and range of the reflecting object. Skilled sonar operators can discriminate between hulls and schools of fish by the character of the reflected sound. Active sonar does not rely on the cavitation or noise produced by ship propellors or other sound sources and it cannot be defeated by reducing a ship's noise. Active sonar, however, does warn submarines that they are being pursued since it can be detected well beyond its own effective range.

Passive sonar has the advantage that the hunted submarine remains unaware of its operation. While ranges of active sonar have not increased significantly in the last twenty-five years, improvements in passive sonar now make it possible to detect a submarine moving at high speeds up to 100 miles away. Because of this development, extensive measures have been taken to silence submarines and the Navy plans to incorporate improved silencing techniques in the proposed Trident submarines. These same silencing techniques can, however, be incorporated in the existing Polaris/Poseidon hulls.

*Infrared Detection.* The temperature of a submarine differs from the temperature of the surrounding water. Nuclear submarines, in particular, have hot water around them as a result of their nuclear reactor discharge. Although, aircraft fitted with infrared detectors could pinpoint thermal variations and thus fix the positions of possible submarines, no practical progress has been achieved in this area.

*Magnetic Anomaly Detection.* The presence of a mass of metal, which distorts the earth's magnetic field, can be measured with a magnetometer. While surface vessels and submarines create too much magnetic interference of their own to permit their use of such a system, it has been installed in Navy ASW patrol aircraft. Yet the range of this system is extremely limited and it can be countered by deep running.

*Lasers.* Considerable research into the applicability of laser beams for detecting underwater objects is now being conducted. Yet lasers are so directional that their utility as a means of ocean surveillance would appear to be limited.

*Underwater Acoustical Arrays.* In this concept, acoustical devices, not linked directly to shore sites, could be sewn like seeds throughout the world's oceans to search given sectors and report the results to a central data analysis and display facility. The technological problems of operating and maintaining such a system, the relative ease with which it could be countered, and its expense are its main drawbacks.

Kosta Tsipis, an expert in high energy physics at the Massachusetts Institute of Technology, summed up the state of the art for ASW in a recent article when he wrote: "Once submerged, a missile-carrying submarine is practically undetectable and therefore non-targetable." Without quantum advances in detection technology, there can be very little progress in solving the problems of tracking and destruction and to date the improvements in detection systems have fallen short of the mark.

The intensive ASW effort of the past has consistently confirmed that the best method of hunting a submarine is to use another submarine. It can operate below interfering temperature layers affecting the operation of surface sonars and it is not affected by rough weather on the surface.

Saying that the submarine is the best anti-submarine weapon is not saying that it is good enough, however. The real magnitude of the ASW threat, as it exists for the U.S. sea-based deterrent force is readily seen when calculated in terms of probabilities. In order to eliminate a force of 20 U.S. ballistic missile submarines operating at sea, the Soviet Navy would have to first detect the accurately pin-point the locations of all 20 submarines. The probability of doing so is slight. Then the Soviet attack force would have to track each of the 20 U.S. submarines in order to get into optimum firing positions, while at the same time avoiding warning the U.S. submarines that they were being hunted. Again the probability of achieving this kind of surprise is extremely small. Finally, the Soviet attack vessels, presumably submarines, would have to launch an attack that would destroy each U.S. submarine, render it inoperative, or prevent it from launching its missiles. Given the low reliability of present ASW weapons, such as the advanced but trouble-plagued Mark 48 torpedo, the probability of success is here again very slender.

Since each of these contingencies rests on the success of the prior one (i.e., tracking depends on detection and destruction depends on tracking and detection), the overall probability of destroying one ballistic missile submarine is not good and the chances of destroying anything like an entire 20-unit deployed Polaris/Poseidon force is negligible. Furthermore, if the Soviet Union were attemping to disarm the U.S. in a first strike, it would have to attempt to destroy the land-based ICBM force and each of the dispersed bombers as well. Such feats are not only impossible, from a technical and a temporal standpoint, they don't have a high probability of achieving anything like 50% success.

Assuming, however, that with detection and tracking equipment and weapons systems much more advanced than anything now available and with phenomenal good luck, the Soviets could take out 75% of the 20-submarine U.S. sea-based deterrent force, five U.S. ballistic missile submarines would still remain to launch 800 nuclear weapons on the Soviet Union. Taking an even more conservative approach, it has been estimated that a single Poseidon submarine, with its MIRVed missiles, could wreak unacceptable damage on the Soviet Union.

The Soviet Navy has, as Dr. Foster pointed out a year ago, showed an interest in "strategic ASW," as anti-submarine warfare against ballistic missile submarines is now termed. It is hardly surprising that they would show such an interest, considering the nature of the U.S. threat arrayed against them.

However, given the state of Soviet technology, especially as revealed in its long

struggle to develop a workable MIRV and the newly revealed inadequacies of its space program, it seems highly unlikely that the Soviet Union could create a breakthrough in an area where the best United States physicists, engineers, and naval officers have been unable to achieve a breakthrough in 25 years of trying. More importantly, no one in the U.S. intelligence community has been able to uncover any evidence of anything remotely resembling a Soviet breakthrough in this area.

On the contrary, the available evidence on Soviet ASW programs indicates that they are light years behind the U.S. in hardware, in ASW ship types, in ASW forces and in ASW doctrine.

*Economic evaluation*

Through 1973, $960 million has been appropriated for Trident and the FY 1974 budget request is for $1,572.4, indicating that the accelerated program is being accelerated still further.

The Department of Defense currently estimates that the total Trident program acquisition cost, for ten submarines and the Trident I missiles, will run to $13.5 billion, *making the per unit cost of each Trident submarine over $1.3 billion, or higher than the cost of the proposed nuclear aircraft carrier, CVN–70.* This estimate is a conservative one and assumes no cost-impact engineering changes and no developmental problems.

The total program acquisition cost presented by the Defense Department (see Tables 1 and 2) does not include all of the development and production costs for the Trident II missile, which, when deployed will be additive to the basic program cost of $13.5 billion. The Navy has not publicized the procurement estimates for the Trident II missile, so precise figures are not available, but it is certain to push the per unit cost of Trident in the direction of two billion dollars per submarine. Nor has the Navy made available any data on the anticipated operating costs for Trident, though outside estimates run as high as $1 billion per ship for the first ten years of operation.

TABLE 1.—COST COMPARISON

[In millions of dollars]

| | Fiscal year 1974 | |
|---|---|---|
| | Fiscal year 1973 accelerated program | Request for accelerated program |
| R.D.T. & E.: | | |
| Trident I missile | 348.4 | 529.0 |
| Trident submarine | 122.0 | 125.6 |
| Trident II missile | | |
| Total R.D.T. & E. | 470.4 | 654.6 |
| Procurement: | | |
| Ship construction (SCN) | 311.0 | 867.8 |
| Weapons procurement (WPN) | | 5.0 |
| Total procurement | 311.0 | 872.8 |
| Total authorization request | 781.4 | 1,572.4 |

TABLE 2.—PROGRAM COMPARISON

| | DOD 1971 plan | DOD accelerated program |
|---|---|---|
| Operational date for lead boat | [1] 1980 | 197 |
| Production rate per year for follow on boats | [2] | 3 |
| Operational date for Trident I missile | 1977–79 | 1978 |
| Operational date for Trident II missile | [2] | [3] |
| Backfit of Trident 1 missile in Poseidon boat | 1977–79 | [4] |

[1] Early 1980's.
[2] Not determined.
[3] To be determined.
[4] Classified.

Source: Senate Armed Services Committee Report, 1973.

Though Trident has been touted as eliminating the need for foreign bases and overseas tender availability, reports presently indicate that operation and maintenance (O & M) expenditures could reach twice the amount now estimated for the current Poseidon force. Nor do costs listed above include the expense of the proposed new base at Bangor, Washington, for which $182 million is requested this year.

Perhaps the most significant economic aspect of Trident, however, is its potential for cost-overruns or cost-growth.

In its study entitled *Cost Growth in Major Weapons Systems,* and released in May 1973, the Government Accounting Office found that the single most significant contributor to cost growth was changes made in weapons systems by the military after the programs had begun. This contrasts sharply with the DOD contention that inflation is the largest single cause of cost overruns. The GAO study found that cost-impact engineering changes accounts for 45% while inflation accounts for 30% and estimating errors account for the remaining 25%.

More revealingly, the GAO study noted that the changes which drive up costs result from "unrealistic performance targets at the outset" and that the worst overruns consistently occur on the most costly, most ambitious programs.

Also pertinent to the Trident program is the finding of the GAO study that:

Most resources are invested in systems to replace systems that perform the same types of missions. The successive generation of systems which follow this pattern push state of the art frontiers and, of course, costs increase with each increment of improvement. This technological momentum can be expected to drive costs up no matter how well the programs are managed.

In short, the push for modernization at any cost and the inability to wait for technology to mature, are major causes of cost overruns. Changes in the Trident program, particularly the decision to accelerate hull development, seem to be classic cases of this cost-push effect.

The cost-growth of Trident due to acceleration has been singled out in a recent study released by the Brookings Institution entitled *Strategic Forces: Issues for the Seventies.* The need to proceed with hastily drawn and poorly defined contracts, the study concludes, could lead to "real cost growth of major proportions for Trident." The study points out that there are already indications the estimated $13.5 billion for Trident may be in error.

The study's comparison of acquisition costs under the original (operational 1981) and accelerated (operational 1978) programs is set forth below. The figures shown represent total obligational authority (TOA) in millions of constant 1974 dollars.

| | Fiscal year— | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1974 | 1974 | 1974 | 1974 | 1974 | 1974 | 1974 |
| Original program | 0.7 | 0.9 | 1.0 | 1.5 | 2.0 | 2.7 | 2.8 |
| Accelerated program | 1.7 | 2.5 | 3.1 | 3.0 | 2.8 | 2.9 | 2.9 |

On the basis of this economic analysis the Brookings study concludes that "the pace of the Trident development envisioned in fiscal 1972 seems appropriate to us."

The cost history of Tridents predecessors, Polaris and Poseidon, further underscore the enormity of proposed system's price tag.

When completed in 1967, the Polaris program, including 41 submarines and 816 A–1, A–2, and A–3 missiles, cost a total of $13.9 billion. Ten-year operation and maintenance costs have been estimated at an additional $6.6 billion.

Poseidon, scheduled to be completed in 1976, with the conversion of 31 of the earlier hulls and the installation of 496 C–3 SLEMs is expected to reach a total acquisition cost of $5.9 billion, for a per unit figure of $193 million. The ten-year operating and maintenance costs are estimated to run about $5.5 billion for the entire force.

By contrast, the Trident program, as presently formulated, would provide only ten submarines with 240 C–4 missiles at a procurement price of $13.5 billion and a ten-year O&M cost of unknown proportions. At a minimum it will cost four to five times as much as a Poseidon submarine. And this still does not, as noted, buy the advanced Trident II missile.

From the point of view of cost-effectiveness, the Trident program does not offer sufficient advantages to justify the enormous increase in expense. While it might enhance the invulnerability of the U.S. sea-based deterrent, the present deterrent force is not in jeopardy and Trident increases the security of the force at a cost out of proportion to the gain. It could, on the other hand, if built now, impair mutual deterrence by provoking the USSR to abrogate existing programs and/or renew efforts to expand its force of super-ICBMs, such as the SS–9.

There is, however, a more cost-effective and less destabilizing option—one which the Navy and the Department of Defense have unaccountably deferred. That is the far less expensive option of installing the Trident I missile in the existing hulls of the Polaris/Poseidon force as originally planned. Ironically, as the earlier quoted testimony of Admiral Kaufman reveals, the Navy attempted to justify the elimination of this less expensive option on the grounds that it was cheaper to do so.

*Vulnerability*

Given the present and foreseeable state of ASW technology, there exists no meaningful threat to the current U.S. ballistic missile submarine force. The previously described technical constraints on ASW will be pushed back, if at all, by more long years of intensive research. Even then, the prospect for an important change in the conditions favoring the offensive submarine remains small indeed. If progress is made, it is far more likely to occur in the U.S. where, working from a much more developed knowledge base, the major advances in ASW have been made in the past.

If the argument founded on a sudden "Soviet ASW breakthrough" falls, then the whole question of the survivability of the current Polaris/Poseidon force becomes academic. Defense officials have acknowledged that, without such a breakthrough, the invulnerability of the force remains unquestioned and unimpaired.

In testimony before the House Armed Services Committee prior to his resignation as Defense Secretary, Melvin Laird stated that investigations have proved that there is "no immediate concern about the survivability of our Polaris and Poseidon submarines at sea."

Admiral Zumwalt, in February, 1972, declared:

"Our present Polaris/Poseidon system is excellent now and is highly capable for the near future against threats that we anticipate that the USSR is likely to develop."

Mr. Laird's successor as Defense Secretary, Elliot Richardson, when asked whether the Trident program should be accelerated, displayed no enthusiasm for acceleration in his reply that:

"I think the development process should be pursued deliberately. I don't think it's a matter that needs to be undertaken with haste."

A critic of the Trident program and sponsor of the previous MCPL report on it, Senator William Proxmire, has highlighted the inconsistency between the speed of Trident development and the justification for it by asking:

"If the Soviet threat to our Polaris submarines is of such low magnitude that there is no need for a relatively inexpensive mis-

sile retrofit program which would improve their invulnerability in the late 1970s, how can that same threat be used to justify the crash replacement of almost half of our Polaris and Poseidon fleet by the early 1980s?"

Some Navy spokesmen, however, have hinted darkly about possible eventualities lying beyond the next few years. Admiral Hyman Rickover conjectured in February, 1972 that:

"While we know of no definite threat to our existing Polaris/Poseidon submarines, the Soviets have made great strides in naval capability which may in the future pose a threat to these submarines."

Two facts emerge from this and similar expressions of concern:

(1) It provides no details as to what the hypothetical threat to the U.S. force might be or any concrete evidence of any threat at all.

(2) It is made in behalf of a system which is already fully designed to meet threats about which nothing is known.

In short, this testimony expresses a willingness to commit a very substantial portion of the nation's resources to a weapons system which may be obsolete, if and when the unknown threat assumes real form. The greatest unknown, then, is whether the Trident system will be capable of countering an intangible and uncertain threat.

Examined in this light, the conservatively estimated Trident acquisition cost of $13.5 billion, plus over half a billion for a new base, plus more billions for the Trident II missile, plus as yet unguessed at operations and maintenance (O&M) costs, plus the likelihood of cost overruns, become the extraordinarily high stakes in a gamble between known and unknown technology. With the survivability of the Polaris/Poseidon fleet guaranteed against existing and foreseeable threats, and with such enormous sums of money at stake, the prudent course would appear to be to wait until there was more certain knowledge about potential threats before committing ourselves to this program. The kinds of threats which the Trident system may fail to meet and its own vulnerabilities are addressed in a later section.

*Technical evaluation*

As presently conceived, and assuming the continuance of the present constraints on ASW technology, the Trident program offers certain technical advantages over the Polaris-Poseidon force, chiefly with regard to silent running, greater submarine range, and greater missile range. Certain of these features, such as greater missile range and the silent running capability, could be achieved at far less cost by incorporating them in existing hulls.

The Trident, however, also has certain present and potential defects. For one, it involves placing more missiles in fewer launch platforms, (48 in 2 vs. 48 in 3) thus reducing the number of targets for any adversary. By having fewer submarines the U.S. makes it numerically easier for an opponent to trail these submarines from home ports or from a line barrier to their operating areas. This same concentration of missile resources works to the disadvantage of deterrent survivability by removing a greater number of weapons from a state of readiness each time a Trident submarine is in the yard or tied up alongside a tender for major repairs.

The option of placing the Trident I missile in existing hulls eliminates this weakness. Furthermore, such deployment could be carried out in a manner that would significantly enhance the striking power of the sea-based deterrent, while keeping it dispersed. If, for example, the Trident I missile were retrofitted in Poseidon hulls a few at a time, the total force would achieve the longer range capability far sooner. Waiting for the full Trident program, on the other hand, even at its accelerated pace, would mean a Trident I force of 20 submarines could not be achieved before 1985 at the earliest. Furthermore, such mixed Poseidon/Trident I submarines would be able to launch an immediate attack soon after leaving each coast port and the capability would increase as they moved closer to their assigned operating areas.

The Navy, in its justification for Trident, has made much of the need for long lead-time in the development of any system to counter a sudden breakthrough in ASW by the Soviets. The Navy estimates that it will take six to seven years to develop a new submarine. However, this lead-time justification pertains only to the initial prototype or "lead ship." Knowledgeable experts have estimated that the results of an ASW breakthrough by the Soviets could not be fully deployed until the late 1980s, giving the U.S. ample time to deploy Trident, if that is the most effective response, even with development of the lead ship timed for completion in 1980.

Such ASW experts as Richard Garwin of IBM's Thomas J. Watson Research Center discount the lead-time problem and do not consider it a compelling reason for Trident. An attempt to increase lead-time against an unknown threat can, on the other hand, lead to an unwise use of that time. For example, much of the increased size of the Trident hull is attributable to efforts to achieve a quiet-running capability as a defense against passive sonar. Should the hypothetical breakthrough in ASW technology involve advances in active sonar detection, magnetic field anomalies, temperature differentials or laser technology, Trident's huge relative size could work to its disadvantage. Even with existing technology, Trident's size makes it more vulnerable to attack by torpedoes using active sonar or similar guidance techniques in its homing phase. While it is the conclusion of this study that exists little chance of a sudden ASW breakthrough, these considerations illuminate the problems inherent in trying to design a system to counter an unknown technology.

Although the details of the Trident submarine program are, for the most part, classified and therefore not subject to independent analysis, there remain several other questions about the system's design characteristics and performance criteria. It is undetermined whether the Trident submarine will be able to achieve the maneuverability, or even the speed, of its predecessors, qualities which are essential for evading detection, surveillance, and destruction. Further, at the present rapid rate of development, it is unclear whether Trident will be able to incorporate any ASW countermeasures which may be developed through the Navy's SBN defense program over the next decade or whether the present design will permit incorporation of such features without enormous cost escalation. It is questions of this sort which, when combined with the extraordinarily high cost of Trident, raise doubts as to whether the accelerated Trident program is not a case of "too much, too soon."

If, therefore, the Trident program is pursued purely as a matter of modernizing the existing force, it is quite possible that such premature "modernization" will end not with an improved capability but in a force that will become obsolescent at an even more rapid rate because of a failure to incorporate technological innovation. From this point of view, the retrofitting of the Trident I missile again appears to be the most desirable option, for it will enhance the survivability of the current force while preserving the option of developing a truly "modern" follow-on fleet in an orderly and more economical fashion at a later time.

*Trident and the Strategic Arms Race*

The ABM Treaty signed in May, 1972 should make it clear that the U.S. and the USSR have elected not to attempt to develop expensive and problematic ballistic missile defenses beyond the two systems permitted each country.* Without extensive ABM systems to shoot down incoming missiles, they will have, in effect, a "free ride" to most of their targets. In light of this development, the need for Trident and especially the "ABM-busting" Trident II missile, with its MARV and other penetration aids, is considerably lessened. However, as a hedge against Soviet abrogation of the treaty and to counter its existing Galosh ABM system, the Poseidon/Polaris missiles already possess significant ABM-penetrating capabilities. If a further hedge should be required, they can be easily and cheaply attained by fitting the Trident I missile into the Poseidon vessels. Since the Navy expressed high confidence in the effectiveness of the Polaris/Poseidon force to place as many warheads on target with an ABM as without, the limitation on Soviet ABMs should only confirm that confidence.

The Interim Agreement on Strategic Offensive Weapons permits the U.S. 44 ballistic missile submarines and a total of 710 missiles. Within these ceilings, the U.S. is permitted to replace older submarines, SLBMs or land-based ICBMs with newer hulls or missiles. Nevertheless, the decision to accelerate Trident, setting an operational date for four ships in 1978, must appear to the Soviets as an act of bad faith in relation to the current Geneva SALT round aimed at negotiating a permanent limitation on offensive strategic weapons, for it implies that the U.S. has little expectation of reaching such an agreement.

If, on the other hand, the Department of Defense plans to replace Polaris and Poseidon submarines as the Trident vessels become available, in order to remain within the established limits, then the Trident program appears even less cost-effective, since its acceleration would require the retirement of some 15 Polaris/Poseidon boats well in advance of the end of their normal life-span.

Under either option, the decision to go ahead with the whole Trident program at this time tends to undermine the SALT accords and offers the prospect of renewing the arms race—not ended by SALT but only rechanneled and somewhat more carefully managed—at higher levels of nuclear overkill. Additionally, such a crash program is likely to reduce Soviet confidence in its own strategic deterrent, thus provoking Soviet leaders to seek the psychological security of a build-up in their strategic force levels.

*Base selection*

On February 16, 1973 Secretary of the Navy, John W. Warner announced that the Trident would be deployed in the Pacific and that its home base would be constructed near Bangor, Washington.

The Navy, in announcing the base selection, claimed that the decision ". . . came well over two years after the initial Pacific basing proposal with the Trident program."

The Navy estimates that the new base would cost approximately $553 million and would provide permanent employment for about 3,000 military and 3,000 civilian personnel who would earn gross salaries of $90 million annually.

The Navy claims that the selection of the Pacific base provides a two ocean front thereby doubling the problem for Soviet ASW threats.

The U.S. presently has ballistic missile submarines operating in the Pacific from existing bases, however, so that the Soviets are already presented with the two-ocean threat. With present U.S. missiles, the Soviet targets

*The Defense Department request for research and development funds for Site Defense of Minuteman (SDM), labelled a "presumptive ABM" by some critics, raises doubts, however, on the U.S. position in this regard. See the MCPL Research Report on SDM prepared by Congressman Robert Leggett.

west of the Urals cannot be reached. This is not a shortcoming of the Poseidon submarine or its base, however. With the retrofitting of the Trident missile into Poseidon, as was originally planned, the present U.S. forces could provide the capability for attacking any Soviet target regardless of the submarine's base location.

In discussion of the base selection before the Senate R. & D. Subcommittee, Admiral Kaufman defended the decision in stating:

"A thorough study and examination into every pro and con provided convincing evidence that this dramatic announcement signaled a new plateau of strategic deterrence, in which our sea-based systems would be assured of even higher status of survivability than exists today."

There is a real question, however, as to what new "plateau of strategic deterrence" can be attributed to the selection of the Bangor base. Increased survivability is very much a matter of contention. In fact, due to the geographic characteristics of the proposed Bangor Trident base, it may be that just the opposite is true.

Furthermore, if increased survivability can be attributed to anything, it would have to be attributed primarily to the Trident I missile and not the base location. It is increased missile range that increases survivability. The retrofitting of the Poseidon with the Trident I missile would provide virtually all of the primary additional capabilities of the full Trident submarine.

Herbert Scoville, Jr., the former Assistant Director of the Arms Control and Disarmament Agency and Deputy Director of the Central Intelligence Agency, argues that the Bangor base selection is a serious mistake for precisely reasons of vulnerability, especially in regard to acoustic ASW techniques. Pacific basing, unlike Atlantic basing, is subject to detection by fixed acoustic systems due to the direct and unobstructed access to the deep ocean, primarily because there are no large land masses to curtail such access. Therefore, to deploy an acoustic net in the Pacific would be much simpler even if the submarine missiles are of longer range.

In addition, since the submarines will be forced to exit through the Juan de Fuca strait, picking up a Trident submarine and maintaining a continuous trail as it moves to its operational base will be far easier than in the Atlantic.

In the Atlantic, a submarine can proceed along the coastline and exit into international waters at any point it chooses, thereby avoiding detection.

The Bangor base has one additional difficulty not found in Atlantic bases. It is vulnerable to mining. The narrow strait would, in time of war, serve to bottle up all submarines which were in port, and prohibit the return of those at sea. "By every possible criteria," Scoville states, "the Atlantic is preferable for invulnerable basing of missile submarines."

Still another problem can be cited with the Pacific basing. Because of the large ocean area and the Pacific base location many targets in the Soviet Union will be out of range of the Trident I during a large part of its patrol. This is not true in the Atlantic. With a missile of 4,000 nautical mile range, a submarine could stay in U.S. coastal waters along the north coastline and still reach many Soviet targets, most of which lie west of the Urals.

It is certain, therefore, that some serious questions concerning the advisability of basing a new submarine in the Pacific ocean exist. The decision to build the Trident base in the State of Washington may be premature and even prove to be a grave strategic mistake.

SUMMARY OF U.S. SSBN PROGRAMS

| Polaris | Poseidon | Trident |
|---|---|---|
| **FUNDING STATUS** | | |
| Procurement completed. Total program cost for 41 submarines and 816 missiles: $13,900,000,000. | $5,320,000,000 spent to date for conversion of 31 submarines. $5,130,000 requested in 1973 to complete program. | $795,300,000 appropriated for fiscal year 1973. $1,744,000,000 requested for fiscal year 1974. Total estimated cost for 10 submarines and Trident I missile: $13,500,000,000. |
| **SUBMARINE CHARACTERISTICS** | | |
| Nuclear-powered; 48 nuclear weapons (Triplet MRV) in 16 missiles. Total weapons: 480. | Nuclear-powered; 160 nuclear weapons (MIRV) in 16 missiles. Total weapons: 4,960. | Nuclear-powered; 408 nuclear weapons in 24 missiles (MIRV or MARV). Total weapons: 4,080. 10 Trident submarines replacing 10 Poseidon submarines would exceed SALT I limits by 26 launchers. |
| **MISSILE CHARACTERISTICS** | | |
| A-1 range: 1,200 n.m. (all now replaced) A-2 range: 1,500 n.m.; A-3 range: 2,500 n.m. Each submarine could destroy 16 Soviet cities. | C-3 range: 2,500 n.m., C-4 range: 4,000 n.m. (C-4 originally scheduled for use in Poseidon submarines.) | Trident I (C-4) range: 4,000 miles. Trident II designed range: 6,000 miles. Each submarine could destroy potentially 408 Soviet cities. |
| **REASON FOR BUILDING** | | |
| Move part of the U.S. strategic deterrent force to sea to attain greater survivability. | Provide stronger deterrent by moving a greater portion of strategic forces to sea. Increased range. | Greater Soviet threat assumed. Force modernization. Hedge against a Soviet technological breakthrough. |
| **SYSTEM STATUS** | | |
| First ship completed: December, 1959. Last ship completed: April, 1967. | 17 submarines in operation today; 9 undergoing conversion; 5 more planned. Program to be completed: 1976. | Construction begun prior to July 1, 1973. Lead ship to be completed in 1978. Money appropriated for fiscal year 1973 to begin work on 4 submarines, including lead ship. |

Mr. HARRY F. BYRD, JR. Mr. President, I suggest the absence of a quorum.

Mr. ROBERT C. BYRD. Mr. President, will the Senator withhold that?

Mr. HARRY F. BYRD, JR. I withhold the suggestion.

## TIME LIMITATION AGREEMENTS

Mr. ROBERT C. BYRD. Mr. President, this request has been cleared with Mr. THURMOND, Mr. TOWER, and Mr. BAYH and managers on this side of the aisle.

I ask unanimous consent that at such time as the Senator from Indiana (Mr. BAYH) calls up his amendment dealing with the SAM-D missile, the time on the amendment be limited to 4 hours instead of 6 hours, as earlier agreed to.

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

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that at 4 p.m. on Tuesday next, the Senate proceed to the consideration of the President's veto message, and that there be a 1-hour limitation for debate thereon, with the time to be equally divided between the Senator from Texas (Mr. TOWER) and the Senator from California (Mr. CRANSTON).

Mr. JAVITS. Mr. President, will the Senator yield on that?

Mr. ROBERT C. BYRD. I yield.

Mr. JAVITS. What was the measure that the Senator has reference to?

Mr. ROBERT C. BYRD. I am glad the Senator asked me. I should have identified it. It is S. 1672, to amend the Small Business Act.

Mr. JAVITS. That is a veto message from the President?

Mr. ROBERT C. BYRD. Yes.

Mr. JAVITS. I am just wondering—this is strictly personal, and the Senator will please feel free to say no, as I never stand in the way of the business of the Senate, but I would be accommodated if it could be a little earlier.

Mr. ROBERT C. BYRD. I would like to make it earlier but I believe the distinguished assistant Republican leader can speak better to this.

Mr. JAVITS. Addressing myself, then, to the distinguished assistant minority leader, I would say, speaking personally—and I never do—even though it embarrasses me, I would prefer to make it a little earlier. If the Senator cannot do it, he just cannot do it.

Mr. GRIFFIN. Mr. President, we are running into a problem because the Senator from New Jersey (Mr. CASE) on Tuesday has to attend the funeral of a very close relative or friend, and cannot be back until 4 o'clock.

Mr. JAVITS. Could I check with him and see? Maybe he could do it at 3:30.

Mr. GRIFFIN. Yes.

Mr. ROBERT C. BYRD. Mr. President, I withdraw my request for the time being, and 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. ROBERT C. BYRD. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

Mr. ROBERT C. BYRD. Mr. President, I renew my request with the understanding that it may be possible to begin debate on the override of the President's veto as early as 3:30 p.m. on Tuesday next; but the request would stand at 4 p.m. as of now.

The PRESIDING OFFICER. Is there objection to the request of the Senator from West Virginia? The Chair hears none and it is so ordered.

Mr. ROBERT C. BYRD. Mr. President, I have cleared this request with the distinguished managers of the military procurement bill. We have already gotten a time agreement on the Stevens amendment thereto.

I ask unanimous consent that on Monday next, immediately following the disposition of the Eagleton amendment on the XM–1 tank, the Senate proceed to the consideration of the Stevens amendment on housing allowances.

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

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that my name be inserted in lieu of the name of the Senator from New Hampshire (Mr. McINTYRE) with respect to the 15-minute order entered for Monday next.

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

## THE PROGRAM

Mr. ROBERT C. BYRD. Mr. President, the program for Monday is as follows:

The Senate will convene at 10 a.m. The junior Senator from West Virginia will be recognized for not to exceed 15 minutes. Then the distinguished assistant Republican leader will be recognized, following my order, for a period not to extend beyond 10:30 a.m.

At 10:30 a.m., the unfinished business, the military procurement bill, will be resumed, with the Goldwater amendment—dealing with the Air National Guard study—as the pending question. There is a 30-minute time limitation on that amendment and a similar limitation on amendments thereto.

Yea-and-nay votes may occur.

Upon disposition of the Goldwater amendment, action will begin immediately on H.R. 9639, the school lunch bill, under a time limitation of 2 hours, with one-half hour on any amendment.

Yea-and-nay votes very likely will occur.

Upon disposition of the school lunch program, action will resume on the unfinished business, the military procurement bill.

The first amendment to be taken up will be the amendment of the Senator from South Dakota (Mr. McGOVERN), and that is the so-called economic conversion amendment, under a time limitation not to exceed 2 hours.

Upon disposition of the McGovern amendment, the Eagleton amendment on the XM–1 tank will be called up, under a time limitation.

Yea-and-nay votes are expected.

Upon disposition of the Eagleton amendment, the Senate will take up the Stevens amendment dealing with housing allowances, under a time limitation. Other amendments to the military procurement bill will follow on Monday, with yea-and-nay votes expected.

Mr. President, I think that about wraps it up for Monday next.

## ADJOURNMENT TO 10 A.M. ON MONDAY, SEPTEMBER 24

Mr. ROBERT C. BYRD. Mr. President, if there be no further business to come before the Senate, I move, in accordance with the previous order, that the Senate stand in adjournment until 10 a.m. on Monday next.

The motion was agreed to; and, at 2:04 p.m., the Senate adjourned until Monday, September 24, 1973, at 10 a.m.

# SENATE—*Monday, September 24, 1973*

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

### PRAYER

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

O God, our help in ages past, our hope for years to come, be with us each step of our pilgrimage lest we falter and fail in doing Thy will. Teach us anew the lesson that a "nation under God" is a nation under Thy judgment as well as Thy providence. Grant us grace to repent of our sins and to turn from all the little evils which corrupt life and corrode the spirit. Make us supreme in compassion, mercy, and love, in fellowship with our fellow citizens and in brotherhood with all mankind—a mighty bastion of spiritual strength and moral power. Bring us more and more into oneness with Thyself and obedience to Thy laws, that we may have peace within our hearts; and that Thou, O Lord, mayest work through us to give peace to the world.

We pray in the name of the Lord, the Prince of Peace. Amen.

## THE JOURNAL

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the reading of the Journal of the proceedings of Saturday, September 22, 1973, be dispensed with.

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

## WAIVER OF THE CALL OF THE CALENDAR

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the call of the legislative calendar, under rule VII, be dispensed with.

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

## COMMITTEE MEETINGS DURING SENATE SESSION

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

The ACTING 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. 377, 381, and 382.

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

## AMENDMENT OF WILD AND SCENIC RIVERS ACT

The Senate proceeded to consider the bill (S. 921) to amend the Wild and Scenic Rivers Act, which had been reported from the Committee on Interior and Insular Affairs with an amendment, on page 1, after line 8, insert:

(c) In section 6(a) strike the comma after "donation" and insert in lieu thereof "or exchange,".

(d)(1) In section 4 strike subsection (a) and insert in lieu thereof the following:

"SEC. 4. (a) The Secretary of the Interior or, where national forest lands are involved, the Secretary of Agriculture or, in appropriate cases, the two Secretaries jointly shall study and submit to the President reports on the suitability or nonsuitability for addition to the National Wild and Scenic Rivers System of rivers which are designated herein or hereafter by the Congress as potential additions to such system. The President shall report to the Congress his recommendations and proposals with respect to the designation of each such river or section thereof under this Act. Such studies shall be completed and such reports shall be made to the Congress with respect to all rivers named in subparagraphs 5(a) (1) through (27) of this Act within three complete fiscal years after the date of enactment of this amendment: *Provided, however,* That with respect to the Suwannee River, Georgia and Florida, and the Upper Iowa River, Iowa, such study shall be completed and reports made thereon to the Congress prior to October 2, 1970. With respect to any river designated for potential addition to the National Wild and Scenic Rivers System by Act of Congress subsequent to this Act, the study of such river shall be completed and reports made thereon by the President to the Congress within three complete fiscal years from the date of enactment of such Act. In conducting these studies the Secretary of the Interior and the Secretary of Agriculture shall give priority to those rivers with respect to which there is the greatest likelihood of development which, if undertaken, would render the rivers unsuitable for inclusion in the National Wild and Scenic Rivers System. Every such study and plan shall be coordinated with any water resources planning involving the same river which is being conducted pursuant to the Water Resources Planning Act (79 Stat. 244; 42 U.S.C. 1962 et seq.).

"Each report, including maps and illustrations, shall show among other things the area included within the report; the characteristics which do or do not make the area a worthy addition to the system; the current status of landownership and use in the area; the reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included in the National Wild and Scenic Rivers System; the Federal agency (which in the case of a river which is wholly or substantially within a national forest, shall be the Department of Agriculture) by which it is proposed the area, should it be added to the system, be administered; the extent to which it is proposed that such administration, including the costs thereof, be shared by State and local agencies; and the estimated cost to the United States of acquiring necessary lands and interests in land and of administering the area, should it be added to the system. Each such report