

PRISONERS OF WAR—AMERICA'S
FIRST PRIORITY

HON. L. MENDEL RIVERS

OF SOUTH CAROLINA

IN THE HOUSE OF REPRESENTATIVES

Tuesday, August 4, 1970

Mr. RIVERS. Mr. Speaker, on July 30, 1970, in Paris, North Vietnam again rebuffed the efforts of the U.S. spokesman, Ambassador Philip G. Habib, to negotiate seriously on the prisoner-of-war situation. This comes as no surprise. A week prior—July 23—the North Vietnamese also turned a deaf ear to Ambassador Habib's eloquent statement. It is a matter of record that Hanoi has refused all efforts to resolve this humanitarian subject. By its own actions it stands in contempt of the humane standards expressed in the Geneva Prisoner of War Convention of 1949, by which it is bound. As a consequence our brave men in their hands have had to endure many years of internment under conditions that cause the gravest concern.

There may be some who prefer to forget about the prisoners and the conditions under which they are held. I am glad that so many among us in this body have made known their own personal concern about this. We owe it to these men who have given and are continuing to give so much that they be not forgotten. They will not be forgotten.

I commend these statements to the reading of every Member of the Congress because they show the grave concern of the American Government and our people in regard to the prisoner-of-war question. The remarks follow:

OPENING REMARKS BY AMBASSADOR HABIB AT 77TH PLENARY SESSION OF PARIS MEETINGS, JULY 30, 1970

Ladies and gentlemen, from the outset of these talks, we have endeavored to engage your side in serious discussion of the fundamental issues involved in restoring peace in Viet-Nam. We have put before you specific proposals on these issues, and we have offered to discuss your own proposals as well. We have indicated we are prepared to deal flexibly and reasonably with you on all aspects of these proposals in order to arrive at a set-

tlement which will truly allow the South Vietnamese people to determine their own future. We have asked repeatedly that you approach these talks in the same spirit.

Unfortunately, you have presented your demands as preconditions which you call upon us to accept before serious negotiations can begin. As a consequence, you have avoided meaningful discussion of the specific issues themselves.

Last week, for example, we attempted again to engage you in discussion of the urgent and relatively simple problem of proper treatment of prisoners of war. Your reply was completely unresponsive. You continued to avoid discussion of this question, one which need not—and, indeed, should not—be held in abeyance regardless of other developments and issues.

Ladies and gentlemen, renewed efforts for serious negotiation call for a positive and responsive spirit on both sides. They can be successful to the extent that these meetings are not misused for propaganda purposes but rather deal with the fundamental issues on the basis of genuine and relevant negotiation. They can be successful to the extent that there is discussion and agreement on the basis of actions by both sides in favor of peace.

OPENING REMARKS BY AMBASSADOR PHILIP C. HABIB AT THE 76TH PLENARY SESSION OF THE NEW PARIS MEETINGS ON VIETNAM, JULY 23, 1970

Ladies and gentlemen, last week I urged that you be ready to join us in serious discussion of the fundamental issues involved in these talks. Certainly one of the fundamental issues on which such discussion can start immediately is the urgent question of the treatment of prisoners of war. A few weeks ago, you stated the prisoner question can only be settled together, with an overall settlement of the war based on your ten points. You even insisted that we stop raising this issue at these meetings.

Ladies and gentlemen, the question of humanitarian treatment of prisoners of war cannot be avoided while the war goes on. On the contrary, it is precisely during a war that the question is of utmost importance. This is why there are accepted standards of international behavior toward prisoners, and why these standards must be applied wherever prisoners are held and from the moment of their capture.

You have frequently spoken of the proposals set forth in your ten points. We see nothing in these proposals that precludes serious discussion now of the proper treat-

ment of prisoners of war. Nor do we see anything that prevents you from putting into practice now the accepted international standards.

We see nothing, for example, that prevents you from opening your prisoner of war camps now to impartial outside inspection, as our side has done. We have many times mentioned the need for complete and official identification of all those prisoners of war you hold, and for all these prisoners you hold in South Vietnam, whom you have not only refused to identify at all, but who have never been allowed to correspond with their families despite the statements by your own representatives that they are permitted to do so. The early repatriation of seriously sick and wounded prisoners you hold is yet another matter of immediate concern.

Ladies and Gentlemen, your attitude so far on the prisoner of war issue is incomprehensible to American and world opinion. This is a matter which cannot be held in abeyance. It cannot await the end of the war.

Surely steps can be taken in regard to treatment and release of prisoners of war which would contribute to our renewed efforts here to bring peace to Vietnam.

Mr. Speaker, there is resting in the Committee on Foreign Affairs a bill which I introduced that makes it the sense of Congress that the prisoner-of-war matter be the first order of business at the Paris Peace Conference. That bill is House Concurrent Resolution 499.

The primary reason for this resolution is to notify the leaders of North Vietnam and the National Liberation Front that the Congress of the United States is united with the administration and the American people in demanding an immediate solution of the prisoner-of-war question. Regardless of other matters under discussion, this humanitarian problem, which is totally unassociated with either the military or political settlement of the issues, is, to us, our very first and highest priority.

Hearings have been held on this bill and, in my appearance before the chairman and members of the Subcommittee on National Security Policy and Scientific Development, I have urged them to report this matter favorably.

I am hopeful that this House will have an opportunity to express its feelings on this matter.

SENATE—Wednesday, August 5, 1970

The Senate met at 10 a.m. and was called to order by Hon. JAMES B. ALLEN, a Senator from the State of Alabama.

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

O God, who hast given us the night for rest and the day for labor and service, grant that we may use all the circumstances of this day to further a righteous order of human life. And as we work may we grow in the graces of the Master of Life.

Grant that we may use success as a way of thankfulness; use failure as a way to better effort; use praise as a way to humility; use disappointment as a way to patience; use pain as a way to endurance; use danger as a way of courage.

Flood our lives with the wisdom and beauty of Thy presence. Grant that the words of our mouths and the meditations of our hearts may be acceptable in Thy sight, O Lord, our strength and our Redeemer. Amen.

DESIGNATION OF ACTING PRESIDENT PRO TEMPORE

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

The assistant legislative clerk read the following letter:

U.S. SENATE,
PRESIDENT PRO TEMPORE,
Washington, D.C., August 5, 1970.

To the Senate:

Being temporarily absent from the Sen-

ate, I appoint Hon. JAMES B. ALLEN, a Senator from the State of Alabama, to perform the duties of the Chair during my absence.

RICHARD B. RUSSELL,
President pro tempore.

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

MESSAGE FROM THE HOUSE

A message from the House of Representatives, by Mr. Berry, one of its reading clerks, informed the Senate that pursuant to the provisions of section 2(a), Public Law 91-354, the Speaker had appointed Mr. ROGERS of Colorado and Mr. WIGGINS as members of the Commission on the Bankruptcy Laws of the United States.

The message announced that the

House had passed the following bills, in which it requested the concurrence of the Senate:

- H.R. 1747. An act for the relief of Jose Luis Calleja-Perez;
 H.R. 2849. An act for the relief of Anan Eldredge;
 H.R. 10704. An act for the relief of Samuel R. Stephenson;
 H.R. 13383. An act for the relief of Mrs. Marcella Coslovich Fabretto; and
 H.R. 13712. An act for the relief of Vincenzo Pellicano.

ENROLLED BILLS SIGNED

The message also announced that the Speaker had affixed his signature to the following enrolled bills and they were signed by the Acting President pro tempore (Mr. ALLEN):

- H.R. 1453. An act for the relief of Capt. Melvin A. Kaye;
 H.R. 1697. An act for the relief of Jack Brown;
 H.R. 1703. An act for the relief of the Clayton County Journal and Wilber Harris;
 H.R. 1728. An act for the relief of Capt. Norman W. Stanley;
 H.R. 2209. An act for the relief of Carlo DeMarco;
 H.R. 2241. An act for the relief of John T. Anderson;
 H.R. 2407. An act for the relief of Elbert C. Moore;
 H.R. 2458. An act for the relief of Frank J. Enright;
 H.R. 2481. An act for the relief of Comdr. John W. McCord;
 H.R. 2950. An act for the relief of Edwin E. Fulk;
 H.R. 3558. An act for the relief of Thomas A. Smith;
 H.R. 3723. An act for the relief of Robert G. Smith;
 H.R. 5337. An act for the relief of the late Albert E. Jameson, Jr.;
 H.R. 6375. An act for the relief of Amalia P. Montero;
 H.R. 6377. An act for the relief of Lt. Col. Earl Spofford Brown, U.S. Army Reserve (retired);
 H.R. 6850. An act for the relief of Maj. Clyde Nichols (retired);
 H.R. 9092. An act for the relief of Thomas J. Condon;
 H.R. 9591. An act for the relief of Elgie L. Tabor;
 H.R. 10662. An act for the relief of Walter L. Barker;
 H.R. 11890. An act for the relief of T. Sgt. Peter Elias Gianutsos, U.S. Air Force (retired);
 H.R. 12176. An act for the relief of Bly D. Dickson, Jr.;
 H.R. 12622. An act for the relief of Russell L. Chandler;
 H.R. 12887. An act for the relief of John A. Avdeef;
 H.R. 15118. An act to provide for the striking of medals in commemoration of the one hundredth anniversary of the founding of Ohio Northern University;
 H.R. 15354. An act for the relief of Anthony P. Miller, Inc.; and
 H.R. 17548. An act making appropriations for sundry independent executive bureaus, boards, commissions, corporations, agencies, offices, and the Department of Housing and Urban Development for the fiscal year ending June 30, 1971, and for other purposes.

HOUSE BILLS REFERRED

The following bills were severally read twice by their titles and referred, as indicated:

- H.R. 1747. An act for the relief of Jose Luis Calleja-Perez;
 H.R. 2849. An act for the relief of Anan Eldredge;
 H.R. 10704. An act for the relief of Samuel R. Stephenson;
 H.R. 13383. An act for the relief of Mrs. Marcella Coslovich Fabretto; and
 H.R. 13712. An act for the relief of Vincenzo Pellicano; to the Committee on the Judiciary.

THE JOURNAL

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the reading of the Journal of the proceedings of Tuesday, August 4, 1970, be dispensed with.

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

EXECUTIVE SESSION

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

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

The ACTING PRESIDENT pro tempore. The nomination on the Executive Calendar will be stated.

U.S. DISTRICT COURT

The assistant legislative clerk read the nomination of G. Thomas Eisele, of Arkansas, to be a U.S. district judge for the eastern district of Arkansas.

The ACTING PRESIDENT pro tempore. Without objection, the nomination is considered and confirmed.

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

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

LEGISLATIVE SESSION

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

The motion was agreed to, and the Senate resumed the consideration of legislative business.

ORDER FOR RECOGNITION OF SENATOR GOLDWATER TODAY

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the distinguished Senator from Arizona (Mr. GOLDWATER) be recognized for not to exceed 20 minutes following the remarks of the distinguished Senator from New Hampshire (Mr. MCINTYRE).

Mr. GOLDWATER. Mr. President, I would hope that my comments might fit into the 1 hour and a half of the Senator from New Hampshire, but I understand that the Senator from South Dakota (Mr. MCGOVERN) is to participate in the debate. I am not going to debate. I have some brief remarks on the subject in general; and if my remarks could be worked into the 1 hour and a half of the Senator from New Hampshire I would be happy to have

that done. It depends mostly on how much time the Senator from South Dakota (Mr. MCGOVERN) takes, because the speech of the Senator from New Hampshire is not a long one.

Mr. MANSFIELD. Either way, the Senator will have time.

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

Mr. MANSFIELD. Mr. President, will the distinguished Senator from New Hampshire yield briefly to me, without losing his right to the floor, or any of his time?

Mr. MCINTYRE. I am happy to yield to the majority leader.

U.S. AIR ACTIVITY IN CAMBODIA

Mr. MANSFIELD. Mr. President, I have been somewhat disturbed by news reports to the effect that U.S. airplanes are being used in close support of the Cambodian Army in hostilities within Cambodia itself.

It was my understanding, based on the President's declaration and promise, that this kind of support would be withdrawn completely from Cambodia itself on June 30, and that activities thereafter would be carried on only in connection with interdicting operations relative to the supply trails running through Cambodia into the area of South Vietnam where U.S. forces would be affected.

I believe the President. I have no doubt he meant what he said. I do not know if he is aware of what is going on in Cambodia at the present time. It seemed to take a little nudging, pressuring, and pulling to get the Pentagon to admit that such was the situation in Cambodia so far as air support of Cambodian troops and their operations were concerned.

I should like to point out to the Senate that if this continues, it could mean that we will have a repetition of what happened in Vietnam; namely, that, first, we will provide air support, then send advisers, then deploy troops, and thus get into a full-fledged war.

I had some grave question about the President's original penetration into Cambodia, but I recognized the fact that he exercised his judgment on the basis of the best information available to him and, thereby, assumed his responsibility as President and Commander in Chief.

As Senators, we likewise have responsibilities. We likewise have to render judgments.

I may be wrong. I hope so.

The President may be right. I hope so.

I should like to read, if I may, a few excerpts from an article published in the Washington Daily News of August 4, 1970, and ask unanimous consent that, at the conclusion of my remarks, the entire article, entitled "No Hurry To Rebuild—Profits, the Cambodian Phoenix" written by James Foster be printed in the RECORD.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered. (See exhibit 1.)

Mr. MANSFIELD. The excerpts read:

PHNOM PENH.—A building contractor from California turned up in Cambodia the other

day, looked around and seemed satisfied with the destruction he saw.

"When this war's over, it's going to take a lot of work to build this place back up. Business is a little slow at home you know."

While his presence may have been premature, his judgment was not. The war in Cambodia already has taken a heavy toll in property.

The U.S. embassy staff has tripled to more than 50. Marine guards wear sportshirts and loafers in keeping with the officially decreed low profile. U.S. military attaches, their tattooed arms and GI oxfords giving them away, carrying briefcases full of data relevant to next year's \$30 million aid program (up from \$8 million) under Jonathan Ladd, a former Special Forces colonel called out of Florida retirement.

Mr. President, I hope we are not treading the same primrose path in Cambodia that we have already traveled, to our sorrow, in Vietnam and in other parts of Southeast Asia.

EXHIBIT I

NO HURRY TO REBUILD—PROFITS, THE CAMBODIAN PHOENIX (By James Foster)

PHNOM PENH.—A building contractor from California turned up in Cambodia the other day, looked around and seemed satisfied with the destruction he saw.

"When this war's over, it's going to take a lot of work to build this place back up. Business is a little slow at home, you know."

While his presence may have been premature, his judgment was not. The war in Cambodia already has taken a heavy toll in property.

Two key Cambodian cities so far have escaped damage, Phnom Penh has taken no rocket fire. The airport four miles west and two bridges guarding entry on the north and east are untouched. Also spared is Kompong Som, the deep-water port on the southern coast, where the country's only oil refinery is located.

Other cities and villages have not been so fortunate.

And while the situation changes, all but two major highways usually are closed to normal traffic. The exceptions are Highway 5 northeastward to Battambang, a provincial capital, and on to Bangkok; and highway 1 to Saigon.

Many other highways, if not cut by the Viet Cong, are passable only to small vehicles able to thread their way around mine craters and to ford streams near blown bridges. These roads are closed to big trucks that haul fuel, food and arms.

The state railroad paralleling the highway to Battambang is cut in at least two points.

Townpeople seem in no hurry to rebuild because the damage grows daily as the war escalates and as more outsiders become involved.

Authorities confirmed this week that U.S. warplanes are being called in to help with "street fighting." But villagers complain not so much about the mass damage as about low-flying jets stampeding their livestock. Villagers say they waste their time looking for their animals.

The Cambodian high command explained—in a letter to an editor—that modern bombing and strafing tactics require low-altitude flying if the enemy is to be killed.

Militia girls giggle when frisked at a checkpoint. So does the soldier with the enviable job. But there was no giggling when 13 dead and more than 60 wounded of a force of 300 were hauled back from a battle last week, victims of the other outsiders.

Cambodians desiring American goods—a GI canteen or an M16 rifle, perhaps—go to Neak Leung, where South Vietnamese peddle such goods in a street bazaar. Prices are negotiable.

A Belgian shoe manufacturer has set up shop to make combat boots for the Cambodian army.

The Australians donated 50 land cruisers to the Cambodian government and made a public ceremony out of it. The French community in Phnom Penh, one exception to the trend, has dwindled from 5,000 to about 500. All French military advisers and teachers are gone.

The U.S. embassy staff has tripled to more than 50. Marine guards wear sportshirts and loafers in keeping with the officially decreed low profile. U.S. military attaches, their tattooed arms and GI oxfords giving them away, carry briefcases full of data relevant to next year's \$30 million aid program (up from \$8 million) under Jonathan Ladd, a former Special Forces colonel called out of Florida retirement.

Mr. GOLDWATER. Mr. President, will the Senator from Montana yield, if the Senator from New Hampshire will allow me?

Mr. MANSFIELD. I ask unanimous consent that this time not be taken out of the time of the distinguished Senator from New Hampshire.

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

Mr. MCINTYRE. I am happy to yield to the Senator from Arizona.

Mr. GOLDWATER. Mr. President, I do not believe that I know any more details of the reports of the bombing in Cambodia than does the distinguished majority leader, because I think both of us have read only what is in the newspapers.

Mr. MANSFIELD. That is correct.

Mr. GOLDWATER. But I do not recall that the President's statement was an exact statement that we would refrain from the use of tactical air or strategic air support in Cambodia.

As the Senator from Montana well knows, the Ho Chi Minh trails—and there are literally hundreds of them—come down through Laos along the border and continue into Cambodia and then filter into South Vietnam.

As I have said before, the enemy is the same in Southeast Asia, whether he is in Cambodia, Vietnam, Laos, or Thailand.

I recall, in World War II, that we did not hesitate to attack the common enemy wherever we found him. We did not declare a separate war when we went into Italy, Africa, or Normandy, or a separate war in the Pacific as we island hopped all the way up to final victory.

So I think we would expect that there would be occasion when our tactical air would be called upon for tactical support, but mainly for the type of attack or interdiction that we have been engaged in for a long, long time in Laos.

I must say that I have been puzzled on the floor lately to hear distinguished members of the Foreign Relations Committee speaking as if our actions in Laos were something that they had not heard of. Most of these gentlemen have been to Thailand where the operations emanate. They must have visited bases whose only purpose for being was to maintain the bombing of North Vietnam tactically, and now to bomb the Ho Chi Minh Trail.

Unless some evidence comes up that we might be engaged in what could be called

indiscriminate bombing—which I do not think we will find—I think that we should not only expect, but should also be willing, to defend the attacks on a common enemy.

I do not quite agree with my friend's analysis of the primrose path, because I would say that when we decided to go into this war, if we had used our airpower reasonably, as it should have been used, this war would not have lasted long enough to get one load of troops over there.

We have continued to refuse to use our airpower, on the part of the Kennedy, Johnson, and, I must say, the Nixon administration, as airpower has been developed and can properly be used.

I would hope that we would not be overly critical before we know more about it. Even if it is the type of bombing that I think it is, I think it is part of this war. I think it is necessary to get our men home and to end this war as fast as we can.

Mr. MANSFIELD. Mr. President, I can appreciate the remarks made by the distinguished Senator from Arizona, who has great experience in the Air Force—none greater in this body and none greater in the Congress, in my opinion. But I would look upon this as indiscriminate bombing. It is a long way from the Ho Chi Minh trails where these operations have taken place. And in my opinion, therefore, there is no connection with the President's thesis.

Furthermore, I see no connection between references to the Second World War, in either the Pacific or in Europe, and the present tragedy in Vietnam which, in my opinion, was a mistake in the first place and has been a continuing tragedy ever since.

It has cost us approximately 53,000 dead and about 285,000 wounded, for a total of somewhere around 335,000 to date, with no end in sight.

I hope devoutly that what is being done in these indiscriminate close support activities of the Air Force in relation to Cambodian battles waged by Cambodian soldiers is not being done contrary to the orders of the President of the United States, who was quite explicit in what he had to say relative to our withdrawal from Cambodia and what activities subsequent to that withdrawal we would continue to undertake.

I have great faith in the words of the President of the United States, and I hope that his orders are being upheld and are not being distorted.

Mr. GOLDWATER. Mr. President, I might say that I am sure the President has knowledge of this. I am sure that if the President felt it was contrary to his promise to the country, this bombing would not be taking place.

I would suggest that it is difficult to tell whether it is indiscriminate bombing or tactical air support. If we are talking about interdiction, there is no set rule as to where interdiction has to take place. If the Communist forces, as we are led to believe, have spread out into parts of Cambodia, I suggest that they have to be supplied. I would suggest that those places might be extensions of the Ho Chi Minh Trail and if tactical attacks

have to be made there, I think it would be to our extreme advantage to continue.

I join the Senator from Montana in saying that I think this war was a mistake, but not in the same way that the Senator infers.

I think that from its inception it has been fought in the wrong manner.

When the decision was made to go into this war, we failed to make the decision to win it. As the Senator knows, having served his country so faithfully in three of the forces—and I might say as an Air Force veteran that I would feel a little hurt if he would not give us a crack at answering him—when one goes out to fight, he is not going to tie one hand behind his back and think he will come back with all of his teeth.

I think that the war has been conducted horribly and that it will go down as one of the worst conducted wars in all our history.

I hope, with the Senator, that this war will come to a quick end and that we never again will engage in a war without at the same time using the muscle we have with which to win it.

Mr. MANSFIELD. Mr. President, may I say that I hope we never engage in a war on the Asian mainland, or anywhere else, unless the security of the United States is threatened. And in my opinion our security is not threatened by Vietnam.

As far as a comparison between the Second World War and this war is concerned, there was a good deal of justification for our entering the Second World War. There was no justification for our entering a war in Vietnam which has now become an Indochina war and may well become a Southeast Asian war.

Mr. President, based on the latest figures furnished me by the Department of Defense, as of July 30, 1970, 284,824 Americans have been wounded, 43,134 Americans have been killed in combat, and 8,283 have been killed in noncombatant activities in Vietnam, for a total death number of 51,417.

If we add the 51,417 to the 284,824 wounded, we get a total number of casualties of over 336,000 in this war, with no end in sight, with no light at the end of the tunnel, with the negotiations in Paris—if we can call them such—on a dead center, and with the only ray of hope that I can see being the statement made by Ambassador Bruce on yesterday in which, I believe, if I recall the press accounts correctly, he stated that he had been given either great or wide latitude in his discussions with the other conferees at the Paris negotiations.

Again I want to say—and I say this most respectfully—that I hope with respect to what the President said on June 30—and I believe him—that his orders are being carried out and that in no way, shape, or form, are they being contravened with regard to Cambodia.

I thank the distinguished Senator from New Hampshire for yielding.

COMMITTEE MEETINGS DURING THE SENATE SESSION TODAY

Mr. MANSFIELD. Mr. President, I ask unanimous consent that all committees

be authorized to meet during the session of the Senate today.

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

ORDER OF BUSINESS

The ACTING PRESIDENT pro tempore. At this time the Chair, in accordance with a previous order, recognizes the Senator from New Hampshire for 1½ hours.

B-1—WHICH DIRECTION?

Mr. McINTYRE. Mr. President, I indicated in the course of an earlier review of the actions taken by the Research and Development Subcommittee on the fiscal 1971 budget that I wanted to speak later and in greater depth on a number of specific programs in that budget.

One of these programs is the B-1, the new manned bomber desired by the Air Force as a replacement for the B-52's now in our inventory.

The Air Force describes the B-1 as a four-engine strategic bomber in the 350,000- to 400,000-pound gross-weight class, with the ability to deliver large nuclear or nonnuclear payloads over great distances—more than 6,000 miles. The bomb bay will hold considerably more ordnance than that of the aging B-52's the B-1 will replace. In addition to gravity bombs, the B-1 will have a higher standoff capability than the much larger and slower B-52 because of its greater internal complement of attack missiles. This is the bomber we discussed last year known as the AMSA.

The B-1 program is one of the most expensive now in the research and development stage. The total program cost is already estimated by the Air Force at \$9.4 billion, with research and development expenditures themselves predicted to top the \$2 billion mark. These estimates will inevitably increase as a result of future inflation in our economy, which is not at present reflected in them. In addition, the estimates do not include operating costs for the B-1, costs of the SRAMS and SCADS which the B-1 will carry, or the tanker investment and operating costs which in an economic sense are an integral part of the costs of the B-1 itself. So even if present B-1 cost estimates are on target, the B-1 will be a tremendously expensive system.

The B-1 program may also be one of the most vital from the standpoint of our national security. Our land-based strategic missiles are becoming increasingly vulnerable to possible enemy attack. Moreover, manned bombers have several capabilities not possessed by missiles of any kind.

Both because of the potential costs of the B-1 and because of its possible importance to our security, it is essential that its progress in the research and development stage be closely monitored by the Congress. In its work this year the Research and Development Subcommittee has reviewed in depth the present status of the B-1 program. As chairman of the subcommittee, I would like to make a detailed report on that review at the present time.

FISCAL 1970 BACKGROUND

In testimony to the Armed Services Committee a year ago, the Air Force stated that initiation of engineering development on the B-1 was planned for November 1, 1969. The \$100.2 million requested and appropriated for fiscal year 1970 was consistent with this proposed timetable. Air Force plans then called for an initial operational capability—IOC—for the B-1 of mid-1976.

During the course of the year, however, decisions within the Department of Defense itself resulted in changes in the B-1's proposed schedule. Initiation of engineering development did not occur until June 5, 1970, when an announcement was made that contracts for the program's system integration and engine development efforts had been awarded to North American Rockwell Corp. and the General Electric Co., respectively. Selection of the avionics contractor is not expected now until the fall of 1970.

As a result of these delays, only \$35 million of the \$100.2 million appropriated last year has been placed on contract to date, and these funds should support both contractors until October 1970. The remaining \$65 million of last year's funds will also be available for use in fiscal 1971.

Concurrent with these delays in the use of fiscal 1970 funds, there has been a slippage in the planned IOC date for the B-1 to mid-1978.

SUBCOMMITTEE AND COMMITTEE ACTION

This changed situation was reflected in the Air Force request of \$100 million for the B-1 program for fiscal 1971. Had the program proceeded as anticipated last year, additional funds undoubtedly would have been sought.

Notwithstanding this fact, the Research and Development Subcommittee recommended and the committee accepted a \$50 million reduction in the Air Force request. The subcommittee had several rationales for this reduction, each of which I would like to discuss in turn.

First, Air Force testimony indicates that our B-52 G's and H's, with certain modifications, will be capable of operation into the 1980's. Accordingly, the mid-1978 IOC date for the B-1, like the mid-1976 IOC date before it, is not critical. It is not clear in any event that the committee's reduction will necessitate a slippage in the mid-1978 date, since the 7-month delay in initiation of engineering development was coupled to a 24-month delay in initial operational capability. Consequently, any additional slowdown caused by the reduction in fiscal 1971 could be offset by a step-up in the presently planned later program.

Second, since selection of the avionics contractor was not made concurrently with the selection of the systems integration and engine contractors, the specific design of the avionics package will not have been selected for at least 3 months. Once it is selected, an additional period of time will be required to refine the design of the avionics package and to complete the design efforts required to integrate the avionics subsystem, the engine subsystem, and all other minor sub-

systems and components into the final design of the complete weapon system. These efforts will be time consuming, even without the complications inherent in the development of such an advanced and complex weapon system, and they should require a slower than planned rate of buildup of contractor engineering personnel before fabrication of developmental hardware and major portions of the weapon system should commence.

Third. The development program as presently planned would require \$569 million in fiscal 1972 and \$560 million in fiscal 1973. The subcommittee was concerned that this very large dollar requirement for fiscal 1972 might be unrealistic in view of the fact that the administration itself plans on cuts in defense spending for fiscal 1971 and fiscal 1972 in the amounts of \$1 billion and \$6 billion, respectively. The subcommittee doubted whether the \$6 billion cut in defense spending in fiscal 1972 would permit support of the B-1 program at a \$569 million level, even if this were technically feasible. At a \$569 million level, the B-1 program would be the largest single program in the research and development stage and would consume itself a full 8 percent of a \$7 billion R.D.T. & E. budget, a questionable allocation of resources. The subcommittee felt that if the program was slowed down in fiscal 1971, its funding curve would peak and level off several months later than planned. This would delay the buildup of contractor effort and expenditures in fiscal 1972, permitting something of a reduction in fiscal 1972 funding.

COST CONSIDERATIONS

Finally, the subcommittee was influenced also by a concern over the long-term costs of the B-1 program and the openness of the Air Force in its discussions with the Congress about the magnitude of these costs.

As I indicated earlier, the presently projected total program cost for the B-1—the cost of both research and development and production—is \$9.4 billion. This estimate is predicated on a unit production cost for the aircraft of \$29.2 million, still within the \$25 to \$30 million range projected by Secretary Laird last year.

First. B-1 unit costs. One of the subcommittee's concerns was the reliability of this \$29.2 million estimate.

The stability between last year's estimate and that presently being made is not itself any guarantee of reliable cost estimating. For there have been during the past year several changes in the B-1's specifications which, if last year's projection was valid, should have resulted in reductions in the estimated price per copy.

These changes include a 25 percent decrease in the number of SRAM's and SCAD's carried internally and about a 20 percent decrease—from supersonic to high subsonic—in the plane's low altitude speed. Most important, however, the size of the avionics pack planned for the B-1 was greatly reduced—an action which in itself should have produced savings of \$5 to \$6 million per copy.

Not only does the absence of these savings cast doubt on the validity of last

year's estimates. It also lends credence to those who claim that the present \$29.2 million projected unit cost for the B-1 is still unrealistically low.

I have heard it argued, for example, that even crude comparisons between the B-1 and other aircraft in our inventory demonstrate the inaccuracy of this \$29.2 million estimate. The FB-111, it is pointed out, has a maximum gross take-off weight and a weight unloaded which is approximately one-third that of the proposed B-1 and has avionics which are slightly less sophisticated. This tends to suggest, the argument goes, that the B-1 should be projected to cost three times as much as the \$13 million recently paid per copy for the FB-111. This, of course, would result in a cost per copy for the B-1 of \$39 million or 33 percent more than the present estimate.

I must admit in all candor that I do not have the expertise with which to evaluate the accuracy of the present \$29.2 million estimate per copy for the B-1. I do know that the FB-111 comparison I have just cited—and similar ones have been made between the B-1 and such planes as the C-5A and the F-15—is very crude indeed.

But the absence of any reduction from last year's estimate despite the various changes made and the history of unreliable early cost estimating associated with so many recent aircraft programs, do, in the opinion of the subcommittee and the full committee constitute grounds for doubt.

And it should also be noted that the cost savings occasioned by the recent reduction in the size of the avionics pack may ultimately be lost. This reduction was made possible only after a conscious decision to design the avionics pack to meet a considerably lower enemy threat than the original pack was designed to counter. Room was left, in conjunction with the cutback, for later avionics growth if the threat necessitates. Thus, while the cutback itself appears to be a wise and cost-conscious decision, it may still prove to be temporary in nature. If so, there will be a cost increase of \$5 to \$6 million in the B-1's presently planned price per copy, notwithstanding the absence of a similar visible decrease as a result of the cutback itself.

It was the subcommittee's hope that its concern over the possible long term costs per copy of the B-1 would be reflected in the committee report. As the subcommittee envisaged it, the report would call upon the Air Force to conduct, during fiscal 1971, a continuing review of the B-1's specifications, with particular emphasis upon: First, the possibility of further reductions in its high altitude supersonic speed and payload capacity, and, second, the possibility of cost savings and performance improvements being achieved by increasing the B-1's standoff missile launching capability and decreasing its reliance on low-altitude penetration of its targets.

The purpose of such language in the report would have been to make clear to the Air Force the committee's concern that B-1 costs be kept as low as possible consistent with the performance of its mission, in part because the ultimate

magnitude of those costs might well determine eventual congressional approval or disapproval of a B-1 production program.

The subcommittee recognized, in making its recommendation of specific areas for emphasis in its proposed review, that considerable attention has already been devoted to them. It recognized, also, however, that many former defense officials have argued against any supersonic speed capability for the B-1, on the grounds that this is of primary utility only in the secondary, tactical role contemplated for the plane, and that elimination of it would result in 20- to 30-percent savings in the B-1's cost per copy.

Similarly, it recognized that the projected payload capacity of the B-1, even after the recent changes, is considerably greater than that of the B-52.

And the subcommittee and the full committee wanted assurance that the concept of a basically standoff missile launching aircraft, rejected after cancellation of the Skybolt project several years ago, had been subject to a thorough recent examination.

I can only regret that the committee report—probably for reasons of space but perhaps also out of a desire to minimize implied criticism of the Air Force—failed to address more fully the question of long term B-1 unit costs. The report does refer to "possible studies" which the Air Force might take along some of the lines I have discussed. I sincerely hope that the Air Force will take it upon itself to pursue a detailed review of the B-1's specifications during fiscal 1971 and that it will report to the committee next year on the results of that review. The slowdown in the B-1 program which the committee has endorsed in major part for budgetary and program management reasons will provide ample time in which to conduct such a review.

Second. Associated tanker costs. The subcommittee was also concerned by the information it uncovered regarding the long term tanker costs which may ultimately be associated with the B-1 program.

The Air Force now states that it intends to use with the B-1 the KC-135 tanker presently servicing our B-52's. It claims that the KC-135's service life will extend into the late 1980's and possibly into the 1990's.

In its original budget submission, however, the Air Force requested \$500,000 for fiscal 1971 for use in studies which would directly support the initiation next year of a new tanker development program leading to replacement of the aging KC-135 tanker force.

For some reason or another, the Air Force subsequently reversed its position. The KC-135 is adequate, it maintains, and the study funds had been intended for another purpose all along.

The Air Force does admit, however, that modifications in the KC-135 may be necessary if it is to attain the now projected service life, and if its prelaunch survivability is to be made consistent with that of the B-1. On the latter point, it is a simple fact of life that the KC-135's reaction time from warning of at-

tack to escape from danger, while consistent with that of the B-52, is considerably less than that projected for the B-1. Just what modifications will be required and what their costs will be is not fully known at the present time.

I also found it interesting, in light of the present official Air Force position on the need for a totally new tanker, to read in the June 20th edition of the Armed Forces Journal that a debate is now underway within the Air Force as to whether a new tanker may really be needed after all. The piece in question, after describing the official position I have just outlined, went on to say:

But Air Force Officers who will operate the B-1 take a different view. SAC Commander General Bruce K. Holloway told the Journal last week: "We need a new tanker no matter what kind of bombers we have. The problem is not so much the life of the tanker, but we need an aircraft that can offload more fuel."

Some Air Force operations officers, the Journal article concluded, are suggesting the C-5A for the job.

Interestingly enough, Air Force officials staunchly defended the KC-135's ability to offload sufficient fuel in response to questioning before my subcommittee.

The reason why the long-range tanker costs are so associated with the B-1 program are so important is very simple. The tanker-to-bomber ratio for the B-1 is expected to be much the same as the 3 to 2 ratio for the B-52, in which case a great many tankers might ultimately be required. The Air Force indicated, in response to a written inquiry addressed to them by my staff, that the procurement of 255 modified C-5A's for use as tankers—if needed—could be expected to cost \$27.5 million per copy, for a total cost of over \$7 billion. Under the circumstances, I feel that the subcommittee's concern over the lack of hard data regarding tanker costs was well justified.

It was the subcommittee's hope that the subject of tanker costs also would be dealt with in the committee report. If a \$7 billion tanker procurement program is required, the net effect will be to balloon tremendously the real economic costs to the Nation of the B-1 program.

I believe very strongly that Senators and Congressmen should be aware of the program's possible cost implications in determining whether to support its continued funding. Such awareness would have been facilitated had the committee report called upon the Air Force, during fiscal 1971, to conduct an in-house study to determine with greater precision the tanker costs realistically expected to be associated with the new B-1 bomber program. I think it is clear that the Congress will want next year better information both on the need for and possible costs of alternative new tankers as well as the costs inherent in alternative modification programs designed to upgrade the KC-135 fleet. I trust that the Air Force will take it upon itself to provide such information to the committee in conjunction with its budget submissions next year.

A NEED FOR THE B-1?

The committee report, in commenting on the recommended \$50 million reduc-

tion in fiscal 1971 B-1 bomber funding, stated:

In making this reduction the Committee wishes to emphasize that it fully supports the concept for the B-1 advanced manned strategic aircraft. The essentiality of maintaining a deterrent posture with a mixture of all three elements of our strategic force—bombers, land-based missiles, and sea-based missiles—is recognized.

Others, I am sure, would argue for a diametrically opposite position—a decision now that the B-1 will not be needed and that it would be safe to dispense with further funding of it.

I myself cannot support either of these positions. In my view, the most reasonable and prudent course would be to suspend judgment on our ultimate need for the B-1, but to proceed now with the plane's orderly and controlled development.

Let me make clear at the outset that I cannot buy all of the arguments generally cited by all-out supporters of the B-1 program.

I question, for example, the importance of its being used in a show of force. While this is a convenient capability to have, it alone would not justify so costly a program.

Nor would the utility of bombers in a tactical warfare role. We are buying a wide variety of tactical aircraft, specifically designed for the performance of this function. Granted that the B-1 would have a greater ton-mile economy than these aircraft, it would make little sense to use the plane in a hostile environment. In almost all imaginable situations, the importance of the target objective sought would not be commensurate with the possible cost in losses of B-1's.

Nor do I want to foreclose further argument about our continued possession of a triple deterrent, composed of land-based missiles, sea-based missiles, and bombers. What we need is a deterrent sufficient and reliable enough to dissuade potential adversaries from launching a nuclear attack against us. And we should develop such a deterrent as cost-effectively as we can.

At the same time, however, the B-1 may well prove to be a necessary part of the sufficient deterrent to which I have just alluded.

For one thing, there might be serious risks involved in reliance solely on a sea-based deterrent.

While our sea-based missiles are secure today, can we be sure they will remain secure always? It has been the history of military technology in recent decades that many things once thought impossible have become realities only a few years later. The ULMS program, endorsed by the committee, is but one example of what we can do and are doing in our R. & D. programs to improve the survivability of our sea-based missile force. But if Soviet technology is allowed to be concentrated in the ASW field, can we be sure that no breakthroughs will occur?

There is another consideration also. An incapacitation of our sea-based missile force might well be achieved without a direct assault on American submarines

themselves. Continuous communication with the fleet, absolutely essential to the preservation of its strategic usefulness, might be seriously impaired by a surprise strike on land-based command centers. While our present communications might well be improved, the possibility exists that the low data handling capability of truly secure communications systems would not allow the in-depth communications needed for adequate implementation of our strategic nuclear plans.

Finally, there is the possibility that a solely sea-based strategic force could be made viable—but only at a cost every bit as large as the cost of maintaining additional strategic systems. The ULMS program itself should give us pause for thought in this regard. Its precise cost parameters cannot be estimated at the present time, but it is clearly going to be a very expensive system.

And when one looks beyond a sea-based deterrent, the case for a new bomber has considerable weight. Despite the increasing vulnerability of all land-based strategic forces, there are, ironically, at least two considerations which make manned bombers perhaps more important to our security than they were a few years ago, at a time of lesser vulnerability. I think these points should be considered carefully by those who argue that bombers are outmoded in the present "missile age."

The first consideration is the bombers' recall capability. They can be put in the air, out of danger of enemy attack, without a commitment to release their nuclear payloads.

Bomber critics, of course, have tended to disparage bombers' recall capability, claiming that it is offset by their much slower speed. They point out that it takes less time for a strategic missile to cover the entire distance from its silo to its target than it does for a bomber to deliver its weapons after it is within range of an enemy's air defenses and its recall capability negated. Thus, they argue, one need only wait longer with one's missiles themselves in case of doubt as to whether an attack is underway.

But this argument entirely misses the point. One cannot wait longer with confidence in an age of vulnerable land-based forces. One's alternatives—absent a bomber and its recall capability—are really rather ominous. When blips appear on the radar screens, one must either launch on warning or trust to the survivability of increasingly vulnerable land-based missiles.

Adoption of the first alternative would increase the risk of an accidental nuclear holocaust, a prospect which cannot be tolerated. Yet adoption of the second is scarcely more acceptable. If one is willing to absorb a first strike against increasingly vulnerable land-based missiles, there will come a time when it would be more sensible to simply phase out those missiles and rely exclusively on a sea-based deterrent force.

The second consideration to which I referred a moment ago is one which has received surprisingly little attention. This is the "box phenomenon" whereby land-based missiles and bombers, both increas-

ingly vulnerable by themselves, become less vulnerable if employed together.

Consider for a moment the problem posed for an adversary who contemplates a coordinated SLBM attack on our bombers and ICBM attack on our land-based missiles.

If he seeks to hit our bombers and missiles simultaneously, the ICBMs—which have a much greater flight time—will have to be launched first. When they are picked up on our radar screens, our bombers could be put safely into the air.

If he employs a simultaneous launch instead, any destruction of our airfields—which is itself unlikely until after our bombers have escaped—would provide more than sufficient evidence of a nuclear attack to justify a "launch on warning" of our missiles themselves.

Accordingly, it may well be that our wisest future course would be to increase our reliance on a sea-based deterrent, but to couple this with a gradually reduced land-based force, composed of both missiles and bombers.

It is for reasons such as these, Mr. President, that I believe we should move ahead now with the development of a new manned bomber. The points I have made are by no means exhaustive of all that might be said on the subject. I offer them primarily as points to be considered, well aware of the fact that considerable thought, research, and planning lie ahead before a B-1 production decision can rationally be made.

Surely a factor which will affect that decision as much as any other will be the progress made in the strategic arms limitation talks—SALT—now underway in Vienna. Any number of agreements reached at the talks could have a bearing on our need for the B-1 but I will address myself now to only three possibilities.

One is an agreement on rival ABM systems, the main focus of the talks at the present time. I make no claim of inside information on the present status of these talks. If press reports can be believed, however, we may be headed in the direction of a National Capitol Area—NCA—type ABM agreement, whereby all ABM systems except those in defense of Moscow and Washington would be ruled out.

Such an agreement would be a landmark in Soviet-United States relations. It would do much to curtail a strategic arms race which has been out of control for far too long. By itself, however, it would do nothing to offset the increasing vulnerability of our land-based strategic missiles. Accordingly, it would not clearly eliminate a need for the B-1.

But an ABM agreement might be followed later by an agreement on MIRV's, or an agreement of some other kind reducing the threat to land-based strategic forces. And that agreement, in turn, might be followed by the adoption of antisubmarine warfare—ASW—restrictions, increasing the survivability of our sea-based forces also. Under these circumstances, our need for the B-1 would be significantly reduced.

But agreements of this kind will not be reached in a matter of months. It may well take years before they are worked out and then reduced to writing.

Accordingly, while it might be feasible to delay large-scale engineering development of the B-1 for perhaps another year, I believe it would be unwise to do so. Since our security will require the initiation of development either this year or next, it seems far more advisable to begin now and to do so at a more controlled pace. In this way, we may well be able to eliminate costly mistakes which otherwise might occur.

There are those who will argue that a decision to begin development of the B-1 amounts, willy-nilly, to a decision to buy the system. The initiation of development, they point out, will create positions of power, jobs, and profits firmly tied to the program's success, and these, they note, will surely be translated into strong political pressures. Congress itself, they argue, will be reluctant to ever cancel a program in which \$2 billion of R. & D. funds have been sunk.

Regrettably, there is some truth in these assertions. The degree of truth will depend in large measure on the ability of Senators and Representatives to familiarize themselves with the factors really affecting our need for the B-1, and it will depend also on their willingness to reject unsophisticated versions of the "sunk costs" argument, their willingness to recognize that whether \$2 billion has been spent to date may be less important than whether \$10-\$20 billion additional should be authorized.

Incidentally, I was quite heartened by the Armed Services Committee's decision to direct termination of the Cheyenne development contract despite the prior expenditure of \$168 million on that system. The committee recognized that continuing with the program would entail the expenditure of over \$1.5 billion more.

President Nixon spoke in his state of the world message about the necessity of proceeding with programs the ultimate need for which is not established. He said:

Because planning mistakes may not show up for several years, deferral of hard choices is often tempting. But the ultimate penalty may be disastrous. The only responsible course is to face up to our problems and to make decisions in a long-term framework.

As we proceed with development of the B-1, we must do all we can to assure its availability, should it be needed, at a time and cost within our means. It is toward this end that the work of the Research and Development Subcommittee will continue to be directed.

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

Mr. McINTYRE. I am happy to yield to the Senator from Wisconsin.

Mr. PROXMIRE. I want to tell the Senator from New Hampshire that his speech is one of the most useful speeches I have heard on defense procurement. It is useful in many ways. It is obviously an honest statement. It deals specifically with the cost, with the performance, and with the planning of that weapons system, and it concedes some serious shortcomings. It also goes into careful detail as to why, in the judgment of the Senator from New Hampshire, with all the difficulties involved, this system is necessary.

I should like to ask the Senator from New Hampshire this question: The Senator stated that the projected total programs cost of the B-1 is \$9.4 billion?

Mr. McINTYRE. That is the Air Force estimate for research and development and procurement only.

Mr. PROXMIRE. In the light of the Senator's speech today, does he believe that estimate is realistic?

Mr. McINTYRE. No, I cannot say that it is realistic. In the first place, I doubt whether the \$29.2 million estimate per copy for the B-1 itself is realistic. Crude cost comparisons with other aircraft now in our inventory or in development indicate that a more accurate estimate would be \$10 million—even \$20 million—higher. And when other costs admittedly not included in the Air Force estimate—such as a new tanker—are added in, the real economic costs of the B-1 program might well be \$20 billion.

Mr. PROXMIRE. In other words, it could be 100 percent higher than this estimate?

Mr. McINTYRE. Yes.

What the R. & D. Subcommittee is trying to point out is that this is going to be a tremendously expensive program. Just consider inflation for a minute. The program is now looking for an IOC date of 1978. That is 8 years away. Inflation alone will raise the present estimates considerably before then. That is why we are stressing the need to keep costs down. We want the Air Force to study and re-study all alternatives before committing themselves to a final design. This year they have suggested that they do not need supersonic speed at low altitude, but they still want it at high altitude. We want them to consider whether they need it at either altitude.

Mr. PROXMIRE. The Senator does point out some changes that have been made in the specifications. Some people might call them a deterioration of standards and some might call them a change. At any rate, the standards are not as exacting as before, and the Senator points out that the cost per copy should have been reduced by some \$5 or \$6 million. Yet, the Air Force has maintained that estimate of around \$29 million per copy.

Did the Defense Department give any reason why they were unable to reduce the cost, in view of the fact that they are eliminating some of the costly elements involved?

Mr. McINTYRE. The original estimate was what is called a planning estimate. I think that we in the Congress fail to appreciate at times how difficult it is to estimate before any hardware development begins either the exact specs of a system or its exact price. We must give the services some leeway in this regard. At the same time, we do have a right to request "good faith" estimates. I have doubts whether that is what we are getting on the B-1.

So we are asking the Air Force, in effect: "You have reduced your avionics pack by half and have reduced the speed at low altitude and the cost is the same. Why did we not get a reduction?"

Mr. PROXMIRE. What was their answer?

Mr. McINTYRE. They really have not given a satisfactory answer.

Mr. PROXMIRE. I might conclude—the Senator from New Hampshire might strongly disagree—that this is a concealed overrun. An overrun of at least 30 or 40 percent is involved already, and of course we are 7 or 8 years away from even beginning production. There is already an overrun of 30 to 40 percent.

Mr. McINTYRE. The Senator cannot say that.

Mr. PROXMIRE. Why not?

Mr. McINTYRE. It is meaningful to talk about an overrun on a system only in relation to changed cost estimates on a final design. The design of the B-1 has not yet been finalized, and I think we should encourage further study before it is finalized.

Mr. PROXMIRE. The Senator has conceded that they should have saved \$5 to \$6 million per copy by this reduction. They have saved nothing. It still costs \$29 or \$30 million; and it would seem to me, on this basis, that the costs have escalated above the initial estimate. I call that an overrun. One can call it cost growth. Whatever it is, it is higher than it was to begin with.

Mr. McINTYRE. There is no doubt that, so far as the subcommittee is concerned, we were quite surprised to see a reduction in the size of avionics pack and in the low altitude speed and yet no corresponding reduction in the cost per copy.

Mr. PROXMIRE. One of the most shocking revelations of the Senator is the ballooning of the costs with the tanker fleet, which he points out is essential. If we are going to have this, we must have some way of fueling and refueling. The Senator says, on page 7 of his speech, that there is tremendous ballooning of costs.

Mr. McINTYRE. I said the subcommittee cannot really tell whether the Air Force is going to need a new tanker to go with the new B-1 bomber. The Air Force position is that they do not need it, that some modifications have to be made with the KC-135, but that they do not need a new tanker.

The purpose of my proposed study would be to require the Air Force to lay out all the information relevant to an informed judgment on the question. If a new tanker is crucial, we should know this in evaluating the B-1 program. If, on the other hand, it is a comparative luxury, its ultimate purchase really hinges on the availability of overall defense funds and the priority of other defense programs, we should know this, too, in case the Air Force later changes its mind and starts arguing for a tanker. It may well be that it is just too early to say whether a new tanker will be needed. But if that is the case, we should know just what the contingencies really are. After all, it is the possibility of 7 billions of dollars of expenditures which are at stake.

Mr. PROXMIRE. There you get \$7 billion on top of the overrun already developed in the B-1 itself—\$7 billion. Let me ask—

Mr. GOLDWATER. Mr. President, will the Senator from New Hampshire yield

to me at that point for a quick observation?

Mr. McINTYRE. I am happy to yield to the Senator from Arizona.

Mr. GOLDWATER. For the information of the Senator from Wisconsin, I intend to discuss only the tanker question. With all due respect to the subcommittee, as I pointed out to the full committee, there are some real misunderstandings in this field. The remarks of the Senator from New Hampshire do not reflect the thinking of the Air Force at all, and I intend to go into that. As to the avionics package contemplating reducing, I have discussed that with the Air Force, and they have taken a guess, of reducing it from 10,000 pounds to approximately 5,400 pounds, running at \$1,200 a pound. However, they are not quite sure which of the sophisticated, as yet, undeveloped equipment they will eliminate, so it is impossible for them to say whether they will actually save money or not.

I want to make that point clear.

Mr. PROXMIRE. I want to ask the Senator, along that line, does he have any additional information that would lead him to believe that the Air Force is seriously considering a request for a new fleet C-5A tanker at a cost of \$7 billion? Did they just indicate there is a possibility, or did they indicate seriously looking into that?

Mr. McINTYRE. The best answer I can give the Senator is that the Air Force is not presently planning on a new tanker to go with the B-1. They are talking about modifications in the KC-135. At the same time, they are considering a series of new tanker programs, some involving modifications of existing airframes and others the development of a completely new tanker. The modification of the C-5A is one of these programs. I mentioned it because SAC officers themselves have singled it out for comment. The \$7 billion cost of this program is representative of the costs of the other programs also being considered.

But to answer your question more directly, it seems to me that there are two possibilities: first, that a new tanker would be useful but not essential, a preferred alternative to modifications in the KC-135, which has been around as long as the B-52 and is getting to be a rather old aircraft, and second, that a new tanker will be absolutely crucial to the viability of the B-1 itself.

Mr. PROXMIRE. Is my understanding correct that the position of the Senator from New Hampshire is that while a new bomber, the B-1 bomber, may be needed, the subcommittee and the committee are not making a final determination. The final determination may be made later, when more information is developed and that this is, therefore, a tentative determination that is being made now and our options are being kept open. Is that correct?

Mr. McINTYRE. The Senator is correct. The subcommittee feels that under all the circumstances existing today, we should move ahead slowly after additional study, so that we have a cost-effective bomber in the future, if we ultimately need to buy it.

Mr. PROXMIRE. In view of the Senator's position stated on pages 7 and 8 of his speech, to suspend judgment, what happens if Congress deletes the remainder of the \$50 million that have been left in? As I understand it, the committee reduced the request from \$100 million to \$50 million for the B-1. If Congress should eliminate the funds this year for the B-1, why should not this be considered with the notion that we should suspend judgment until the SALT talks, and so forth, are over, to give us a better perspective, if we are not going into production until 1978? I wonder whether this is not an area where we could wisely postpone expenditures.

Mr. McINTYRE. I think the question is important enough that I should tell the Senator that the subcommittee gave careful consideration to the possibility of recommending to the full committee a complete \$100 million reduction, on the grounds that additional funding should be held off until the studies we called for were completed.

This alternative was very carefully considered and then rejected. The original Air Force request of \$100 million left considerable leeway for reviews of the B-1's specifications over the course of the year. As Secretary Laird himself has stated, additional funds would have been requested for the program by the Air Force if budgetary considerations had permitted. This initial leeway, coupled with the committee's reduction, should leave ample time for further studies before moving out on any final design.

The subcommittee's action is also geared to different possible contingencies. If the results of the studies so warrant, the Air Force will be under no obligation to spend all the moneys Congress appropriates. After all, it spent only \$35 million of the \$100.2 million appropriated last year.

But if a final design is fixed upon, there may well be merit in doing at least some preliminary engineering development work this year. The B-52 is expected to last into the 1980's, but this estimate is predicated on certain predictions—as to expected flying hours, for example—which may turn out not to be valid.

And the appropriation of the additional funds will serve another purpose as well. It will make clear to the Soviets that this country takes its national security requirements quite seriously and thus serve as an incentive for some more hard bargaining in SALT. As I said in my prepared remarks, I hope that we will ultimately have no need for the B-1. But we must have it available if we do in fact need it.

And the sooner we move out in developing the plane, the slower we are going to be able to go. If we wait too long, such that a crash program seems needed, there will be a far greater risk of expensive technical problems.

Mr. PROXMIRE. I may ask the Senator, than, inasmuch as he has referred to the fact that last year we appropriated \$100 million and only \$35 million was spent, so that more than \$65 million is unexpended, that this \$65 million is available to the Air Force to spend in the coming year.

Mr. McINTYRE. That is right. That \$65 million is available.

Mr. PROXMIER. I want to thank the Senator from New Hampshire for an excellent speech, one of the most useful I have heard and also very well balanced. He points out some of the problems involved. He concedes that the costs will increase greatly, that the performance is less than originally contemplated, that this will be delivered late at best, and that there are options including—which I did not mention and the Senator did stress—that the B-52's can be, apparently, reconditioned or remodeled in such a way that it can operate into the 1980's. In the 1980's that would give us, of course, more of a cushion than we thought we had in the past, in terms of having an air deterrent to complement our present sea deterrent and our land-based deterrent.

I thank the Senator from New Hampshire very much.

Mr. McINTYRE. I thank the Senator from Wisconsin.

Mr. McGOVERN. Mr. President, will the Senator from New Hampshire yield?

Mr. McINTYRE. I am happy now to yield to the Senator from South Dakota.

Mr. McGOVERN. Mr. President, I join the Senator from Wisconsin in commending the Senator from New Hampshire (Mr. McINTYRE) for the thoughtful statement he has made here today. I have had a chance to look at it and have it in hand and I want to commend him for what seems to me to be an unusually meticulous scrutiny of the B-1 program that he has brought to us as chairman of the Subcommittee on Research and Development of the Armed Services Committee. I think our gratitude at that point should also go to the chairman of the full Armed Services Committee, the Senator from Mississippi (Mr. STENNIS), whose adoption of the subcommittee approach has made possible what seems to me to be a more extensive investigation than has been the case in the past.

There is no question that while there may be some differences among us, even yet, on the amount of money that has been cut from the proposed B-1 program, I agree with the Senator from Wisconsin that further questions need to be raised about that. Nevertheless, it is perfectly clear that the Senator from New Hampshire has brought a very careful and critical examination to this question.

I think that is particularly important in the research and development stage, over which the Senator from New Hampshire has special jurisdiction, because every important question that we can ask at that point and receive satisfactory answers to has the capability of saving billions of dollars that might otherwise be committed for procurement later on.

Thus, I welcome the Senator's initiative and I want to applaud his diligence. I think he has performed a valuable service not only in terms of national security interests of the country but also a service to every taxpaying citizen in the country.

I have had an opportunity to look at

the Senator's statement, as I said, and there are a couple of points on which I should like to raise some questions, if the Senator would care to comment further on them.

First of all, with reference to his suggestion for a study of the design of the B-1, that seems to me to be particularly appropriate. For purposes of its strategic mission, I see little reason, for example, why the aircraft would need to be supersonic.

The explanation always turns to the fact that the supersonic capability would be helpful if the aircraft were called upon to play a tactical role. But, as the Senator knows, we are buying other aircraft for those tactical missions, and I see no evidence that we are planning to reduce the number of tactical aircraft that we would otherwise purchase even if we go ahead on the B-1 program.

Mr. President, I also question the value of the proposed B-1 tactical air situations. If one thinks of no other consideration than the enormous financial loss involved in the loss of one of these planes, it seems to me to raise very serious questions about whether any expensive weapons of that kind should be used in tactical situations.

All the problems associated with the F-111 should convince us that it is extremely risky to try to design an aircraft for more than one major purpose. If the B-1 has the range and payload required for strategic missions, it seems to me very doubtful whether it could cope effectively on a tactical mission with the kind of interceptors it is likely to encounter in conflict.

I think the proponents say that it has been studied and studied to death and that no further examination is needed. I disagree with that statement.

As I said before the Senator from Mississippi came to the floor, I commend him as well as the Senator from New Hampshire for permitting additional study. I wonder if the Senator from New Hampshire, in view of the specific questions I have raised about the tactical purposes that have been described for this plane, would comment and elaborate a little more on why he thinks additional study is needed.

Mr. McINTYRE. Mr. President, I think the thrust of the subcommittee's desire to see additional study on a plane which the Air Force will tell us has been studied to death revolves around questions of cost effectiveness.

I, too, question whether we should design the B-1 for a tactical warfare mission.

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

Mr. McINTYRE. I yield.

Mr. GOLDWATER. Mr. President, I noted the Senator commented on the possible tactical use of this weapon being considered, and I merely refer to the comments of the Senator on page 5 of his speech:

It recognized, also, however, that many former defense officials have argued against any supersonic speed capability for the B-1 on the grounds that this is of primary utility only in the secondary, tactical role contemplated for the plane . . .

I have sat through many discussions of this B-1, and I have not heard the present Air Force commanders or the present Secretary talk about a tactical use of this airplane. In the first place, the primary weapons system would not lend itself to tactical use. Supersonic speed is the last thing we want in a tactical aircraft. My argument is that the slower the better.

It was not planned. It was talked about in the past. If it has been mentioned at the present time, I have not heard it, and I have discussed this weapons system with the people who will use it. Its use is strategic.

Mr. McINTYRE. Mr. President, I thank my friend, the Senator from Arizona, but I must respectfully disagree. The B-52 was originally designed for a strategic purpose but was reconfigured and was used as a tactical plane and is being used for that purpose today. As Secretary Laird indicated in his discussion of the B-1 program last year, its use in conventional wars is also intended. That, he said, is one advantage of bombers as opposed to missiles.

Mr. GOLDWATER. Mr. President, I disagree that it is confined to tactical use. It is to interdict and deny supplies to the enemy.

If we were able to bomb the sources of supply, it would have an even further role.

It is used for the close ground support of troops and to deny supplies to the enemy. If we had to reconfigure the B-52 to 550-pound bomb use, it would still be used strategically.

Mr. McINTYRE. Mr. President, I defer to the wisdom of the Senator from Arizona and his experience. The distinction I was trying to draw was between the use of a bomber in the strategic nuclear role and its use in conventional warfare. To my mind, this is synonymous with a strategic-tactical distinction.

Mr. McGOVERN. Mr. President, with my own education on this subject, in view of the point made by the Senator from Arizona, if his information is correct—and I am not in a position to question that—that the Air Force has given up the tactical role or even a secondary role for this aircraft, what is the rationalization for building a supersonic bomber? What is the advantage of supersonic speed for a bomber on a strategic mission?

Mr. GOLDWATER. Mr. President, the use to which we say any aircraft is being put—and I have to follow that statement up by saying that the B-52 was for an atomic load. We never thought that it would be for conventional delivery. We do not know the B-1's contemplated use. But I would assume that it would be for use against an enemy far away from us.

With a supersonic speed, at a high altitude and a high speed, we get there in a hurry and with a saving on fuel. The higher we fly, even though we fly fast, we burn less fuel because of the greater altitude.

They would descend, going not more than 200 miles and then release their load and go back into supersonic. High-low-high is the way to get there in a

hurry and to save refueling. We would make it with probably one refueling going and one refueling coming back.

If we attempt to do it at any altitude below 20,000, which would be low, I would have to guess how many refuelings.

Flying at a high altitude, even with the thrust that these engines would have, would mean a low consumption in pounds of fuel while flying at a high altitude.

I know of the Senator's long experience in World War II in heavy bombers. This would not apply in the case of the B-24's or B-17's, as it would today in bombers like the B-1.

Mr. McGOVERN. I think the Senator would agree that even at supersonic capabilities of a bomber of that kind it could not outrun surface-to-air missiles once it is in the target area.

I am still somewhat puzzled as to what advantage can be had from supersonic capability, if the tactical role is ruled out. Perhaps the Senator will go into that in more depth in his remarks.

Mr. GOLDWATER. I intend to. As the Senator knows from experience, the longer a tactical aircraft can be on its target, the more weapons it can deliver.

While I am not always agreed with in my thesis, the speeds of tactical aircraft in World War II, with an approach speed of 200 to 250 provided a good solid and stable platform from which could be released a large number of weapons, whereas, if you went in supersonically or even at speeds of mach 0.7 or 0.8 you would have only a few seconds on the target and the accuracy would be destroyed.

That is my argument against supersonic tactical aircraft.

Mr. McINTYRE. I wish to comment further on my recommendation of further studies regarding the B-1's speed and its standoff missile-launching capabilities.

It seems to me a supersonic speed for the B-1 is needed only under two conditions: First, if it is going to be used in a conventional warfare role which requires extreme accuracy and deep penetration against sophisticated enemy aircraft; and, second, in an AWACS busting role in the strategic nuclear mission itself.

As regards the first, I indicated in my prepared remarks that I don't think we should design a new bomber for use in conventional conflicts. The advantage of its greater ton-mile economy, as compared with tactical aircraft, would be negated by the fact that we could not rationally afford to lose a \$30 million aircraft in an attempt to hit a much less expensive target. Moreover, if you did use the B-1 in conventional conflicts, thereby risking its loss, you'd not only be risking dollars but also the strategic capability for which you sized your B-1 force in the first place.

As regards the AWACS-busting capability in the strategic nuclear mission, supersonic speed assumes importance proportional to the extent to which you insist on deep penetration to your targets themselves. If deep penetration is not required, there is less need for such speed.

It is here that improvements in the B-1's stand-off missile-launching capabilities become relevant, since they would reduce the need for deep penetration.

The Air Force argues, of course, that we tried a stand-off approach in the early 1960's, when we embarked on the Skybolt project with the British. They say it did not work then and it would not work now, or at least not at a cost anything less than that presently contemplated for the B-1 itself.

But references to the Skybolt obscure the issue. The Skybolt was conceived of as a huge ballistic missile, weighing many thousands of pounds. It was, in essence, an airplane-launched Jupiter missile. What I have in mind, and what I think warrants further study, is something very different—a modification of the Subsonic Cruise Armed Decoy, or SCAD, already being developed both for the B-1 and our existing bomber force.

The SCAD is a cruise missile, weighing only a small fraction of the old Skybolt. A great number of them could be carried by a single bomber. SCAD A, now in R. & D., itself has a contemplated range well in excess of 500 miles. I strongly doubt, if this route were followed, that it would be anywhere near as expensive as a Skybolt-type missile.

I think a study should be undertaken showing whether this approach is feasible. I think we should have spelled out very clearly the arguments against it. I think the Congress should be allowed to evaluate those arguments and not have to rely on simple assertions that the approach is ill conceived.

There may, in fact, be merit in the opposing arguments, and I don't want to prejudice the case now. But just as the Navy seems to prefer surface ships to submarines, the Air Force likes to fly over the targets it is going to hit. I am not sure whether this preference is justified, in light of the savings which a subsonic, standoff approach would entail. The Air Force itself admits to a 20 to 30 percent savings. I'm not sure it might not be closer to 50 percent if the B-1 were totally redesigned with this new approach in mind.

Finally, a comment on the Air Force claim that the B-1 has already been studied for 8 long years. It has been, but without the right questions being asked. A supersonic speed, deep-penetration model has been assumed in almost all these studies.

Mr. McGOVERN. The Senator has raised an important new point in connection with the aerial refueling required by the B-1.

As I understand it, the Air Force cited as one of the major attributes of the B-1 the fact that it can take off much more rapidly than the B-52 and, therefore, it reduces the danger of being hit on the ground by missiles launched suddenly. But is it not a fact that the proposed B-1 could not carry out that mission without refueling?

The Senator knows the present tanker we are making, the KC-135, cannot get into the air any more quickly than the B-52. Would it not be the situation, if we move ahead with development of this

B-1, that the Soviets or any potential enemy, could target their SLB on the tanker fleet and negate any advantage the bomber had in its first takeoff capability?

Mr. McINTYRE. The Senator raises an important point. We have already discussed it in part. I suspect the Senator from Arizona may have something to say about it in his remarks.

The Air Force claims that the reaction time of the KC-135 could be greatly reduced both by modifications in the plane itself, by positioning crews nearer the aircraft, and by a new basing pattern for the plane. I think that the feasibility of going this route is one thing which should be seriously explored in the study I have suggested.

Mr. McGOVERN. If those modifications could be made with the tanker, why not with the B-52?

Mr. McINTYRE. I am afraid the B-52 has been modified and remodified about as far as it will go, and that this will take it only to the mid-1980's. One purpose of my study is to determine whether the same is true of the KC-135's.

Mr. McGOVERN. What would be the Senator's estimate of developing a fleet of new tankers with the speed and take-off characteristics of the B-1?

Mr. McINTYRE. One of the suggestions was that a modified C-5A could do the job at a cost of about \$7 billion. Other alternatives are in the same cost ballpark.

Mr. McGOVERN. I was interested in the Senator's remarks with respect to the elimination of some of the features that have been planned in the original B-1 proposal; the elimination of the low-level supersonic capability, for instance, which the Senator from Arizona referred to a minute ago.

According to the projection, as I understand it that should have resulted in a reduction of \$5 million to \$6 million in the cost of each of these airplanes; and yet the Air Force, which originally had put an estimate of \$25 million to \$30 million per plane on the B-1 still is estimating that the cost would be something over \$29 million.

Can the Senator shed some light on why there has not been some reduction in the over-all cost if we are eliminating these expensive features that were in the original design? What happened to the savings one could expect in the over-all cost of the plane, in the area of \$5 million to \$6 million?

Mr. McINTYRE. Of course, as I stated in my speech this morning, this is one of the things that concerned those of us on the subcommittee, and we were asking the same question. I do not think we ever got a satisfactory answer.

We thought this was one of the reasons why the B-1 should be continued to be looked at very carefully.

Mr. McGOVERN. As chairman of the Subcommittee on Research and Development, the Senator from New Hampshire has looked into this question very carefully. In view of the facts that have been brought out this morning and what he knows about the situation, does he

now believe that, if he would include the cost of a modified tanker, the eventual cost of producing a fleet B-1's will be in excess of \$20 billion?

Mr. McINTYRE. I will not argue too much with the Senator's figure of \$20 billion.

Mr. McGOVERN. I say, in excess of that.

Mr. McINTYRE. It could be in excess of that. We just do not have the information to know.

Mr. PROXMIRE. Mr. President, will the Senator yield at that point for a question, because it relates to this very matter?

At the bottom of page 29 of the report, subsection (3), it states that the committee will conduct "possible further studies regarding speed and payload capabilities which might result in cost savings and performance improvements."

I know the Senator from New Hampshire can speak only for the subcommittee, and not for the full committee, but I would hope that what is merely a rather vague and indefinite commitment by the committee that possible further studies may be made could be hardened up so that we would be assured that definitely studies of the B-1 will be made, and that a commitment is made to do just this. After all it is perfectly obvious that the estimates of cost range up to \$20 billion, and perhaps higher, heaven knows we need more than just "possible further studies."

I see the Senator from Mississippi (Mr. STENNIS) on the floor. If the Senator from New Hampshire will permit it, I would like to ask the Senator from Mississippi a question. I know he has just come on the floor and this is rather sudden.

In connection with the B-1 bomber, on page 29 of the committee report the Senate is told that "possible further studies" will be conducted.

I wonder if that possibly means that they may or may not be conducted, that it is not really a commitment, that it is possible that they will be conducted and possible that they will not be conducted. Can the Senator from Mississippi give us a clearer understanding of what that particular statement in the committee report means?

Mr. STENNIS. Mr. President, first, that shows that there is no closing of the book on that matter. I do not look upon it as anything finally determined yet. The B-1 is evolving. This is all research and development money. It is always the decision of the Congress each year whether or not more money will be appropriated. I want all studies to go on, when it is agreed to and proper. Our committee is blessed with men having particular qualifications in this field. The Senator from New Hampshire is one. The Senator from South Dakota also is qualified.

I look upon this as a weapon system that I think will be needed in the future, and it is now being logged. There is no pell-mell pace, but a step by step pace, controlled by Congress. Of course, this contemplates further studies from all major points.

Mr. PROXMIRE. The question I was

asking was, what has the committee done to make sure that such study will be made available to Congress? The report refers to "possible studies." The likelihood of enormous cost increases on the B-1 is so great that I wonder if the Senator could give us greater assurance than just "possible studies."

Mr. STENNIS. Yes. That is what we expect to require for the Senate—studies in all major fields—and, of course, we will have the benefit of it, and any other Members of the Senate will have the benefit of it.

Mr. PROXMIRE. So studies will be required?

Mr. STENNIS. Yes. That is why we are evolving this matter.

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

Mr. McINTYRE. I yield to the Senator from Arizona.

Mr. GOLDWATER. I dislike to keep interrupting, but the question was asked as to why the cost was not reduced because of the low altitude of the bombers. I point out that it is the same engine. It will cost just as much whether it flies at subsonic speeds of mach 0.5 or mach 0.7 or fly at mach 2.1. It is the same engine. I think the cost was put at \$2.5 million each. I am taking a guess.

The Senator will recall, from his days of flying in World War II, that we had a top speed, a cruising speed, and a landing speed; and the jet engine has the same problem. If they reduced their supersonic requirements, I agree there would be a sizable saving in engine cost.

Mr. McGOVERN. I was referring not only to the speed capability but the total avionics package.

Mr. GOLDWATER. I agree with the Senator on that. I do not think the Air Force has given a satisfactory answer, and they know my feelings on this.

Mr. McGOVERN. Mr. President, just an additional question to the Senator from New Hampshire. I recall last year there were reports to the effect that one of the reasons why we ought to move ahead on a new bomber of this kind was that the Soviets were developing a new strategic bomber. As the Senator knows, they are now clearly inferior to us in the bomber field. They are relying on what are called the Bison and the Bear, neither of which is supersonic, and one of which is the old turboprop, comparable to the now obsolete B-36 that we phased out of our inventory a good many years ago.

Is there any indication the Senator has that the Soviets now are developing a new strategic bomber similar to the B-1?

Mr. McINTYRE. The last information on this point from the administration was a statement by Secretary Laird before the House Appropriations Committee in February. At that time the Secretary said that the Soviets were developing a "new strategic swing-wing bomber, with better speed, altitude, and radius of action than any of their current medium range bombers." With refueling, it was reported, the bomber could reach some parts of the United States.

So, to answer the question of the Senator directly, it would seem that the Soviets are developing a new bomber, but

there is no real indication that it will be as sophisticated as the B-1 presently being planned by the Air Force.

Mr. McGOVERN. I thank the Senator. I remain concerned about the cost of this project as we move ahead on it.

AUTHORIZATION OF APPROPRIATIONS FOR MILITARY PROCUREMENT—AMENDMENT

AMENDMENT NO. 820

"THE NEW BOMBER IS A BUMMER"

Mr. McGOVERN. Mr. President, I am concerned about the B-1 program for several reasons, all of which suggest to me that we should forgo the additional funds for its development which are retained in the committee bill.

As I will develop more fully at a later time, I think we need more study on the role of bombers in a missile age. Clearly the primacy of the manned bomber in the deterrence role has been long since superseded by missiles, first ICBM's, now the combination of our Minuteman and Polaris forces. Even as insurance of those forces it offers little and probably less than we could accomplish by internal improvements if they do become necessary.

But regardless of how that question may ultimately be resolved, we have two additional causes for moving cautiously at this time. The first is that there is simply no need to move toward the 1977-78 operational date contemplated by the funding level in the bill. The B-52G's and H's presently in force will last well into the 1980's. I noted in the hearings that their durability surprised some members of the Armed Services Committee. In combination with the FB-111's now being procured, they can certainly perform whatever mission remains for the manned bomber until we can make a more thorough evaluation of the bomber's role in the 1980's and beyond, based upon updated assessments of the threat, the results of the strategic arms limitation talks, and other factors. This conclusion is supported by the fact that the Air Force has in the past year downgraded some of the proposed B-1 capabilities, apparently upon a more realistic evaluation of the environment in which it would perform.

Finally, I have grave doubts about the design. As Senator McINTYRE has pointed out, the system as now presented includes costly capabilities which have little or no relation to its mission. The Armed Services Research and Development Subcommittee which he chairs has asked for further study of such issues as whether we should not be aiming primarily for a standoff capability which would eliminate much of the need for low-level penetration. I suspect, frankly, that what we have before us was designed more for the recruiting posters than for a practical national defense posture.

If it is built, the B-1 has the potential for being the costliest single weapons system ever developed by this country. Surely, we should wait for the results of these studies before we accelerate the program. If we move ahead without

them we may ultimately find that we have made annually-mounting expenditures needlessly, that we have created a contract dependency that will be difficult to end, and that we have invited cost overruns by proposing design changes after the contractor has already locked on to a specific proposal.

The B-1 program has \$65 million in carryover from fiscal 1970, an amount that is more than ample to keep it at a highly intensive level of research and development. I propose, therefore, that the additional \$50 million left in by the committee be deleted.

Mr. President, for myself and Senator GOODELL, I submit an amendment to H.R. 17123 and I ask that it be printed.

The PRESIDING OFFICER. The amendment will be received and printed, and will lie on the table.

Mr. McGOVERN. Mr. President, the Senator from New York (Mr. GOODELL) is also sponsoring this amendment. He has prepared a statement on the B-1, and I ask unanimous consent that it appear in the RECORD at this point.

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

STATEMENT OF SENATOR GOODELL

Mr. GOODELL. I want to thank the Senator from South Dakota (Mr. McGOVERN) for his leadership in this effort to amend the Military Procurement bill by deleting \$50 million in funds for the development of the Advanced Manned Strategic Aircraft, B-1. I support this effort as being thoroughly consonant with the security interests of the nation.

By deleting this year's funds we will not close out research and development on the B-1. There is a carryover of \$65 million from last year's appropriations, more than enough to ensure that we could easily produce a new intercontinental bomber should the need arise in the future.

Right now, however, it is incumbent upon us to review this \$50 million in additional funds requested for the B-1 and more for its rescission.

Several considerations warrant this conclusion: First, deployment of an advance manned strategic bomber before 1980 is not urgent. Second, our present strategic bomber force can be upgraded to fulfill the operational capabilities projected for the B-1. Third, a cost-benefit analysis of the program indicates expenses which are excessive when considered against the marginal gains in performance that may or may not accrue from the development and production of the B-1.

Finally, at a time when the nation faces a grave domestic economic situation and when there is no vital security interest at stake, I can see no justification for excess spending on projects of such questionable value as the B-1.

Let us remember that this advanced manned strategic aircraft, B-1 is based on an old mistake, the XB-70. The XB-70 prototypes were built, but then abandoned as unworkable. Today the XB-70 is on display in the Air Museum in Dayton, Ohio. From defense-to-display, the XB-70 cost the American taxpayer \$1.4 billion.

Advocates of the B-1 maintain that a mixed strategic force of missiles and bombers increases our security by multiplying the contingencies for which the Russians must prepare. They say a bomber force makes our nuclear arsenal less vulnerable to Soviet attack since it prohibits our enemy from targeting on a limited number of positions. It is difficult for me to imagine how a force of exposed bombers is any more secure than

a comparably sized and dispersed force of missiles located in underground silos.

We are told that the B-1 is a revolutionary superior aircraft. Nevertheless, close examination indicates that projected B-1 superiority over existing bombers and proposed modifications can be seriously questioned. Department of Defense analyses state that weaponry and penetration aids are of primary importance in determining the effectiveness of a strategic bomber. The Short Range Attack Missile, the Subsonic Cruise Armed Decoy, and new penetration systems are all designed to fit the B-52 and F-111 as well as the B-1. The characteristics of the carrier are relevant only when they affect penetration capability, and it is precisely here that the B-1 has failed to meet its original expectations. Envisioned as having supersonic dash capability, the B-1 will be able to achieve only subsonic speed at these low altitudes. Furthermore, modifications in the basic B-52 design have produced the G and H models which will operate into the 1980's, well into the lifetime of the proposed B-1.

Since it appeared that the proposed B-1 will not make a vital contribution to the nation's security, we must ask if the marginal utility it may or may not provide will justify the massive costs entailed by the program. Already we have witnessed steadily rising RDT&E estimates, as well as soaring production figures. These cost overruns early in the life of the plane portend yet another boondoggle along the lines of the C5A and XB-70. The complexity of the avionics package on board offers another opportunity for increased spending. Already one-half of the electronic equipment has been cancelled until the plane becomes operational. Ancillary spending on necessary support planes, weapons and penetration aids should not be discounted just because it falls outside the development of the carrier plane itself. In short, many people who have studied the program conclude that overall expenses may double to \$25 billion. Can the nation reasonably afford such spending on a weapons program that will not substantially increase our security? It is my contention that it cannot.

I am hopeful that debate on the McGovern Amendment which I am cosponsoring to delete \$50 million for the B-1 will prove the soundness of this effort and will pave the way for passage.

The PRESIDING OFFICER. Under the previous order, the Chair recognizes the Senator from Arizona.

BOMBERS AND TANKERS

Mr. GOLDWATER. Mr. President, first I wish to compliment the distinguished Senator from New Hampshire (Mr. McINTYRE) on the fine work that he is doing in the heretofore unexplored regions of research and development, in which I think we are going to see our greatest savings made. I have not always agreed with the Senator's conclusions, but I compliment him and his staff on the work that has been done—almost starting from scratch, I might say, last year—and I hope that he continues in his diligent work in this very little explored field, which we both know is very, very complicated, and filled with walls we have to climb over and tunnels we have to crawl through to get at the causes for the high expenditures we have had over the years.

I have listened with interest to the remarks of the Senator from New Hampshire on the B-1. He was gracious enough to notify me of his intention to bring this

matter to the Senate floor, and was gracious enough to send me a copy of his remarks. That is why I am able to speak from a prepared text today.

The Senator from New Hampshire is, as we all know, a man experienced in military research and development and served this year as the chairman of the Subcommittee on Research and Development. I, therefore, commend the bulk of his remarks to the Senate. In particular, his exposition of the value of maintaining the TRIAD of bombers, ICBM's, and submarine-launched missiles is as clear an exposition as I have heard in some time. His understanding of the need to start now on an orderly development of the B-1 is to me very sound.

I might at this point speak for a short while on a subject that I did not intend to bring up today, but it has been stated to us in committee by the Air Force that the B-52's can fly well into the 1980's—perhaps until 1984—but what they have not told us, and what we have not found out, is how much it is going to cost us to keep flying each B-52 that much longer. I have asked them to do some research on this subject, and they told me they would, because I have a feeling that by the time that we keep those planes flying into the 1980's, they are going to cost us a total investment in each plane which will be very close to the total final cost of the B-1.

We went through an experience with the B-47, which was a medium bomber, where we had to rebuild the wings because of fatigue. We do not know yet what the state of fatigue is in the wings of the B-52. Frankly, some of them have flown longer than we thought they would. But we are beginning to learn, as we update the plane from year to year with new weaponry and avionics, as we have to modify the bomb bay to accommodate new types of weapons, and particularly as we are able to develop, as the Senator indicates—and I have great interest in it—a long-range standoff missile, which today seems doubtful because of the extreme wait involved, though nevertheless we are working on it, how much the cost will be.

As I say, they are making a study of this for me, and I hope to be able to present it to the Senate sometime during this debate.

I add, too, something else that had slipped my mind: the replacement of engines. These are old jet engines. We buy them today at greatly increased cost over the originals. While we are fortunate in being able to get a long life out of jet engines today, those used in combat, particularly over Vietnam, are much shorter lived.

The Senator expressed some reservations, and in view of his eminence in this matter we are all obliged to pay heed to his concerns.

At this time I want to pay heed to his concern over costs for tankers to permit aerial refueling of the B-1. At the outset, let me say that I believe his concern is unwarranted. After carefully reviewing the evidence presented to the subcommittee, I cannot see how the Senator maintains this concern.

I am, furthermore, distressed by the use of innuendo in the Senator's remarks that the Air Force is not being forthright with the Congress. I have looked into this matter in some depth, because it has come up in the past. I would like to report what are the facts. They may not suit the desires of those who wish, for their own purposes, to hang the albatross of a new tanker about the neck of the B-1, but they are the facts:

First, the Air Force has continuously and consistently planned for the B-1 on the premise it would be supported by the KC-135 tanker aircraft. The original performance specifications for the B-1 were established around the KC-135 capabilities and all subsequent investigations have been worked on this assumption.

Second, based upon the basic performance capability and the various missions which the B-1 might be required to fly, it has been determined that the B-1 force could be supported by the programed force of KC-135's committed to the Strategic Air Command. Comprehensive analyses show that mission objectives can be readily achieved with a force of B-1's performing to these specifications and supported by available KC-135's.

Third, confidence that the KC-135 will be available in the same time frame as the B-1 has been demonstrated by critical evaluations of KC-135 service life remaining. Analysis performed as late as 1969 show that SAC's KC-135 tankers, incorporating only the currently programed modifications, can be expected to perform until at least the 1985-89 time frame.

With regard to General Holloway's statement quoted in the June 20 issue of the Armed Forces Journal, the general was correctly quoted. I believe it would be useful to understand the context of his remark. After rechecking this matter with the general himself and others in the Air Force, I can report that the point being made was that we would still have a mix of B-52's, FB-111's, and B-1's in the late 1970's. However, the more B-1's we have in the above bomber mix, the fewer tankers and less tanker off-load would be required, because the B-1 will have better range at low altitudes than either the B-52 or the FB-111. If we should buy enough B-1's to replace all B-52's on a one-for-one basis, we would not need a tanker with greater capacity than the KC-135. One of the specific design requirements for the B-1 is that it will be capable of deeper target penetration with less tanker support than our current B-52's.

The distinguished Senator from New Hampshire correctly states that the safe escape times from a nuclear explosion which are normally attributed to the KC-135 are compatible with the escape times of the B-52. He also correctly alludes to the shorter escape time projected for the B-1. Comparative data of this nature, along with specific comments pertinent to potential KC-135 modifications were provided to the Research and Development Subcommittee in response to direct questions by the subcommittee staff. Contrary to contentions of the

Senator from New Hampshire, specific cost estimates for KC-135 modification were also provided.

Specific responses to the question of modifying the KC-135 fleet to reduce the escape time included cost estimates associated with some modifications, the first being thrust augmentation.

I might say in this connection that they have changed the KC-135's ability, now, to start all its engines separately, to the B-52's ability to start one engine and then, by bleeding air off that one engine, start all the other engines simultaneously. This would provide a greatly increased B-1 escape time, because all the engines would start automatically as the pilot puts his foot on the lower rung of the ladder to climb into the aircraft, at least for those planes that would be on standby alert.

Other modifications include hardening the tail structure of the aircraft and providing a quick start capability. The purpose of such modifications would be to decrease vulnerability to weapon effects and decrease the exposure time prior to launch and during the critical phase of flight immediately after launch.

For the most part, modifications of this nature involve state of the art technology and off the shelf equipment. In the event the threat warrants such action, these modifications could be performed at reasonable expense.

More important, however, is the significant reduction in escape time which can be attained through the use of revised alert procedures, coupled with the quick start capability I previously mentioned. The cost estimates associated with these two actions are quite modest and the resultant escape time may well be adequate without the other, more extensive modifications outlined above.

I might say also, Mr. President, that I do not think we are talking about waking up and hearing an alarm some morning, without having had any previous indication, that we might be ready to go to war. We had this information prior to Pearl Harbor, but we did not use it. I am sure we will not fail to use it in the future.

So, as the time might approach where war might open, our tankers could be airborne at all times, providing, as we do in South Vietnam, a 24-hour service station flying thousands of feet above the land.

Let me deal now with the questions raised by the Senator regarding a \$500,000 item for studies on advanced tanker capabilities. He is simply incorrect when he states that these studies "would directly support the initiation next year of a new tanker development program." The facts are these:

There is a planning document that shows an allocation in fiscal year 1970 of \$500,000 for air tanker advanced development. Actually, the money for 1970 was not spent, and the Air Force intends to use it in 1971 for studies exploring the utility of multiple booms on KC-135's for in-flight refueling of fighter aircraft. In other words, the study money is not to be spent this year on an advanced tanker for use by strategic bombers, but for research on refueling fighters.

To explain it a little better, instead of having one refueling boom or probe, they would have a multiple number of stations enabling the tanker to refuel several fighters at a time, quickening the time that the tactical aircraft could get back on target. As Senators know, the Air Force uses refueling quite extensively in a variety of mission areas.

In later years, I am sure the Air Force will perform continuing studies of ways to improve and modernize the existing tanker fleet as well as study the need for new tankers in relation to other needs within a constrained budget. This is only right and proper. But to infer from this study effort that the B-1 will require a new tanker is just not correct, nor is it fair.

Finally, there is the implication by the Senator that the Air Force has plans for a \$7 billion program to procure a tanker version of the C-5A. This is both untrue and unfair. It is untrue because there is no such program. It is unfair because information supplied by the Air Force has been misused. The Senator's staff submitted the following question to the Air Force:

If the Air Force were directed to procure a new tanker, what options would it consider and what, roughly, would be the respective unit production costs of each?

The Air Force gave a classified response to this question with a list of five aircraft. But the response was not intended to imply that these tankers are needed for the B-1 or any other program.

In summary, the distinguished Senator from New Hampshire has apparently raised a sincere concern over the ultimate fate of our strategic deterrent and our Nation. However, I am puzzled over his concern about plans for expenditures on a new tanker and his apparent reluctance to use information provided to him in response to direct query by members of his staff. The relevant facts are easily checked and would hopefully ease the degree of concern which the Senator has expressed.

Mr. President, I intend to discuss the B-1 at greater length as we go along. I merely wanted to reply to this portion of the Senator's well rounded speech this morning.

I might just comment in reply to some of the questions that are constantly raised about cost overruns. It seems to me that in the domestic programs we do nothing but pass supplemental bills to handle cost overruns. In fact, as I recall the health, education, and welfare bill, and yesterday unemployment, and many, many others, I cannot recall a single program that has been passed in keeping with the budget.

So we have to assume that even in domestic programs we have giant overruns.

I would hope that some of my colleagues in this body who are so concerned with the overruns and expense of military equipment would concern themselves with the tremendously expanding cost of the domestic programs which have gone up over a thousand percent, while the defense budget has increased and it has now decreased; and according

to information which will appear in the RECORD in other remarks which I will make today, this year's will be the lowest in percentage to the gross national product at any time in our history.

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

Mr. GOLDWATER. One more point: This is a system that has long been needed. When I was in this body before, I recall listening to Secretary McNamara promise us that the next year would bring plans for an answer, and now we are getting it. One of the big reasons, I might say, is the fact that Secretary McNamara did not believe in research and development. Consequently we have, for the first time in my memory, in aviation, an airframe waiting for an engine. It has always been the other way around. We had engines that we did not have airframes to match. These engines have to be developed and researched prior to that, and then they have to be tested.

I yield to the Senator from Wisconsin.

Mr. PROXMIRE. I say to the Senator from Arizona that again and again, not just this morning, but previously, he has raised the point that some of us have been very critical of defense spending but have been quite uncritical of much bigger increases in nondefense spending. I think that to some extent that is a point well taken. I think we have not concentrated as much attention as we should in the area of excessive spending, for example, in transportation, highway trust fund, and many other areas.

I invite the Senator's attention to a report of a subcommittee of the Joint Economic Committee which will be released within the next 2 weeks, which details some of the waste in transportation we have in this country.

I also invite the Senator's attention to a statement I am going to make during the morning hour on the conclusions of some of the leading scientists in the world on the environmental pollution we are going to get from the SST, which is not a defense appropriation, but for which an appropriation of \$290 million is asked this year, an additional nondefense, domestic spending item on which I think we can cut back.

I think the Senator is correct in calling attention to this, but I think many of us have worked to cut down excessive spending in other areas in addition to defense. I think the Senator is right in saying that we have not been as critical, perhaps, as we should have been in some of these areas.

Mr. GOLDWATER. I look forward with great interest to hearing the report on the SST, because I have equally as prominent scientists who will pooh-pooh the idea that one SST, or if we make all 300 of them—which they have to make in order to break even—will produce any pollution of air or sound.

This is pretty much like bringing in some of our well known corporation presidents in this country who argue that this war has caused this inflation. I have remarks for the RECORD today which I hope will bring this matter into focus.

So I am looking forward to the Sena-

tor's continued good work in all these fields. I was not necessarily referring to him, but I think if he checks his voting record, he might find places where he slipped a little in approving too high a request.

Mr. PROXMIRE. I keep very close track of this, and last year I voted for a very sharp reduction—I mean a sharp reduction—in President Nixon's proposals for domestic spending, as I did in the Eisenhower proposals for spending when he was President, and as I did with President Kennedy and President Johnson. I have consistently done that, both in domestic spending and in military spending.

Mr. GOLDWATER. I am happy to hear the Senator say that. I recall when he introduced approximately \$23 billion worth of bills.

Mr. PROXMIRE. That was the interpretation of Ezra Taft Benson and some other people who did not understand what those bills would do. Authorities I had showed they would save \$9 billion. That was a conservative estimate.

Mr. BYRD of West Virginia. Mr. President, will the Senator yield for a unanimous-consent request?

Mr. GOLDWATER. I yield.

ORDER FOR THE TRANSACTION OF ROUTINE MORNING BUSINESS AND CONSIDERATION OF UNFINISHED BUSINESS

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent that the able Senator from Arizona be permitted to proceed for an additional 10 minutes and that, notwithstanding the expiration of the morning hour at 12 noon today, there be a period for the transaction of routine morning business, with statements therein limited to 3 minutes; that following the yielding of the floor by the able Senator from Arizona and upon the completion of the period for the transaction of routine morning business, the unfinished business be laid before the Senate.

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

BOMBERS AND TANKERS

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

Mr. GOLDWATER. I yield.

Mr. McINTYRE. I should like to say to the distinguished Senator, who is a long-experienced member of the Committee on Armed Services, that I thank him for his kind remarks about the Subcommittee on Research and Development.

I think he is wise enough to know that this is a very difficult area for us to probe. We do not want to go beyond the pale of what is appropriate and proper.

I think his remarks relative to the KC-135 are informative and helpful.

I probably will put in the RECORD today a short statement, sort of in rebuttal. I will send a copy to him.

Most of all, I appreciate the Senator's support in the committee, in the full committee, where we are trying to take

hard looks and where I certainly do not have the expertise in my background that I wish I did have. But I think we are making some progress in trying to scrutinize these programs. The B-1 program is one that, as I said in my speech, we must continue to monitor at all times so that we do not have any duplication of the tremendous cost growths we have run into.

I ask unanimous consent that my rebuttal statement be allowed to appear in the RECORD at this point:

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

REBUTTAL STATEMENT OF SENATOR McINTYRE

Mr. President, I have studied with care the remarks of the distinguished Senator from Arizona in response to my earlier remarks. I would like to make only a few brief points in rebuttal of them.

(1) The Air Force has reversed itself during the past six months as regards its request for funds in fiscal 1971 to study the development of a new tanker. I trust that the following chronology will serve to clarify this point:

The "Descriptive Summary" submitted by the Air Force in February in support of the fiscal year 1971 budget estimates states that the \$500,000 in the fiscal 1970 program covers completion of "studies of simultaneous, multiple station refueling for a single tanker and resolution of technical uncertainties on re-engining the B-52 G-H." It also states the program planned for the \$500,000 requested in fiscal 1971 "is to perform studies that will directly support an FY 1972 go-ahead on a new tanker alternative."

General Glasser, when he appeared before the Senate Armed Services Committee on March 12, 1970, stated, "We are this year requesting funds in the amount of \$500,000 to conduct studies of an advanced tanker . . ."

The \$500,000 shown in the budget as being available in fiscal 1970 was not available but was anticipated to be funded by reprogramming. General Pitts, in support of General Glasser, stated that same day that "A prior approval reprogramming is now being processed through DOD which will request authority from the Congress to initiate this (Advanced Tanker) program in fiscal year 1970." This reprogramming action was not approved by the Congress.

Then, by letter dated June 12, 1970, signed by Col. William B. Arnold, Chief, Congressional Investigations Division, Office of Legislative Liaison, a package of twenty-four answers was provided in response to questions asked by the Subcommittee on Research and Development. Question No. 11 asked "Why is the Air Force requesting \$500,000 for the study of a new tanker in FY 1971?" The Air Force answer, which is printed below is the first evidence that the Subcommittee was advised that the funds were not to be used to study an advanced tanker. It came, interestingly enough, only after the Subcommittee began expressing some concern about long-range tanker costs.

The \$500,000 in Fiscal Year 1971 is for studies exploring the utility of multiple booms on KC-135s for refueling TAC fighter aircraft. The study money is not to be spent on an Advanced Tanker for use by strategic bombers (KC-X) but for research on advanced refueling concepts; as advanced concepts are studied for all existing systems for which a continuing need is envisaged.

In the future, the Air Force will continue to perform studies of ways to improve and modernize the existing tanker fleet as well as the study of the need for new tankers in relation to other needs within a constrained

budget. It should be noted, however, that the Advanced Tanker Program Element does not presuppose the development of a new tanker since other alternatives such as modification of new production airframes could also result in an advanced capability tanker.

(2) While the Air Force did submit cost estimates in response to questions from my staff regarding possible modifications in the KC-135, these cost estimates were not complete, covering only some of the modifications referred to. I felt that far more complete data was required before an intelligent assessment of total modification costs would be possible. This absence of complete information was one of the reasons I have called for further study of this whole tanker issue. The Senator from Arizona himself, rather than provide hard data, has merely repeated the unsupported Air Force assertions that the modifications in question are "quite modest" and can be performed at "reasonable expense."

(3) Finally, as regards a \$7 billion dollar C-5A tanker procurement program. I have never claimed that it is the present plan of the Air Force to adopt such a program or that it will necessarily adopt it in the future. The statement in my prepared remarks was as follows:

The Air Force indicated, in response to a written inquiry addressed to them by my staff, that the procurement of 255 modified C-5A's for use as tankers—if needed—could be expected to cost \$27.5 million per copy, for a total cost of over \$7 billion.

It is my belief that neither I nor my staff misused the information furnished us by the Air Force in making this statement. In light of the changed Air Force position on the need for funds to study a new tanker this year and develop one starting next year, I wanted to probe deeper as to whether such a tanker would in fact be needed in the foreseeable future and what its costs would be if needed. So, I submitted the following question to the Air Force:

If the Air Force were directed to procure a new tanker, what options would it consider and what, roughly, would be the respective unit production costs of each?

I asked the question in this manner to avoid an Air Force response saying simply that no new tanker procurement was being planned or was under active consideration at the present time.

In answer to my question the Air Force indicated what I already suspected—that alternative new tanker programs have been given some consideration by it. The answer listed several alternative programs, each with a specific buy and specific total cost. One of these alternatives was the KC-5A approach I mentioned. I referred to that program specifically because it is the stated preference of the Strategic Air Command. The costs of the other programs mentioned—involving the 707 and 747 airframes as well as new airframes to be developed—are also in the multi-billion dollar range.

Mr. President, I am not trying to "hang the albatross of a new tanker about the neck of the B-1." When the Air Force first states it needs a new tanker and then changes its mind, and when it is obvious that alternative programs have been sufficient consideration to make specific cost and buy estimates possible, the matter is one which warrants raising. That is why I have asked for a study in this area and why I still believe that such further study is essential.

Mr. GOLDWATER. I could not agree more with the distinguished chairman of the subcommittee. I might say to him and also to my good friend from Wisconsin that the most valuable changes which have come about in the Armed Services Committee, in my estimation, have been

not the total shift, but the shift in emphasis away from, "Do we need it?" to "Can we afford it?"

In this respect, the staff has been augmented by men who are experienced in auditing work and in cost problems. I can assure my friend from Wisconsin that I am not proposing to speak for the distinguished chairman, the Senator from Mississippi (Mr. STENNIS), but this goes on constantly.

The weekend before last, I went out to the McDonnell-Douglas plant in St. Louis for two purposes. One, to inquire into the simulator, and the other to inquire as to how they were getting along with the F-15 with relation to the milestone process, which they agreed to, and they are well within the bounds. I think that is a great improvement over the contracts we have been letting over the past 8 or 10 years, one of which resulted in the terrible condition of the Lockheed Aircraft Corp., even though we will get a good airplane out of it.

Had this type of program been put into effect 10 years ago, we would not have been faced with the cost overruns other than those occasioned by increases in the cost of living, inflation, and so forth.

The Senator from Wisconsin is due a great deal of credit in this field. I do not always agree with him, but at least he had the courage to step where others had no courage to step. I salute him for that, even though we will proceed to stand up and debate each other at great length on other subjects.

Mr. President, my time has about expired, but I did mention the other point in my statement today, about the Peace Through Law Committee which has again this year published a rather complete and extensive and well studied book and made it available to all Members of Congress—certainly to Members of the Senate.

Last year, I took the trouble to study that book carefully and to write comments where I felt they were due; namely, where mistakes and misstatements had been made.

I have only spoken today on the initial subject, of their approach to spending and some of their conclusions which I feel are erroneous and misleading. I have also prepared a report which I call "Comments on the B-1 Section in the Report on Military Spending by Members of Congress for Peace Through Law," released July 15, 1970, and reads as follows:

I—THE NEED FOR BOMBERS

The opening paragraph of the summary of the peace through law report states that:

With all the destructive deterrent power represented by American ICBM's and SLBM's, it is worth considering whether the manned bomber should have any role at all in future U.S. strategic posture. This question deserves much more scrutiny than it has received thus far, especially since discussions to date pretty much assumed the need for a bomber and have gone more to the kind of bomber to be acquired.

The Members are, of course, correct in saying that the future role of the bomber in our strategic posture deserves the most careful scrutiny. But the Members

are laboring under a serious misapprehension if they think that this question has not been thoroughly considered and discussed in the executive branch, as well as the Congress. In fact, the arguments advanced in the report against the B-1 and bombers generally, were all debated last year in the Senate. And, they have been repeatedly studied and analyzed in the executive branch, and discussed with the appropriate congressional committees, for at least the last 5 or 6 years. Nevertheless, the issue is certainly important enough to warrant a penetrating reexamination each year.

It is interesting to note that while the bulk of the report is devoted to a refutation of arguments in favor of a continuing role for the bomber in our strategic force posture, the report very carefully avoids an outright refutation of the mixed force concept itself. In this respect, the members displayed commendable prudence.

There is every reason to believe that the role of the bomber will be much more important in the future than it has in the recent past. Four or five years ago we enjoyed a wide margin of strategic superiority over the Soviet Union—with or without bombers. That margin of superiority has now been greatly narrowed, and within the next 5 years may actually be eliminated or reversed, unless SALT is successful, or we greatly increase our strategic forces. Since the prospects for SALT are uncertain and major force increases are unlikely at this time, we must continue to rely for our deterrent in the foreseeable future on a combination of strategic weapons systems, each of which not only contributes directly to our overall retaliatory capability but also serves to enhance the survivability and effectiveness of the others.

To this end, bombers in our strategic forces make a unique contribution. In combination with land- and sea-based missiles, they provide a hedge against future technological developments which might severely degrade the capabilities of any one of the major elements of our strategic offensive forces. They provide insurance against an unlikely, but possible, gross failure in our strategic missile systems. Together with strategic missiles, they compound and frustrate Soviet first-strike attack planning, and make the Soviet defensive task much more difficult and costly. They are more appropriate and useful than strategic missiles for less than all-out nuclear wars, and they comprise the only major element of our strategic offensive forces which can be used in conventional wars. Finally, their presence in the force provides the United States with a greater degree of flexibility in arms negotiations.

Contrary to the impression left by the military spending report, these are all very compelling reasons for wishing to retain bombers in our strategic forces posture.

Twice in little more than a decade we have been confronted by major changes in the Soviet threat which have seriously increased the vulnerability of our strategic deterrent. Many Members of the Senate may recall that late in the

1950's the emergence of the initial Soviet ICBM threat cast grave doubts on the survivability of our bombers, which were then the backbone of our strategic deterrent. It was estimated by the SAC commander at the time that with a force of 150 ICBM's the Soviets could destroy virtually all of our bombers in a surprise attack. The solution, then, was to construct the ballistic missile early warning system—BMEWS—disperse our bombers over a greater number of bases, and place a portion of the force on 15-minute ground alert—the warning time promised by BMEWS.

Now, with the continued massive buildup of the Soviet ICBM force, especially the SS-9's, our land-based missiles as presently deployed may become vulnerable to surprise attack. Here, again, a number of solutions are at hand and one of them, the deployment of Safeguard for the defense of Minuteman, is already being actively pursued. Several others—including a new "hard point" anti-ballistic-missile—ABM—defense system to compliment Safeguard, further hardening of the existing Minuteman silos and deploying the missiles in a mobile or moveable mode—are the subject of intensive research on costs and capabilities.

Similarly, the continued buildup of the Soviet SLBM force may in time increase the vulnerability of our alert bomber and tanker forces as presently deployed. To cope with this threat the Air Force has already installed new coastal radars for early warning, and is now developing a satellite system which will provide even earlier warning of an SLBM or an ICBM launch. In addition, the alert bomber and tanker forces are being dispersed over a still greater number of bases. And, if deemed necessary later, the alert force could be deployed exclusively at interior bases, away from the more vulnerable coastal areas. Beyond these measures is the option offered by the Safeguard ABM system. If fully deployed, this system would still further reduce the vulnerability of the alert bomber force.

Although, today, our Polaris submarines appear to be virtually invulnerable to Soviet attack, that may no longer be true 5 or 6 years hence. We all know that the Soviets are building a large number of modern nuclear-powered attack submarines each year and are rapidly improving the other elements of the anti-submarine-warfare—ASW—forces. In fact, Secretary Laird has recently reported that by the early 1970's the submarine construction rate could reach 10 to 14 units per year, of which a large percentage would be nuclear powered. In his judgment, "a combination of technological developments and the decision by the Soviets to undertake a worldwide ASW effort might result in some increased degree of Polaris/Posidon vulnerability beyond the mid-1970's". He went on to say:

That is one of the reasons why we are proceeding with the research and development for a new sea-based missile system. . . . Undersea Long range Missile System (ULMS).

Thus, the lesson to be drawn here is a

very old one, namely, that we should never place all of our eggs in one basket. It should be clear to anyone who has seriously thought about this survivability problem, that no one of the three major elements of our retaliatory force should ever properly be considered entirely, or even largely, invulnerable to Soviet attack. Consequently, the only prudent course we can follow is to continue to hedge against future developments by improving and retaining in the force all three elements—land and sea-based missiles and bombers.

The committee studiously avoids coming to grips with this extremely vital issue.

Another increasingly important reason for retaining bombers in our force, which the committee's report completely ignores, is that they greatly complicate Soviet "first strike" attack planning. That is, if the Soviets want to attack our land-based missiles and bombers at the same time with their ICBM's and SLBM's respectively, they have two basic choices: First, launch their ICBM's first, then their SLBM's, so that both arrive over the targets simultaneously, or second, launch both forces simultaneously.

If the Soviets make the first choice, then our bombers would have ample time to clear their bases before the SLBM warheads arrive. Our new over-the-horizon early warning system has already extended the warning time of an ICBM launch well beyond the 15 minutes provided by the line-of-sight radars of the ballistic missile early warning system; the satellite system will extend it further.

If the Soviets make the second choice, then there would be an interval of about 10 to 15 minutes between the detonation of the first SLBM warheads over our bomber bases and the arrival of the first ICBM warheads over our Minuteman silos. This would give the President enough time to launch our ICBM's before they could be attacked. Whether he would do so under those particular circumstances is, of course a matter which would have to be decided at that time. But the fact remains that the decision to launch our ICBM's could be made, transmitted and executed within that 10- to 15-minute time interval, and then Soviet planners would have to take that fact into account in their calculations.

Thus, the presence of bombers and land-based missiles in the force greatly enhances the retaliatory capabilities of both. And, by confronting the Soviets with two mutually exclusive "first strike" alternatives, either of which would be highly risky for them, we greatly strengthen our strategic deterrent. The central objective of our strategic posture, after all, is to deter a Soviet nuclear surprise attack upon ourselves and our allies.

A third reason for retaining bombers, which the committee acknowledges as valid, is that a mixed force compels the Soviets to spread their resources over two different types of defenses, instead of concentrating them on one—or diverting more resources to offensive forces. While the committee is quite correct in stating that this objective can be

achieved with a relatively small force, that is not the determining factor in the size and character of the force required. It is simply one good reason why bombers should be retained in our strategic forces.

The committee unfortunately confuses the issue of "missile unreliability." No one now argues that missiles are unreliable. But the fact still remains that we have never fought a war with strategic missiles. We have with bombers. We know what bombers can do and cannot do. And this is very important. The credibility of our strategic force, as a whole, is greatly enhanced by the presence of bombers. They provide insurance that our force will be able to perform its functions under all conceivable circumstances, including an unlikely, but possible, gross failure in our missile systems.

In this connection, we should not be misled by calculations which purport to show that bombers are not as cost-effective as missiles. Such calculations are always based on the assumption that missiles arrive first, and then the bombers. Thus, the bombers are assigned the "clean up" role, after the major targets have been attacked by missiles. But if bombers are applied first, as would be the case if missiles fail, then they turn out to be quite cost-effective in these calculations. Considering our current strategic forces on normal day-to-day alert, the bombers are loaded with about 35 percent of our tactical capability compared to 50 percent for ICBM's and 15 percent for SLBM's.

The committee's report hardly does justice to the "flexibility" argument. While the primary objective of our strategic forces is to deter the Soviet Union, or any other nation from launching a nuclear attack upon the United States and its allies, that is not the only objective of those forces. As President Nixon points out in his foreign policy report to the Congress in February 1970:

The overriding purpose of our strategic posture is political and defensive: to deny other countries the ability to impose their will on the United States and its allies under the weight of strategic military superiority. We must insure that all potential aggressors see unacceptable risks in contemplating a nuclear attack, or nuclear blackmail, or acts which could escalate to strategic nuclear war, such as a Soviet conventional attack on Europe.

Inherent in this broader purpose of our strategic forces is a capability to conduct a limited, controlled nuclear exchange, which, hopefully, could be terminated before it escalates to an all-out exchange. This type of capability can best be provided by bombers. Missiles, once launched, are irrevocably committed and they impose on the opponent a very compressed reaction time—both of which serve to invite uncontrolled escalation. Bombers, in contrast, can be launched and recalled. They can attack designated targets with greater precision—that is, there is much less chance of their going astray—and they provide the opponent with much more time to consider his response, or to react in a deliberate, carefully controlled manner.

Bombers would also be particularly

useful in third area conflicts—such as, Communist China—both in a nuclear and conventional bombing role. In contrast to missiles, bombers can be recycled repeatedly, and because air defenses in those areas are far less formidable than in the Soviet Union, bombers could be employed in sustained campaigns without the expectation of unacceptable losses.

This factor will assume a much greater importance once China acquires a significant nuclear capability, including ICM's. The deterrent task would then be much more difficult because China as well as the Soviet Union would have the capability to strike directly at the U.S. homeland. Our strategic forces would then have to be prepared to retaliate decisively against both China and the Soviet Union. Or, they might be called upon to retaliate against Communist China only, while maintaining their deterrent against the Soviet Union. In this latter case, bombers would be especially valuable, since, in contrast to missiles, they could be used repeatedly against China and still constitute a part of the deterrent against the Soviet Union.

Bombers, in contrast to missiles, can also be used in nonnuclear wars. In this respect, they are unique among our strategic weapon systems. They, alone, have the flexibility and capability to support our national objectives across a wide range of possible conflicts—from a quick show of force, to small scale conventional wars to global nuclear wars. Strategic bombers operating from bases within the continental limits of the United States could provide the initial support for an overseas ally under attack, while our tactical aircraft, either land or carrier based, are being deployed to the combat theater.

This capability could prove to be of even greater importance in the future if the trend toward the use of fewer U.S. overseas bases and forces continues during the 1970's. The strategic bomber, because of its range, could very well become our only immediately available capability for timely application of force in many parts of the world. Although of secondary importance to its operational utility, the bomber is also the least costly method for delivering conventional ordnance to long ranges. Furthermore, this conventional capability could be provided with but a temporary and minor degradation of our deterrent posture.

It is for all of these reasons, in combination, that bombers should be retained in our strategic forces for as far into the future as we can discern the threat.

II—THE NEED FOR A NEW BOMBER

While the committee report is somewhat ambiguous on the need for bombers generally, they are clearly opposed to the full scale development of a new bomber at this time. The reasons stated in the "summary" of the report are as follows:

First is the simple lack of necessity for operational capability before the end of the decade, deriving from the attributes of existing bombers and from the assured sufficiency of U.S. missiles into that time period. Second is the probability that a less costly bomber

could be developed without loss of the most important capabilities contemplated for the B-1—service as a low-flying platform for the launch of stand-off missiles. Retention of the basic B-52 design with some modification would be one option, and it has also been suggested that the C-5's potential for service in this area should be investigated. Third is the fact that current budgetary pressures demand that expenditures be delayed or foregone in every possible case.

Elsewhere in its report the committee quotes the Defense Department as saying:

There appears to be no reason why the B-52G's and H's cannot be maintained through 1980, if that should prove necessary.

This statement is quite true. But the B-1 is intended to serve in the force during the decades of the 1980's and 1990's. By 1980, the earliest B-52G will be more than 21 years old and the latest B-52H about 17 years old.

With regard to the FB-111, only 60 operational aircraft are now planned. Moreover, the FB-111 has nowhere near the capacity of the B-52, not to speak of the B-1. It has always been considered an interim strategic bomber and never as a replacement for the B-52.

As the committee correctly noted, the B-52's were not designed for low level operations. Very extensive structural modifications were required over the years to keep them in a safe operating condition. Furthermore, new avionics equipment had to be installed to maintain their effectiveness against the steadily improving Soviet air defenses. In total, about \$3 billion has been invested in the B-52 force—including structural modifications, capability improvements and depot maintenance—to keep it operationally safe and effective.

Even so the B-52 is not an optimum aircraft for low altitude operations. It is more subject to the effects of low altitude turbulence in terms of loss of aircraft control and airframe damage from fatigue. Another decade of flight at low altitude might well result in some structural damage which would require even more extensive and costly structural modifications than have been made in the past.

Accordingly, it is only a matter of time before the B-52 G/H's will have to be replaced. Given the long lead time involved in the development, production, and deployment of a new intercontinental bomber—about 8 to 10 years—it is not too soon to start an orderly development program now.

Furthermore, the B-52's incorporate an aircraft technology dating back to the early 1950's. Although the engines and the avionics in the newer B-52's have been updated, the airframe is basically the same as the early B-52's. Aircraft technology has advanced enormously since that time and a much more efficient and effective bomber can now be built. The B-1, with better inherent stability, better terrain avoidance equipment, better control systems for low altitude flight and a high tolerance to low altitude turbulence, could operate safely much closer to the ground than the B-52. The normal speed of the B-1 at low altitude would be about 60 percent greater than

the B-52, an important factor in penetrating interceptor defenses. And, it would have a far better navigational accuracy and, therefore, much better accuracy with the short range attack missile—SRAM—than the B-52. Thus, the B-1 would be able to cope with an even more advanced low level surface to air missile—SAM—system than the current Soviet SA-3.

But perhaps more important, the B-1 would also have a much better penetration capability than the B-52 against a possible new Soviet "look-down, shoot down" air defense system involving the use of airborne warning and control aircraft and very high performance interceptors. One such interceptor, the Foxbat, may have already entered production and the first few may be deployed this year. And we have reason to believe that the Soviets are also working on the other elements of a "look-down, shoot down" air defense system just as we are.

The extensive deployment of such an air defense system by the Soviet Union would present our bombers with a formidable threat. The employment of subsonic cruise armed decoy—SCAD—together with electronic countermeasures, would help to alleviate that problem, since this subsonic cruise armed decoy, if successfully developed, would look like a bomber to the Soviet ground and airborne radars. But even so the penetration problem would still be very serious for our B-52's.

The B-1, by virtue of its much greater speed at high altitude and much smaller radar cross-section, would have a much better chance of penetrating at least the leading edge of the Soviet air defenses undetected. The effective radar range of a Soviet airborne warning and control aircraft would be considerably shorter against a B-1 than against a B-52. And, the B-1 could move through the extended defense area considerably faster than a B-52, at high or low altitude. This latter feature would be particularly important if the Soviets deploy a large force of Foxbats, which have a top speed at high altitude of about Mach 3.

Indeed, if the Soviet air defense threat becomes much more severe in later years, our bombers may have to be equipped with air-to-air missiles for self defense, as the committee report suggests. The B-1, because of its greater volume and weight carrying capacity, would lend itself much more readily than the B-52 to the provision of such a self-defense capability. In fact, the B-1 would be much more suitable for the installation of any type of new equipments, since provisions can be made for them in the original design of the airframe. Moreover, their installation in the B-52 would still leave us with a very old basic aircraft by the 1980's. If we are to make these large new investments in avionics, and other equipment, it would seem far more prudent to install them in a new aircraft which would have a much longer and more certain life expectancy.

In addition to its better penetration capabilities, the B-1 would also have better prelaunch survival characteristics than the B-52. It will be specifically designed for quick reaction launch and will

be hardened, to the extent feasible, against nuclear effects. It will also be capable of being widely dispersed, thus compounding an already difficult enemy targeting problem.

The committee is quite correct in stating that, "the KC-135 tanker upon which it—the B-1—would rely for refueling is not blessed with a similar capability." The Air Force is well aware of that problem, and if the SLBM threat becomes severe the tankers could be modified for a quicker start capability, or relocated on interior bases. Accordingly, the committee incorrectly concludes that massive new expenditures on a new supersonic short-takeoff tanker will be required.

The above quotation also reflects a basic misunderstanding of the aerial refueling task. Tankers assist in optimizing the penetration tactics of a bomber force. They accomplish this by supplying the fuel necessary for low-level penetration to deep targets, and the subsequent recovery with appropriate fuel resources. However, this aerial refueling is accomplished at subsonic speeds, prior to penetration of the enemy's defensive system. The tanker aircraft is not designed for supersonic flight, and there is no foreseeable need for such a design. Moreover, the B-1 is designed to be used with the KC-135 and has always been planned for such use. A commitment to B-1 development does not entail a commensurate commitment to a new tanker aircraft.

The suggestion that a markedly lower cost solution to the new strategic bomber problem may be found, is entirely without foundation. The Defense Department has spent the better part of a decade and several tens of millions of dollars seeking such a solution. The idea of using a large transport aircraft as a standoff missile launching platform was intensively studied in the early 1960's. It was rejected because the Soviets could push out their peripheral defense to a point where the standoff missiles could no longer reach most of their targets. And, in fact, that is precisely what the Soviets are now in the process of doing. Consequently, any new bomber designed to serve in the decades of the 1980's and 1990's should primarily have a capability to penetrate the Soviet air defenses, and that capability the B-1 will have in very great measure.

A modified version of the B-52 would be grossly inadequate for the 1980's and 1990's, for the reasons discussed earlier. And, a B-52H, even without major modification, would cost probably twice as much now than it did 10 years ago when it was in production.

Nevertheless, the Defense Department is well aware of the current budgetary pressures mentioned in the committee's report. In contrast to some large development programs in the past, a continuing review of design specifications in relation to costs will be maintained throughout the development phase of the B-1 program. Adjustments in specifications will be made where the cost to achieve them is not commensurate with the performance benefits to be gained. Also, a series of development milestones

will be established for each of the three major work areas—aircraft, propulsion, and avionics. These milestones will be used to measure progress and to provide a technical basis for decisions to proceed with succeeding phases of the program. Milestones will also be identified in the development process to serve as reference points for the updating and verification or production cost estimates. A cost trace will be maintained throughout the program.

Moreover, the B-1 development program is geared to a very deliberate and orderly schedule. First flight will occur 4 to 5 years after the award of the engineering development contract, which took place in early June. And, no commitment to production is planned until first flight is achieved. Thus, the Congress will have ample opportunity to review the progress and costs of the program before a decision on production need be made.

The total cost to completion of the R.D.T. & E. program is now estimated at about \$2.3 billion in 1970 dollars. Although no procurement program has as yet been approved, the Air Force estimates that to provide about 200 aircraft in operational units would cost about \$7 billion in 1970 dollars, including initial spares and the necessary additional aircraft for training, attrition and command support. Thus, the total acquisition cost for a program of that size is estimated by the Air Force at about \$9.3 billion.

The committee's report shows an estimated acquisition of \$9.8 billion for about 250 production aircraft. But in either case the cost per unit, including R.D.T. & E., would be about \$40 million. This is about twice the price of the Boeing 747 airliner quoted in the committee's paper; which presumably also includes the cost of development. Since the B-1 is expected to be only about two-thirds the size of the 747—based on the committee's figures of 500,000 pounds for the 747 and a corrected figure of 360,000 pounds for the B-1—the cost per pound would be more than 2½ times that of the 747. Thus, the Air Force estimate already reflects a reasonable allowance for the greater complexity of the B-1, as compared with the 747.

With regard to the alleged downgrading of the B-1 specifications, the committee's report is quite inconsistent. On the one hand the members complain about the cost of the B-1 on the other hand they complain about the elimination of marginal performance characteristics which are not considered worth their costs. The B-1, as presently planned, will be fully capable of performing missions for which it is being developed, and that is the important point. There are many other characteristics which it would be nice to have in this aircraft, but they are not essential to the proper performance of its mission and are not included in the current design.

Another inconsistency in the report is the committee's contention on the one hand that we have a large enough missile force even without bombers, and on the

other hand that we ought to buy more missiles instead of the B-1. But what we really need to insure is the continued diversification of our strategic forces, so that at all times we are properly protected against unexpected shifts in the threat. This matter is discussed in part I of these comments on the report.

And, it should be clearly understood that the Defense Department is not developing the B-1 in order to maintain a bomber superiority over the Soviets. That argument is entirely inconsequential and is not worthy of any further comment.

Whether or not we will want to go forward with the production of the B-1 will depend upon future developments in the Soviet strategic threat as a whole, and, of course, the outcome of the strategic arms limitation talks now in progress. In any event, we will still be several years away from a decision on production. Continuing with engineering development at this time will keep open, at a relatively reasonable cost, the option to replace the B-52's by the early 1980's. It would, therefore, serve as a hedge against further unfavorable developments in the Soviet as well as the Chinese Communist threats, which might require a major upgrading of our manned bomber capabilities. Given the precariousness of the present strategic balance, it would be highly imprudent to weaken or foreclose that option.

Mr. President, I yield the floor.

TRANSACTION OF ROUTINE MORNING BUSINESS

The PRESIDING OFFICER (Mr. LONG). Under the previous order, there will now be a period for the transaction of routine morning business with statements therein limited to 3 minutes.

THE B-1 BOMBER

Mr. STENNIS. Mr. President, quite briefly, I want to thank the Senator from Arizona for his very fine coverage of the matters which he has discussed this morning, as well as to commend him for further discussions that he may make.

The Senator from New Hampshire (Mr. McINTYRE) went over the entire B-1 matter with great minuteness.

Just for the information of the Senate, and I want the RECORD to show this, the B-1 was debated around the committee table twice—on 2 separate days. I recall that two votes having been taken, some additional information came in and there was great consideration of it. Finally, it was put in its final form here, on the \$50 million of new money.

That illustrates that these things are not taken just because they are asked for. They are not taken on presumption or on assurance. We act on the facts.

The facts are that we developed this—as the Senator from Arizona said—with our staff members who know the subject matter, in addition to the knowledge that the membership itself has. That is the least that we should do, of course, because the public is entitled to that. The membership here is, too.

I want to say one word, as it was mentioned several times during the course of debate this morning, about the matter of the overruns.

I think, Mr. President, it must be made clear, overall, that "overrun" is a bad word, which is being misapplied some, with reference to the cost of these weapons.

The cost of an overrun, or excessive amounts of money, would, ordinarily, apply to the building of a house, which could have an overrun of 40 percent. In that case, while we might think of that as being bad management, waste, bad judgment, incompetence, or something like that contributing to it, that is certainly not the case with reference to our weapons systems, especially those in the beginning stage, such as the B-1.

There is no design of the plane settled on as yet. They have not even decided what the final form of the design, contour, capacity, weight, and what all will be. Thus, there could not be any overruns now, anyway, as that word is ordinarily being used. Until we settle the design and know something about what we are going to try to build into a bomber, we do not find a starting point to figure a so-called overrun, or an actual overrun for the future.

The word "overrun" is thrown around here and used in connection with waste, long before there is any basis for establishing a line as to where an actual overrun might begin.

There is no bad faith in that on the part of any Senator. The press uses that term, too, and they do not do so in bad faith. It is just an undefined item in military construction. We are not trying to build just a house. Many parts of intricate weapons are just ideas in the beginning, just as Alexander Graham Bell had an idea for the transmission of the human voice, and look how far that has come, from his crude apparatus in the beginning to the present vast telephone system in this country.

Thus, we could hardly figure an overrun on Alexander Graham Bell's initial apparatus to what is now the local telephone. I do not believe that is a far-fetched illustration.

I think we have had a very fine debate here this morning.

Mr. PROXMIRE. Mr. President, will the Senator from Mississippi yield at that point?

Mr. STENNIS. I yield.

Mr. PROXMIRE. The distinguished Senator raises the overrun question regarding the B-1. In the course of my discussion with the Senator from New Hampshire, I asked him about the fact that that plane is still costing \$29.5 million per copy in spite of the fact that there have been certain changes that should save \$5 million to \$6 million per copy. I asked the Senator from New Hampshire to explain this discrepancy in the cost of the plane. I asked him why this was not an overrun in the sense that if we were getting the same plane it would cost more money, inasmuch as the saving was not reflected in the cost, he said that he had asked the Air Force again and again to explain it, but they could not do it.

If this is not a matter of mismanagement but a matter of inflation, or some other logical reason, it seems to me it can be explained. Why cannot they give us some reasonable explanation? We should have it. The Senator from New Hampshire said there was no explanation, even though he persistently asked the Air Force about it.

It seems to me whether it was a cost overrun, a cost growth, a miscalculation, whatever it was, the fact is that the planning estimate on which the Senate, in good faith, went ahead with the B-1 last year and provided an appropriation of \$100 million was wrong and in error.

I cannot understand why, under the circumstances, we should not honestly and properly call it an overrun. If that term is wrong, I shall be delighted to change it and use another term.

Mr. STENNIS. Mr. President, I do not know the Senator's question. But I have tried to explain that these development stages were so uncertain. They change one and decide to put on certain avionics. That does not work and they then decide to put on another one. That does not work. In the process, they decide that they will not put any avionics feature into the bomber. So it is dropped out all together. That is the process of what I call experimentation.

Mr. PROXMIRE. I understand that. This is \$5 million or \$6 million for each copy, every single plane, as I understand it.

Mr. STENNIS. Mr. President, at some point there, after they get through with a lot of this experimentation, we can find a valid base upon which to figure it. We can figure if there is actually an overrun.

That is my point. As long as we have these vagaries and there is experimentation being carried out and abandoned and changes made, there is no proper base on which we can figure an estimate.

When we do get our design, we have something then on which to base an estimate. That is where the strict accountability starts, as I see it.

Mr. PROXMIRE. Mr. President, I think that is very useful. What has happened in the past is that we have been told we can go ahead and buy a weapon system. In this case we were told the cost would be about \$9.5 billion. We assumed that would be the cost. If we were told that it was a guess and that it could be twice as large or 50 percent larger, we might very well have taken a different view on appropriations.

Mr. STENNIS. Mr. President, I emphasize that in these early stages I do not think we can get what I would call an estimate.

I was the man who used the word "guess," and not the Senator from Wisconsin, but some other Senators on his side, jumped on that word "guess."

That is what it looks to me to be when these matters are in their early stages.

Mr. PROXMIRE. Mr. President, certainly the Senator would agree that when we have something like the C-5A with a contract agreement for \$3.4 billion and an increase in that amount, that that is different from what we are discussing now with the B-1.

Mr. STENNIS. There is a great difference.

Mr. PROXMIRE. That was an overrun. It was an increase over the contract price.

Mr. STENNIS. On the C-5A they started with the research and went into the research and development and other stages. So there are elements in there when that uncertainty was prevailing. However, after the design was adopted and agreed on, from then on out, there has to be soundness in their figures. We have to allow for inflation and salary increases and adding some changes there.

In the first part of the work there is uncertainty and there are no definite lines.

Mr. PROXMIRE. Mr. President, in the case of the C-5A there were two problems. One was that it was decided to go ahead on the basis of the estimate. The second is that the contract was awarded to a particular company because they bid low. The Air Force finding was that Boeing had a better plane while Lockheed had a better price. So the contract went to Lockheed solely on its lower price. It turned out to be a buy-in. It was an overrun that can be very damaging to the taxpayers.

Mr. STENNIS. There are overruns, I agree. My point is that we have to get the right point to start the figures from.

I thank the Senator from Wisconsin.

Mr. President, I yield the floor.

AMERICAN PRISONERS OF WAR

Mr. SAXBE. Mr. President, if it is indeed true—as St. Paul contended in II Corinthians—that we walk by faith, not by sight, then surely, the families of our men now held prisoner by the North Vietnamese live in perpetual shadow, for the enemy gives no sign of abiding by the Geneva Convention. If the simple act of releasing the names of prisoners, or allowing the delivery of mail between families, is too much to ask, then it can truly be said that the forces of inhumanity have triumphed at last.

PUBLICITY CONCERNING MANSON TRIAL

Mr. SAXBE. Mr. President, I have been interested, as we all have been, in the statement made by the President concerning the Manson trial and the reaction to that statement.

I am sure it was an inadvertent statement. And I am quite certain that it is regretted by all that the statement was made. But it brings to our attention a situation that is not unique.

Having had considerable experience as an attorney general, and I say that particularly with respect to one of the nationally discussed cases, the Sheppard case, and prejudicial error in regard to publicity, I cannot help tying it in to what is happening in the Manson case and pointing up that if we are to be limited on the trial of serious crimes as to prejudicial error, we are never going to be able to try some of these people by the standards set by some courts and injustice will triumph.

It points up further that we need to change our rule and to accommodate ourselves to the innovations in communications throughout the United States and throughout the world, as far as that is concerned.

In the Sheppard case, if we recall, it was contended, and successfully, in a habeas corpus case, that the jury was prejudiced because of newspaper publicity.

This matter has been raised in a famous Louisiana case that I am sure the present Presiding Officer (Mr. Long) is familiar with.

It has been raised in numerous other cases, everything from confessions on TV to more or less the editorial comments of newspaper editors.

In the Sheppard case, if this rule had been strictly applied at the time of trial, no county in our State would have been capable of trying this man, because all people had seen the newspapers and television and heard the radio reports of this crime.

The Sheppard case was very similar to the Manson case in that the whole world is aware of the crime that was committed at the Tate residence, is aware of the existence of this group, and is aware of the confession of one of the participants.

Where would we expect to get someone who is completely free of any knowledge of the case? We are not concerned here about opinions. We are concerned about knowledge of the case.

I submit now, as I did then, that if we expect to get a jury that is completely free of any knowledge or opinion, perhaps, in a case as notorious as this case or the Sheppard case, we will wind up with a jury of idiots, because only they would live in such a manner as to be completely out of touch with the news media as it exists today.

Perhaps we should have a jury bank established, in which we would put a certain number of people away each year and keep them isolated or in cold storage, so to speak, to get completely blank minds concerning the events that have happened within that year.

If we limit it to a year, we would have to speed up the trials as we have them today. I think it is unrealistic. We find ourselves, in our effort to be completely fair and to live within the original concept of the English common law and our jury system, working with an impossible situation which is entirely weighted on the side of the accused.

As I have stated many times, we are dealing with a system today where we, as the prosecutor and as the State representing the people, are outgunned. We are outgunned at every level. We are outgunned at the police level because we do not have adequately paid and adequately trained police. We are outgunned at the prosecution level. I think Time magazine this week commented on the judicial breakdown in New York City. They have a backlog of cases that is such that if all the judges sat all day on the existing backlog it would take 2½ years to catch up. The odds there are 200 to 1 that a person who commits a serious crime will ever go to the penitentiary.

We add to this confusion by saying we have to have a completely blank-minded jury, and with respect to prejudice, whether it be by the editor of a newspaper, by the prosecutor, or by the President, if an opinion is expressed which the jury hears about, we have to wipe out the proceedings and start over again.

As a matter of fact, the attorneys in this case say the defendants should be set free forever because it would be impossible to have a fair trial. If one were to go by some of the decisions on cases of this type, that would be true. What a terrible mistake it would be if the accused in this case should go free and not face a jury and not face a judge in the matter with which they are charged because of the statement of an individual, whether it be the President, me, or anyone whose knowledge they would come in contact with. If we are willing to go down this road in our search for justice and say, "Well, we cannot get a jury free of prejudice," and the person charged goes free, we are going to have to live with this type crime.

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

Mr. SAXBE. Mr. President, I ask unanimous consent that I may proceed for 2 additional minutes.

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

Mr. SAXBE. Mr. President, we are going to deserve exactly what we get because our zealotry for the rights of the accused, which we are all interested in, has completely blotted out the reality of a different set of conditions today.

I think the judge made a wise decision to proceed with the trial. Obviously the accused hopes to benefit by holding up a copy of the headlines so the jury would be aware of the President's statement. If that is so, the carelessness with which they have been kept during the trial is going to be pierced by this exposé by the accused to the jury, which would be completely out of keeping with the concept of justice when he would profit by his own act in holding up this newspaper. I think the judge has acted wisely, but it brings to our attention something we have too long avoided. What are these rules? What should we be doing in this area?

Of course, first, we have to have a more speedy trial. Perhaps we need the British system which provides that nothing shall be reported concerning the accused in a newspaper. If we were to do this and did not have speedy trials, we would do a great injustice to all our people.

I hope we will respond by some realistic action, not just by our courts, but, also by our legislative bodies, which gives us the power and the tools to make justice work by speedy trial, by adequate presentation of evidence, by good prosecutors, well paid and full time, and by speedy trials, and, if necessary, as many judges as we need.

ORDER OF BUSINESS

Mr. STENNIS. Mr. President, I ask unanimous consent that I may proceed for 5 minutes.

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

A REQUEST THAT SUPREME COURT RECONVENE TO CONSIDER DESEGREGATION IN SCHOOLS

Mr. STENNIS. Mr. President, total and massive integration has been and is being forced on the schools in the school districts in the South by the Federal Government even before the Supreme Court of the United States has decided, clarified, and laid down the law with respect to many basic practical problems which are involved. In many instances, school trustees have been required to take drastic action to bring about racial balance in the individual school, including the wholesale busing of children away from their neighborhood or community schools in the middle of the school year, thus almost totally disrupting, interrupting, and ruining the school year for countless thousands of children. These requirements are made of schools that are already integrated, so the purpose is racial balance.

Let me make my point very clear. In a concurring opinion in Northcross against Board of Education of Memphis, decided March 9, 1970, Chief Justice Burger stated that he believed the High Court should bring clarification to the legal "confusion" which now dominates the school desegregation question. The Chief Justice said:

I would do this on the basis that the time has come to clear up what seems to be a confusion, genuine or simulated, concerning this Court's prior mandates.

These are not my words. This is what the Chief Justice said. He also said:

As soon as possible, however, we ought to resolve some of the basic practical problems when they are appropriately presented, including whether as a constitutional matter any particular racial balance must be achieved in the schools; to what extent school districts and zones may or must be altered as a constitutional matter; to what extent transportation may or must be provided to achieve the end sought by prior holdings of the Court. Other related issues may emerge.

Mr. President, here is the Chief Justice with his solemn responsibility saying these points have not been decided by the Court and that they should be decided. Nevertheless, after the Court was augmented to its full membership, and all members were hale and hardy and sitting on the Bench, the Supreme Court did not face up to the issue in the Northcross case, where there were only seven members on the Court at the time. Now there are nine members. In addition there is a long line of cases clamoring for decision from Memphis, Charlotte, Norfolk, Richmond, and a long list of smaller districts.

Despite this and the statement of the Chief Justice which I have quoted, the Supreme Court later adjourned for 3 months and will not convene until October.

I do not speak disparagingly of the Court, as such. I am pointing out here that according to the belief of the Chief Justice, these matters have not been fully considered, decided, or defined and

they should be. Nevertheless, this recess is scheduled for 3 months and that critical 3 months is the very period when the Department of Justice is moving full tilt upon these school districts all over the South to make this total massive integration for the term beginning in September before the Court even reconvenes.

Mr. President, we can have differences of opinion about how a case should be decided, but there should not be any difference of opinion about the fairness, it seems to me, in a situation like this. If the Government is not going to function during that period, then these requirements should be suspended during that period.

As I say, I speak with great deference to the Supreme Court as an institution, and with respect to each member of it; but something must be done in my humble opinion.

Frankly, I think that in the interest of fairness to the South and to the entire country, the Department of Justice should select an appropriate case or cases to be heard by the Court, and make a strong plea for the Supreme Court to reconvene before October and before the next school session begins, and decide the issues which the Chief Justice said should be resolved. They are not issues I have said should be resolved; they are questions the Chief Justice said should be resolved.

This is not without precedent. The Constitution does not provide that the Supreme Court must take a long recess. It is just a custom, a practice. There is no requirement, and there is nothing in the Constitution about it. Also, I think it is the duty of the Supreme Court to decide as soon as possible the question of the legality or illegality of segregated schools outside the South.

The basic point which I am making is that some of these cases should be taken to the Supreme Court and there should be a definitive decision on the points which Chief Justice Burger himself has said should be decided.

Despite the fact that the law on these "basic practical problems" is not clear, the Court has adjourned until October, far beyond the opening dates of schools. As a result, the "basic practical problems" mentioned by the Chief Justice will not have been decided before school reopens, and the school people in the South will again be left holding the bag. Basic justice and fairness, I think, demand that we not condone this situation.

In addition, I think it is the duty of the Supreme Court to decide just as soon as possible the question of the legality or the illegality of segregated schools outside of the South. By refusing to face up to this question the High Court has given the legislative and executive departments of the Federal Government an excuse for taking the position that they will not act in the areas outside the South until the Supreme Court has passed upon the legality or the illegality of the school policies involved. As a result, the failure of the Supreme Court to act in such a case is institutionalized into the law and is relied upon by Gov-

ernment agencies in failing to move in northern and eastern school districts.

We have found that when the question of desegregating the schools outside the South reached the point of decisions for the people in non-Southern States that they decided that they were not willing to accept for themselves what they are now imposing on the South. Thus, as of now, the "political decision" is to continue the desegregation pattern in and against the South but leave the other areas of the country virtually immune.

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

Mr. STENNIS. Mr. President, I ask unanimous consent that I may proceed for 1 additional minute.

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

Mr. STENNIS. Mr. President, this makes the proceedings, as of now, a sham, as between one part of the country and the other.

Mr. President, in conclusion, I again assert that the Department of Justice should select a proper case or cases and take them to the Supreme Court and make a strong request that the Supreme Court reconvene this summer before the next session of school starts and decide both the "basic practical problem" mentioned by Chief Justice Burger in his Northcross opinion and also the question of whether or not segregation of children in the public schools in States outside the South is legal or illegal. These questions must and should be decided as promptly as possible and the failure to decide them adds to the chaos and confusion already existing. It also contributes to the injury being inflicted on the South while other areas of the country are allowed to go almost scot-free as far as desegregation is concerned.

But of the two, the need to get some definite determination on the constitutional questions as pointed out by the Chief Justice, in the South, before the schools have to reconvene in September, is by far the greater emergency of the two subjects I have mentioned.

I plead for some kind of response to give us the guidelines and the determination of the constitutional questions as mentioned by the Chief Justice of the United States, and in time to be of benefit in the lower courts, before the next school terms start.

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

Mr. STENNIS. I shall be glad to yield if I may first ask unanimous consent to have 2 additional minutes.

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

Mr. SCOTT. Mr. President, I would like to say, without at all going into the merits of the controversies that the Senator and I have had our agreements and disagreements on, that I do agree with what the Senator from Mississippi has said in reference to the comments of the Chief Justice.

We have many things that are wrong in the North, and particularly with the de facto segregation situation. The problem is a national problem. I would like the Supreme Court to act on it as soon

as possible. Decisions in the gray areas, the as yet unexplored legal questions which need to be met and charted, ought to be made as soon as possible, so that all of our people may know where they stand, what is expected of them, and how they must conduct themselves in this great search for an equality of treatment and improvement in our educational system. I thank the Senator for yielding.

Mr. STENNIS. Mr. President, the Senator from Pennsylvania has a fine understanding of the law and a fine understanding of the human elements involved and is a great supporter of education, so I am most grateful to him for his interest.

I may say that I get telephone calls. Last night I got a telephone call from a school district in my State that has been in compliance since 1964, Vicksburg, Miss. Their school plan had been approved by HEW then and they had understood that their amended plan had been approved by HEW several weeks ago. All of a sudden they heard a news broadcast that they are going to be included in the lawsuit. They heard it on television. They do not know what to do or where to turn.

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

Mr. STENNIS. Yes; I yield to the Senator from Montana.

Mr. MANSFIELD. Mr. President, I align myself with the distinguished minority leader. This is a question which has been bothering me for years. Why is it that the Supreme Court has to take 3 months off every year? It is a coequal branch of the Government. Does the President of the United States take 3 months off? Does Congress take 3 months off?

I understand the Associate Justices get salaries of \$60,000 a year, and I think the Chief Justice gets \$60,500 a year, but I have read in the newspapers that many of them take long trips during the 3-month recess, with work piling up.

What applies to the Supreme Court applies to the appellate courts and the district courts as well.

It is my belief, and it has been for many years, that these members of the judiciary, who are protected all the way through, ought to consider at least operating under a 1-month recess schedule rather than a 3-month recess year after year after year, decade after decade after decade, while the work piles up—which they were appointed to attend to, just as our work piles up and which we are elected to attend to.

I think something should be done about it and that the initiative should be taken by the Justices and judges themselves. There is no justification for a 3-month recess.

Mr. SCOTT. Mr. President, will the Senator from Mississippi yield?

Mr. STENNIS. First, Mr. President, I ask unanimous consent to have 3 additional minutes.

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

Mr. STENNIS. I yield to the Senator from Pennsylvania.

Mr. SCOTT. Mr. President, I know, as we labor here, that at times we are a lit-

the sympathetic to ourselves, but the job is here, and we have to do it, and the public would not excuse us if we did not hew the wood which had piled up awaiting our efforts.

I believe that the present Chief Justice would not, for himself, object to a longer court term. I think the court has followed lackadaisical ways, over the decades, as the distinguished majority leader has said; but \$65,000 is a lot of money. It is not really contemplated that the public pay that salary for 9 months out of the year but for all of the year. The backlog in the Supreme Court is immense and is of concern to all our citizens. The backlog in the lower courts certainly contributes to the criminal minded, who believe that the longer their cases are delayed, the greater their chance of avoiding being held responsible for their acts.

While I have no criticism of the Supreme Court as such in this context, I think a colloquy of this kind is the only proper and legitimate way of communicating to another branch of the Government the feeling of the executive, which is working all the time, and of the legislative, which is working all the time with very limited recesses, that we would respectfully submit to them that they might assume some additional burden of labor and of effort and put their own fine, brilliant, collective talents—all nine of them—to a more continuous use so that the country will bask in the effulgence of the Court over most of the year rather than deny us the privilege of enjoying or not enjoying their edicts and ukases over a truncated period.

I thank the Senator for yielding.

Mr. MANSFIELD. Mr. President, will the Senator yield briefly?

Mr. STENNIS. Mr. President, I ask unanimous consent to proceed for 2 additional minutes.

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

Mr. STENNIS. I yield to the Senator from Montana.

Mr. MANSFIELD. May I also say, in connection with the 3 months that they take off, they do not contribute anything to their retirement, and when they retire they get their full salary anyway.

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

Mr. STENNIS. I yield to the Senator from Wyoming.

Mr. HANSEN. Mr. President, I certainly am not qualified, on the basis of experience, to participate in such a learned colloquy as has taken place on the floor, but I would like to observe, nevertheless, that if the members of the Court were to take advantage of the 3-month recess in order better to understand the temper of the country, to appreciate the difficulties of trying to apply the laws as they are handed down by the Supreme Court, insofar as the activities of prosecuting attorneys are concerned, it might not all be a lost effort.

I call attention to the fact that it seems, in the opinion of many, as though in recent years the Court has almost demanded nothing less than complete excellence on the part of the prosecution. If, at any step along the way, from the time a person may have been observed

in the commission of an illegal act until he is arrested, arraigned, and brought to trial—if there is any place along that entire series of steps that less than complete compliance with the law has characterized the efforts of the prosecution, the thrust of many of the Court's decisions seems to be that the case must be thrown out, and the accused turned loose.

I speak with some first hand knowledge when I say this. In Wyoming, during the time I was Governor, I had occasion to witness the reaction that resulted from the fact that a young man who murdered a baby sitter, and admitted it, had not been accorded one of the protections called for by the Court: he did not have an attorney present when he made a confession, which he voluntarily made. There was no doubt at all about his guilt; and yet, because of that slightly less than full compliance with all of the processes which the Supreme Court says must characterize the efforts of the prosecution, he was turned loose.

So I say, with all due respect, that if the members of the Court were to become more familiar with the difficulty that has been imposed upon the law enforcement officials of this country in trying to comply with some of the rather extreme positions that I think have been taken by the Court, the summer recess might not all be lost.

Mr. STENNIS. Mr. President, I ask unanimous consent that I may have 1 additional minute to conclude.

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

Mr. STENNIS. I thank the Senators for their very fine response.

I illustrate, Mr. President, with a school district—and there are many of them—crying for better definitions, better constitutional guidelines, and more definite guidance from the other courts. Moreover, this school district—Vicksburg, Miss.—has been in compliance for 6 long years. It has been complying with HEW and all that they exact, as I understand the facts.

Now, less than 4 weeks before time to open school, they are jerked up here and hauled into court about this matter, with the question of constitutional guidelines going begging for an answer while the Supreme Court remains on vacation.

I think we could not have a more desperate or more regrettable situation existing for the youth of our country, black and white, than we are faced with right here, as illustrated by these remarks.

ORDER OF BUSINESS

Mr. PROXMIRE. Mr. President, I ask unanimous consent to be permitted to proceed for 6 minutes in the morning hour.

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

SCIENTISTS VOICE GROWING CONCERN OVER THE SST

Mr. PROXMIRE. Mr. President, I call to the attention of the Senate a very alarming statement by some very distinguished scientists:

A feeling of genuine concern has emerged from [our] conclusions. The projected SST's can have a clearly measurable effect in a large region of the world and quite possibly on a global scale. We must emphasize that we cannot be certain about the magnitude of the various consequences.

This statement on the SST represents the conclusion of a month long study by a group of scientists, professionals, and public officials on critical environmental problems. The study, known as SCEP, was sponsored by the Massachusetts Institute of Technology and chaired by Carroll L. Wilson, professor of management at MIT. Approximately 100 scientists and professionals, with expertise in meteorology, atmospheric chemistry, oceanography, biology, ecology, geology, physics, engineering, economics, social sciences, and law, participated in the study. They came from 17 universities, 13 Federal departments and agencies, three national laboratories, and 11 non-profit and industrial corporations.

Mr. President, if the SCEP conclusion were made about some brandnew proposal Congress was considering for the first time, I doubt whether anyone in this Chamber would contemplate voting for it. At a time when we all are acutely aware of the need to safeguard our air, our water, and our right to a peaceful existence, it would be the height of folly to embark upon such a project in the face of such a warning.

But unfortunately, Mr. President, the SST is not a new project. Funding for this project has been going on since the early 1960's, with some \$700 million already spent. This is certainly no justification for throwing good money after bad. But it has evidently provided a powerful argument for continuing SST funding in prior fiscal years—despite the fact that ultimate Government costs for the SST will probably run in excess of \$4 billion; despite the fact that we are still short of the 20-percent mark in funding the SST; and despite the fact that the Government is clearly receiving the raw end of the deal in a "heads I win, tails you lose" contract with the SST manufacturers.

Somehow, Mr. President, the SST is not regarded in the same vein as other projects funded by the Federal Government—such as urban renewal, hospitals, pollution control, model cities, or education. The SST represents progress. In the name of progress, it seems we must expect to tolerate a certain amount of environmental pollution.

But how much, Mr. President? The MIT study found that a fleet of 500 SST's flying 7 hours a day could produce "increased temperatures in the stratosphere with possible increase in surface temperatures." Does the American public have to put up with that, in order to have a plane which will benefit fewer than 1 percent of our population? The study group also found that the SST's could produce "increased clouds from water vapor." Will the public tolerate this too?

What is more, the study group makes it quite clear that these effects could well be on a global scale:

Clearly such consequences are on a global scale even though the most pronounced effects would be felt where the highest density

of traffic existed, i.e., the North Atlantic Ocean.

Mr. President, how much more do we have to hear?

Last year the ad hoc committee on the SST, consisting of top-ranked officials from President Nixon's administration, warned of "a significant increase in cirrus clouds" and of "a significant increase in the relative humidity from a fleet of SST's." It also cautioned that these effects could "alter the radiation balance" and possibly affect "the general circulation of atmospheric components."

This spring Chairman Russell Train of the Environmental Quality Council told the Joint Economic Committee that the water vapor emitted by the SST's "would affect the balance of heat in the entire atmosphere leading to a warmer average surface temperature," and that the water vapor "would react so as to destroy some fraction of the ozone in this part of the atmosphere." The effect of destroying the ozone, Chairman Train said, could be "that the shielding capacity of the atmosphere to penetrating and potentially highly dangerous ultraviolet radiation is decreased."

And just a few days ago, the Airport Operators Council wrote to the Transportation Subcommittee urging the Senate to hold up funds for the SST until acceptable noise limits can be met. Referring to the fact that the SST's sideline—airport—noise is at least several times louder than existing jets, the Council told the subcommittee that:

It is completely unrealistic to believe that the public would permit or tolerate the introduction of an SST which requires new and larger airports.

Mr. President, from the President's ad hoc panel, to Chairman Train, to the Airport Operators Council, and now to the MIT study group, the warnings are all the same: the SST is a potential environmental monster, and there is no way now known of alleviating its impact on the environment.

I urge the Senate, as strongly as I possibly can, to heed the advice of those who have studied this project very closely. I urge the Senate not to appropriate any more funds for the SST when the Department of Transportation appropriations bill (H.R. 17755) comes to the floor.

I might point out that we are asked to appropriate this year \$105 million to reduce air pollution, and \$290 million for the SST, to increase air pollution.

Mr. President, I ask unanimous consent that the summary of the findings by the MIT study group, a description of the background of the MIT study, a list of the participants in the study, and an article published in the Milwaukee Journal of August 2, 1970, entitled "SST Worries World Panel of Scientists," be printed in the RECORD.

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

GENERAL DISCUSSION OF THE STUDY OF CRITICAL ENVIRONMENTAL PROBLEMS (SCEP)
(Sponsored by Massachusetts Institute of Technology)

BACKGROUND OF SCEP

The need for the 1970 Study of Critical Environmental Problems (SCEP) was per-

ceived in June 1969 in discussions among a number of scientists, professionals, and public officials. In examining the status of governmental and non-governmental preparations for the 1972 United Nations Conference on the Human Environment, they concluded that an initiative such as SCEP would provide an important input into planning for that Conference and for numerous other national and international activities.

The Steering Committee which planned the Study during the Fall of 1969 and Spring of 1970 was chaired by Carroll L. Wilson, Professor of Management at M.I.T., and included John L. Buckley, Office of Science and Technology, Executive Office of the President; Richard A. Carpenter, Chief, Environmental Policy Division, Legislative Reference Service; Raymond L. Bisplinghoff, Dean, School of Engineering at M.I.T.; Raymond F. Baddour, Chairman, Department of Chemical Engineering at M.I.T.; George W. Rathjens, Professor of Political Science, M.I.T.; Richard S. Morse, Senior Lecturer, School of Management, M.I.T.; William H. Matthews, Department of Political Science, M.I.T.; Thomas F. Malone, Professor of Physics, University of Connecticut; Roger Revelle, Director, Center for Population Studies, Harvard University; and Paul M. Fye, Director, Woods Hole Oceanographic Institution.

By mid-November 1969, the Steering Committee had chosen as the topics for the Study those problems arising from the impact of man's activities on the global environment. Unlike many environmental problems of more immediate or local concern, global problems such as changes in climate and in ocean and terrestrial ecosystems had not been subjected to intensive study and examination. SCEP was developed to fill that gap.

The Steering Committee felt that a one-month, multidisciplinary study of these complex problems would provide citizens, public policymakers, and scientists with an authoritative evaluation of the present status of scientific understanding of present or potential harmful effects of world-wide pollution. But in addition to evaluation, the Study was also undertaken to develop specific recommendations for new programs of focused research, monitoring, and action which will be required if more definitive information is to be obtained and if potential crises are to be recognized and averted. It was also hoped that if such a multidisciplinary and systematic study of this specific set of global problems proved effective in raising the level of informed public and scientific discussion of and action on these issues that this Study might serve as a model for similar multi-disciplinary efforts which could attack many of the other critical problems of our time.

During the Winter and Spring of 1969-1970, support for the Study was sought and obtained, participants were invited, and extensive background preparations were undertaken. These background materials included approximately two hundred papers and articles of which about one-fourth were prepared especially for SCEP. The Study was conducted between July 1 and July 31 of 1970 at Williams College in Williamstown, Massachusetts.

CONDUCT OF SCEP

Approximately forty scientists and professionals participated in SCEP for almost the entire month of July 1970. In addition, about thirty other part-time participants attended for periods ranging from one to three weeks and made substantive contributions to one or more SCEP Work Groups. The Study was also greatly aided by the work of another ten or twelve scientists and professionals who acted as consultants or observers.

SCEP participants represented expertise in over a dozen disciplines including meteor-

ology, atmospheric chemistry, oceanography, biology, ecology, geology, physics, several branches of engineering, economics, social sciences, and law; and they were drawn from seventeen universities, thirteen Federal Departments and agencies, three national laboratories, and eleven non-profit and industrial corporations. The research and rapporteurial staff of the Study included eleven graduate and law students from three universities.

SCEP concentrated on the global climatic and ecological effects of several specific pollutants in the atmosphere-land-ocean system. The SCEP Report will present the scientific and technical judgements of the participants on the present status of understanding of several global problems. In addition, SCEP explored procedures and programs of focused research, monitoring, and action which will be required to understand further the nature of potential threats to the global environment so that effective action can be taken to avert future crises. The major findings and recommendations of SCEP are briefly outlined in the accompanying document and will be discussed in more detail in the SCEP Report.

The Study began on Wednesday, July 1, 1970, at Williams College in Williamstown, Massachusetts. During the first two days, several participants made presentations to the assembled group which established the framework for the month-long effort. By Friday, Work Groups for the first full week of study had been identified. These five Work Groups, which met during the first week (July 7-12), were concerned with evaluating present knowledge of the rates, routes, and reservoirs of several pollutants which might have harmful global effects. Two of the Groups were concerned with routes and reservoirs in the atmosphere and the oceans. The other three Groups developed the data base for the Study by determining the sources and rates of relevant pollutants from three major sectors of man's activities—industrial wastes; domestic, agricultural, and mining wastes; and energy products.

During the second full week of the Study (July 13-19), the participants divided into four Work Groups—Climate Effects, Biosphere Effects (on ocean and terrestrial ecosystems), Baseline Measurements and Monitoring, and Implications of Change. These Work Groups continued into the third week and then the participants mixed to some degree to develop recommendations for programs of focused research, monitoring, and action. The first three days of the fourth week (July 27-29) were devoted to adoption of Work Group reports and conclusions and recommendations developed by SCEP.

PUBLICATION OF RESULTS

The SCEP Report will be published by the M.I.T. Press in mid-October 1970. In the late Spring of 1971, a series of edited volumes will be published by the M.I.T. Press which will include many of the working and background papers produced by or for SCEP. Comprised of papers signed by the individuals or small groups which produced them, those volumes will provide the substantive support for the summaries contained in the Report.

The SCEP Report will be divided into two major sections. The first section will be a distillation of major findings and recommendations developed by the various Work Groups of the Study. That section will be, in a broad sense, the SCEP Report. All those attending the Study had an opportunity to examine these conclusions and the papers on which they were based, but all participants had neither the time nor the expertise required to make an independent judgment on each and every area discussed in the first section. Therefore, it should not be assumed that each Study participant subscribes to every statement in the Report.

The second section of the Report will contain the reports of the seven SCEP Work Groups (several first and second week Work Groups combined to write single reports). These Work Group reports were developed through intensive, full-time discussion and study by the Group members. In some cases, these deliberations continued for the entire Study period. Those reports represent the consensus of the members of the individual Work Groups and will be signed by those members. The first section of the book will be based exclusively on findings and recommendations contained in the Work Group reports.

SUPPORTERS OF SCEP

The following Federal Departments and agencies, private foundations, and organizations supported the Study through preparation of background materials and professional participation in the Study and funded the Study through grants or contracts:

Agricultural Research Service; Department of Agriculture.

Atomic Energy Commission.

Department of State.

Environmental Science Services Administration; Department of Commerce.

Forest Service; Department of Agriculture. National Aeronautics and Space Administration.

National Air Pollution Control Administration; Department of Health, Education, and Welfare.

National Science Foundation.

American Conservation Association.

Ford Foundation.

Rockefeller Foundation.

Sloan Foundation.

Center for the Environment and Man. Massachusetts Institute of Technology.

In addition, the following Federal Departments and agencies and organizations provided support for SCEP through preparation of background materials and professional participation:

Coast Guard; Department of Transportation.

Federal Water Quality Administration; Department of Interior.

Fish and Wildlife Service; Department of Interior.

National Academy of Sciences.

National Center of Atmospheric Research.

Oak Ridge National Laboratory.

RAND Corporation.

American Electric Power.

Chemical Construction Corporation; Boise Cascade Corporation.

Consolidated Edison Corporation of New York.

ESSO Research and Engineering.

General Electric.

The extraordinary support provided by the above organizations and many persons within them and by numerous other individuals contributed greatly to the deliberations of SCEP.

STUDY OF CRITICAL ENVIRONMENTAL PROBLEMS (SCEP) (SPONSORED BY MASSACHUSETTS INSTITUTE OF TECHNOLOGY, JULY 1-31, 1970)

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Donald S. Lowe, Assistant Director of Engineering, Bendix Corporation, Aerospace Systems Division, 3300 Plymouth Road, Ann Arbor, Michigan, 48107.

Claus Ludwig, Mail zone 596, Convalr, San Diego, California 92112.

Thomas Malone, Department of Physics, Special Consultant to the President on Environmental Problems, University of Connecticut, Storrs, Connecticut.

Robert A. McCormick, Director, Division of Meteorology, National Air Pollution Control Administration, 3820 Merton Drive, Raleigh, North Carolina, 27609.

Richard Morse, Sloan School of Management, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139.

Alfred C. Neal, President, Committee for Economic Development, 877 Madison Avenue, New York, New York 10022.

Vaun A. Newill, M.D., Director, Division of Health Effects Research, Air Pollution Control, Mutual Plaza Building, 411 West Chapel Hill Street, Durham, North Carolina 27701.

Conrad Newman, Environmental Science Division, National Science Foundation, Washington, D.C.

Gaylord Northrup, Center for the Environment and Man, Hartford, Connecticut.

Martin Prochnik, Deputy Science Advisor, U.S. Department of the Interior, Office of the Secretary, Washington, D.C. 20240.

Robert H. Quig, Manager, Pollution Control Division, Chemical Construction Corporation, Boise Cascade Corporation, 320 Park Avenue, New York, New York 10022.

Roger Revelle, Director, Center for Population Studies, Harvard University, Cambridge, Massachusetts 02138.

Harry Richardson, Consultant, Pollution Control Division, Chemical Construction Corporation, 320 Park Avenue, New York, New York 10022.

William Salmon, International Scientific and Technological Affairs, Department of State, Washington, D.C.

Vincent Schaefer, New York State University at Albany, Albany, New York.

Herbert A. Simon, Psychology and Computer Science, Carnegie-Mellon University, Pittsburgh, Pennsylvania 15213.

Norman Sohl, Geological Survey, Department of Interior, Washington, D.C.

Kurt Stehling, National Marine Resources Council, Executive Offices, Washington, D.C.

Lyle Tiffany, Bendix Corporation, 3300 Plymouth Road, Ann Arbor, Michigan.

Thomas Winter, Staff Member, Council on Environmental Quality, Washington, D.C.

Harold Yates, Director of Satellite Experimental Laboratory, National Environmental Satellite Center, FOB 4, Environmental Sciences Services Administration, Suitland, Maryland.

Harry G. Woodbury, Consolidated Edison, 4 Irving Place, Room 1405-S, New York, New York 10003.

SUMMARY OF MAJOR FINDINGS AND RECOMMENDATIONS, STUDY OF CRITICAL ENVIRONMENTAL PROBLEMS (SCEP)

(Sponsored by Massachusetts Institute of Technology)

The findings and recommendations in this document were developed by SCEP Work Groups through intensive, full-time discussion and study during the month of July at Williams College, Williamstown, Mass. Each statement has been subscribed to by all members of at least one Work Group. All those attending the Study had an opportunity to examine these conclusions and the papers on which they were based, but all participants had neither the time nor the expertise required to make an independent judgment on each and every finding and recommendation. The summary was presented July 30-31 at the conclusion of the study.

SST'S IN THE STRATOSPHERE

Discussion of findings

The stratosphere where supersonic jet transports will fly at 65,000 feet is a very rarified region with little vertical mixing. Gases and particles produced by jet exhaust may remain for one to three years before disappearing.

Using FAA estimates of 500 SST's operating in 1985-90 mostly in the Northern Hemisphere, flying seven hours a day, at 65,000 feet, propelled by 1,700 engines like the GE-4 being developed for the Boeing 2707-300, we have estimated the steady state amounts of combustion products using GE calculations of the amount of such products because no test measurements exist. We have compared such amounts on a steady state basis with the natural levels of water vapor, sulfates, nitrates, hydrocarbon and soot. All are believed to form fine particles. We have also compared these levels with the amounts of particles put into the atmosphere by the volcano eruption of Mt. Agung in Bali in 1963.

In our calculations we used jet fuel of 0.05% sulfur. We are told that a specification of 0.01% sulfur could be met in the future at higher cost.

We do not believe that CO₂ resulting from such operations is likely to affect the climate. We are genuinely concerned about the possibility of increased stratospheric cloudiness, and about the fine particles, even using the calculated amounts given us by GE.

Clouds are known to form in the winter polar stratosphere. Two factors will increase the future likelihood of greater cloudiness in the stratosphere due to moisture added by the SST. First is the increased stratospheric cooling due to the increasing CO₂ content of the atmosphere. Second is the closer approach to saturation indicated by the observed increase of stratospheric moisture.

The largest engine whose combustion products have been actually measured in static ground tests was the P&W JT9D used on the Boeing 747. Its fuel consumption rate is one third that of the GE-4. Combustion products from such tests of the JT9D, leading to particles, were much greater than the calculated values for the GE-4.

It is claimed that the particle formation is very small at 65,000 feet. Very, very little is known about reactions under such conditions. One guess is now as good as another. Depending upon the actual particle forma-

tion, the effects of 500 SST's could range from a small, widespread continuous "Agung" effect to one as big as "Agung".

The temperature of the equatorial stratosphere (a belt around the globe) increased 6-7°C and remained at 2-3°C above its pre-Agung level for several years. No apparent temperature change was found in the lower troposphere.

Clearly such consequences are on a global scale even though the most pronounced effects would be felt where the highest density of traffic existed, i.e. the North Atlantic Ocean.

Conclusions

SCEP concludes with respect to contamination of the stratosphere by products of SST's that:

1. CO₂ creates no problem.
2. Global water vapor may increase 10%; increases in regions of dense traffic may go up 60%.
3. Particles from SO₂, hydrocarbons and soot may double pre-Agung global averages and peak at ten times those levels where there is dense traffic.
4. Effects on climate could be increased clouds from water vapor; increased temperatures in the stratosphere with possible increase in surface temperatures.
5. A feeling of genuine concern has merged from the above set of conclusions. The projected SST's can have a clearly measurable effect in a large region of the world and quite possibly on a global scale. We must emphasize that we cannot be certain about the magnitude of the various consequences.

Recommendations

1. That uncertainties about SST contamination and its effects be resolved before large scale operation of SST's begins.
2. That the following program of action be commenced as soon as possible:
 - a. Begin to monitor the lower stratosphere for water vapor and particles and develop means to measure SO₂, NO_x and hydrocarbons.
 - b. Determine whether additional cloudiness will occur in the stratosphere and the effects of such changes.
 - c. Obtain better estimates of emission of combustion products under simulated flight conditions and under real flight conditions at the earliest opportunity.
 - d. Using data resulting from a, b, and c, estimate effects on weather and climate.

SST WORRIES WORLD PANEL OF SCIENTISTS

WILLIAMSTOWN, MASS.—Scientists from the United States and Europe, after meeting for a month at Williams College here on the environmental problems, recommended Saturday that large scale operation of supersonic transport planes be delayed until serious questions about the SST's potential for environmental contamination are answered.

The scientists, concluding their study of global pollution, its effects on the earth and its climate, indicated that regular stratospheric flights by such planes could cause an increase in cloud formation and stratospheric temperatures, with unpredictable consequences.

Environmental pollution has become a heated question, with political overtones, in the debate between advocates and opponents of the supersonic jet. The more than 40 scientists and professionals in the group here emphasized that their concern was based solely on scientific observations in various parts of the world.

EFFECTS UNKNOWN

Fine particles from the jet engines exhaust would tend to double global averages of such particles, with unknown effects, the scientists said. The particles, which will be distributed in the lower level of the stratosphere where the first jets will fly, will warm the stratosphere by reflecting sunlight.

The preliminary report of the scientists' efforts recommended that a monitoring program be set up to measure the lower stratosphere for water vapor quantities and to measure sulfur dioxide, nitrogen oxide, and hydrocarbons, which make up most of the fine particle matter.

The report followed a recent recommendation by William Magruder, who is in charge of the SST program for the U.S. government, that a \$43 million study of the SST's environmental impact be made. The SST project is awaiting Senate action on a \$240 million appropriation.

INDIRECT EFFECTS

The teachers, scientists and professional men gathered here, who were recruited under sponsorship of Massachusetts Institute of Technology, also studied and reported on other aspects of worldwide pollution. These included contamination by DDT and other persistent pesticides, mercury, oil and fertilizers and waste nutrients.

The study was primarily concerned with indirect effects of pollution on man through changes in climate, ocean ecology or in large terrestrial life systems.

Among the study group's findings:

The effect of the increasing quantities of carbon dioxide in the atmosphere (believed to raise temperatures by the "greenhouse effect") has resulted in little climate change in this century and future consequences are not known.

Calculations show that the earth's oxygen supply has remained fairly constant and that burning all the world's recoverable fossil fuels would result in an oxygen reduction of only .15 of 1%.

The effect of DDT on oxygen producing phytoplankton in the ocean is negligible.

About 1.5 million tons of oil are introduced into oceans each year by ships, offshore drilling and accidents.

The increasing use of fertilizers and the growing quantity of animal and human wastes will cause destructive runoffs of nutrients in rivers and streams, causing overfertility and oxygen depletion, unless recycling technology is soon developed.

Findings of the study group, it is hoped, may provide a better planning base for the United Nations Conference on the Human Environment in Stockholm in 1972 and will also help in planning for other national and international environmental conferences.

Evidence of the scarcity of data on environmental problems was frequently noted in the summary.

"This is a question there are no available data on," was the comment several group leaders made as they explained their findings to newsmen at a two day briefing.

Because of this knowledge gap, the scientists urged establishment of sophisticated monitoring facilities to determine facts about air and water pollution and routes that pollutants travel.

Global computer models showing atmospheric motion and ocean-air interaction were recommended. A drastic reduction in DDT use was strongly urged, with a recommendation that subsidies be furnished to countries unable to afford the more expensive, nonpersistent pesticides.

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

THE FARM LABOR SITUATION IN CALIFORNIA

Mr. MURPHY. Mr. President, I rise at this time to make a few observations with regard to a condition that has been very much in the news in my State during the past several weeks. It has to do with labor contracts that affect the farmworkers in the State of California.

Mr. President, I ask unanimous consent to have printed in the RECORD the conclusion of my remarks two articles, the first entitled "Lettuce 'War'; Battle Between Teamsters and Chavez Looms," published in the Los Angeles Times of August 5, 1970, and the second entitled "Chavez Checked as Farm Labor Boss by Teamsters," published in the Los Angeles Herald-Examiner of July 29, 1970.

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

(See exhibit 1.)

Mr. MURPHY. Mr. President, I should like to point out that I am concerned about these reports. As a former labor man, probably one of the few Members of this body who has ever been in a labor union, and without question one with longer experience in labor unions, certain things disturb me about these highly publicized contracts.

Many of the problems I have foreseen and talked about in the past several years are coming to pass. We are given the impression that everything is settled and all is going to be peaceful and productive. I do not think this is exactly the case. One very serious possibility is the problem of a jurisdictional dispute which is now building up between the United Farm Workers Organizing Committee and the Teamsters Union, both of which have been active for many years in the areas of the agriculture business in California.

Almost lost in the triumphant announcements by the United Farm Workers Organizing Committee is the fact of the signing of a contract by the Teamsters which covered approximately 5,000 fieldworkers in the Salinas Valley. Salinas Valley is only a name to the people in the Midwest and on the east coast. It has a beautiful name and is a lovely valley. Most of the lettuce that is sold across the country comes from Salinas.

It seems that the Teamsters Union has gone in and signed contracts just as the United Farm Workers Organizing Committee has gone in and signed contracts with those growing table grapes. The thing that concerns me most is the fact that in both cases the desires and the rights of the farmworkers have been forgotten, seemingly. I do not know that there has been any election in which the worker had a chance to say whether or not he wanted to join a union or have a union represent him in bargaining for his working conditions.

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

Mr. MURPHY. I ask unanimous consent that I may proceed for an additional 3 minutes.

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

Mr. MURPHY. I do not know of any case in which the same farmworker has been given the opportunity to say whether he wanted to be represented by one union or another union. In other words, the individual is being treated, if at all, as a chattel, completely at the mercy of what we in labor used to call a "sweetheart" contract. That is a situation in which the labor organizer goes in and makes a deal with the boss, and the right of the worker is not considered.

We had that condition in Hollywood many years ago, when two gangsters from Chicago came in with a contract to represent everybody in the entertainment industry. Some of us who were employed in the entertainment industry at that time, such as the present Governor of the State of California and the present senior Senator from California, opposed this. We said, first, we did not want to be represented by gangsters. We wanted to have a union of our own choosing. This we brought about through the organization of the Screen Actors Guild.

So this impending jurisdictional war concerns me.

Now we are faced with the impending possibility of a long, drawn-out jurisdictional dispute between two groups, where the rights of the individual, the prospective union member, are not considered. Equally important, the housewife, who has to make here budget work in the marketplace, will have to pay extra money for all the produce she goes to the market to buy. If the jurisdictional dispute becomes serious enough, she even may not be able to purchase certain produce she wants.

Mr. President, while these charges and countercharges and threats of lawsuits are highly publicized, I wish that consideration would be given to a bill on which I have worked very hard for the last 2 years, S. 2203, the Consumers Agricultural Food Protection Act of 1970. It would do away with the "law of the jungle" in the agricultural area and provide, I believe, a proper, equitable, fair, and practical manner in which the rights of all concerned could be considered including those of the consumer. At the same time, it would provide for proper organization where the farmworkers want to be organized and for proper collective bargaining, and for the rights and consideration of all concerned would be properly protected.

EXHIBIT 1

[From the Los Angeles Times, Aug. 5, 1970]
LETTUCE "WAR": BATTLE BETWEEN TEAMSTERS AND CHAVEZ LOOMS
(By Harry Bernstein)

The surprise collapse of grower resistance to the unionization of California's lettuce workers has sparked what may be an all-out war between the Teamsters Union and Cesar Chavez' farm workers union.

After decades of bitter resistance, nearly 100 California growers who produce the bulk of the nation's lettuce crop gave in without a struggle to the Teamsters' request to represent field workers.

The agreements between lettuce growers and the Teamsters were reached within the last two weeks, simultaneous with Chavez' historic victory in unionizing the state's table grape growers after a five-year strike-boycott.

Chavez' AFL-CIO United Farm Workers Organizing Committee had reportedly planned to move next into the melon industry. But the Teamster agreement with lettuce growers has forced a change in strategy, and Chavez has moved his headquarters to Salinas to lead the fight against the Teamsters and growers, a UFWOC official said.

CLAIM TO REPRESENT 9,000

The Teamsters claim to represent 9,000 lettuce field workers' while UFWOC says it has 12,000 grape pickers in its membership.

Chavez and his supporters see the Teamster pacts as a deliberate move by the growers to strangle the still-small farm workers' union just as it is burgeoning in the wake of the table grape victory.

Larry Itllong, assistant director of UFWOC, said the Teamster agreements were "a stab in the back of our union."

He said plans are being made to strike lettuce growers, and possibly use the boycott weapon which was so successful in forcing grape growers to recognize UFWOC as bargaining agent for field workers.

The intensity of the motions involved in the fight was evidenced by a speech Chavez gave Sunday to a mass rally of an estimated 2,500 farm workers in Salinas at the end of a march from Delano to protest the lettuce growers' contracts:

"No longer can a couple of white men sit down together and write the destinies of all the Chicano and Filipino workers.

"CALLS IT 'GREAT TREASON'"

"What has happened in the past week is a great treason against the aspirations of men and women who have sacrificed their lives for so many years to make a few men (growers) rich in this valley.

"And it is especially tragic that another labor union should submit itself to this kind of conspiracy to keep farm workers from rightful representation by a union they so overwhelmingly want."

Chavez then called on Gov. Reagan to set up a secret ballot election to let the lettuce workers decide which union they want.

A spokesman for the lettuce growers said no elections among field workers are needed because "we have contracts with the Teamsters Union, contracts which were arrived at after bargaining talks that began when the Teamsters began discussing renewal of their contracts covering truck drivers and others who do not work in the fields."

He said the new contracts cover a five-year period, and provide for a \$1.85 hourly minimum wage, plus annual raises of 6%.

Teamster officials remained silent in the face of the attack from Chavez and Itllong, but their position is well-known in labor circles.

The Teamsters argue that they have long represented over 60,000 workers in California canneries, packing sheds and other phases of food processing and shipping.

Therefore, they contend, anything that Chavez does to affect farm production in the fields inevitably affects Teamster members in the canneries, packing sheds and shipping operations.

"In signing contracts for field workers, then, we are merely protecting the interests of our members in food processing and shipping, one Teamster source explained.

And he predicted that most California growers in all phases of agriculture are now ready to sign contracts with the Teamsters.

A prominent grower, who asked that his name not be used, said "This is no sweetheart deal. We don't want any union for field workers. But if there is going to be one, we would rather have our workers represented by a union we have known for years in contract negotiations for nonfield workers."

COMPARES UNIONS

Another said, "The Teamsters are a responsible, disciplined organization while Chavez' UFWOC avoids traditional trade union methods."

To Chavez, these replies are all part of a desperate move by the growers to stop him and his AFL-CIO union at any cost.

In 1967, the Teamsters and UFWOC clashed over union representation at the Di Giorgio and Perelli-Minetti farms, but when UFWOC won elections there, the Teamsters backed away and signed a peace treaty with Chavez.

The treaty was effective for only one year,

but Itllong said that Chavez was told by the Teamsters "that we have a gentlemen's agreement to continue the treaty so that the Teamsters leave field workers alone while we stay out of the canneries and packing sheds."

PRIDE IN REPUTATION

Teamster Union officials take pride in their reputation among many growers as a "traditional trade union" in contrast to the reputation of Chavez, who is accused often of being a fanatic.

And some Teamsters contend privately that it is this contrast in reputations which helped them get the contracts for lettuce workers.

Chavez, who once fasted 25 days to call attention to his strike-boycott, does not object to his reputation as a radical, although his supporters say it is ridiculous to denounce his methods as not being "traditional trade union tactics" since it was those tactics which won the table grape fight.

In fact, Chavez told a reporter the other day that he would "feel complimented if you called me a fanatic. The only ones who make things change are fanatics. If you are not a fanatic around here, you can't cut it."

And he is clearly determined not to surrender to the organizing efforts by the Teamsters, even if it means using the elaborate worldwide machinery he set up to promote the table grape boycott.

At present, that machinery is being used "to make the grapes sweet again," he says, meaning that the boycotters are now pushing the sale of union-labeled grapes in markets across this country and abroad.

The Teamsters can make a strong argument for their interest in organizing field workers, and the 1.9-million member union has enough strength to make the contest with Chavez and the UFWOC a serious one.

But once again, Chavez seems to have gained at least a propaganda advantage in one of his battles.

In the grape dispute, he had the image of a dedicated, almost saintly man working for \$5 a week, plus minimal expenses, in the fight against wealthy grape growers.

Now his friends picture Chavez and UFWOC as the small David fighting the Goliath of the giant Teamsters Union and the lettuce growers.

Undoubtedly, efforts will be made to bring peace before a full-scale labor war breaks out in the lettuce fields.

But as of now, the lines of battle have been drawn and the final outcome is far from certain.

[From the Los Angeles Herald-Examiner, July 29, 1970]

CHAVEZ CHECKED AS FARM LABOR BOSS BY TEAMSTERS

Spread of a move by the United Farm Workers Organizing Committee to control farm labor in California appeared checked today after the Teamsters Union was named collective bargaining agent for crop workers in five northern counties.

The surprise agreement between shipper-growers of the Salinas and Santa Maria Valleys, and elsewhere, extends for five years. The California Council of Growers termed it "a big breakthrough" against the forces of Cesar Chavez's United Farm Workers Organizing Committee.

Some 7500 workers in lettuce, carrots, celery, strawberries, onions, tomatoes, and more than a dozen other crops, now fall under the bargaining aegis of the Teamsters.

"Chavez's attempts to organize field hands in crops other than grapes has been frustrated by this contract," said Herb Fleming and Rich Freeland, officials of the Growers Council. "This is a master agreement, covering the majority of growers in the state's No. 1 agricultural area."

Hitting back at Salinas press conference,

Chavez called it "a Pearl Harbor sort of attack," claiming collusion between the Teamsters and producers. He said he would file suit against "an unholy alliance."

Chavez announced immediate picketing of farms from Salinas through Monterey, Santa Cruz, San Luis Obispo and Santa Barbara Counties following signing of more than 200 growers with the Teamsters.

West Coast Teamsters head Einar Mohn refused to reveal terms of the surprise agreement, saying a statement is under preparation. One Salinas lettuce shipper said it provides a wage floor pegged at the prevailing \$1.75 an hour paid harvesters, open to early negotiation.

Growers Council spokesmen said that obviously Chavez was "beaten to the punch" by a move covering everything from multi-million-dollar leaf crops down to such specialties as broccoli and garlic.

Previously, the Teamsters had not moved heavily into farm labor in the Salinas Valley. Only two past efforts, both successful, to unionize local producers are credited to the Teamsters by farm-association representatives.

"The top architects of this conspiracy are Einar Mohn and Gov. Ronald Reagan," stated Chavez. He claimed his UFWOC represented 95 per cent of the field workers in the Salinas area. He called the Teamsters-grower contract in direct violation of "an explicit agreement" by the Teamsters in 1967 that they would not organize field workers.

Herb Fleming, president of the Growers-Shippers Assn. in Salinas, called the 95 per cent figure untrue. Through the Council of Growers, he said that Chavez currently has no operative contracts in the valley, other than with grape producers.

In Los Angeles, a Teamster official claimed that the 1967 agreement related to grapes only.

Governor Reagan had no comment to make on the situation, other than that the collusion charge was "patently ridiculous," and to point out that Chavez recently refused the governor's offer to introduce the state's Conciliation Service into the grape conflict.

FCC—FAIRNESS OR BIAS?

Mr. DOLE. Mr. President, yesterday, discussion on the floor concerned remarks made by Donald E. Johnson, Veterans' Administration Administrator, in a speech to the DAV National Convention in Los Angeles on July 28.

Because of the furor raised, I would now call attention to what I believe is a unique letter, and share it with my colleagues. In fact, I would like to go a step further and let what I say here suffice as the reply to that letter.

Let me first say, it was written on Federal Communications Commission stationery and was signed by one, Gary Gerlach, who identifies himself as legal assistant to Commissioner Nicholas Johnson. I can only assume that he speaks for the Commissioner.

Mr. President, one thing that makes Mr. Gerlach's letter unique is that the Federal Communications Commission for which he works is an arm of the Congress. Another is that in that capacity he accuses me of being "pro-war."

It is not often that an employee of an arm of the Congress officially accuses a Member of the Congress of seeking to inaugurate a prowar television campaign. In fact, it is not often that a Member of Congress is accused of being prowar. We

may differ here on what is the best way to end the war in Vietnam, but I know of no Senator who, per se, is prowar.

However, this does not bother Mr. Gerlach. His opening sentence is—

I read with interest in the July 27 issue of *Broadcasting* of your campaign to get prowar spots on stations across the country.

Mr. President, I would hope that Mr. Gerlach can substantiate what he says I am doing.

For his edification I would like to take a moment and explain what it is I am doing.

The Amendment To End the War Committee and sundry allied groups are running on television a number of slick, professional prepared spots aimed at convincing American citizens that, if the McGovern-Hatfield amendment does not pass, the war in Vietnam will continue indefinitely.

Now, I happen to disagree with that premise. Like Senators HATFIELD and MCGOVERN I, too, want peace. But like President Nixon, I want peace, not a pullout. I want a peace with honor and justice. So, do most of the Members of the Senate. For that reason, I have asked those TV stations running the McGovern-Hatfield spots for time to reply under the fairness doctrine, which states that both sides of any controversial issue must be fairly presented.

I will have more to say about this in a later speech, but now I wish to get on with Mr. Gerlach's letter.

His next paragraph warns me that if I am successful in gaining equal time under the fairness doctrine, that many so-called peace groups will have the right to seek equal time to reply to me.

Now this may be, however, most of them are associated in some manner with the Amendment To End the War Committee. If they have a right to time I do not begrudge it to them. But I do resent being warned against seeking time to reply to MCGOVERN-HATFIELD on the grounds that other so-called peace groups will then get more free time.

Finally, Mr. President, Mr. Gerlach tells me he is enclosing a recent Commission opinion on the matter because—

I thought you might like to bring yourself up to date.

The inference is obvious in that last snide remark. Mr. President, I should like to pose a question: How can we expect impartial and honest interpretations of the broadcasting code and of the laws when we depend on FCC employees who show an obvious antagonism toward some Members of the Senate and an equally obvious bias against the views they espouse.

I strongly believe, Mr. President, that Mr. Gerlach is a detriment to the Federal Communications Commission and has placed himself in a position where he is unable to serve honestly or effectively.

Incidentally, I should point out here that he is not what he implies. Though he calls himself Mr. Johnson's legal assistant, files at the Commission show that he was graduated from Harvard this summer, is not a member of the bar, and is, in fact, classified as a "legal trainee."

It is obvious, Mr. President, that his

training has included courses in neither manners nor veracity.

I do not call for his resignation, Mr. President. I do not believe he should be offered that chance. I do call, however, on Commissioner Johnson to fire him in the best interests of the Commission and the industry it serves if Commissioner Johnson is unaware of his letter.

If Commissioner Johnson was aware of the letter when it was written, then I believe he should examine his own conscience carefully to see if he can continue to serve as an effective and unbiased member of the Commission.

I ask unanimous consent to have Mr. Gerlach's letter printed in the RECORD.

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

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., July 30, 1970.

HON. ROBERT DOLE,
U.S. Senate,
Washington, D.C.

DEAR SENATOR DOLE: I read with interest in the July 27, 1970, issue of *Broadcasting* of your campaign to get pro-war spots on stations across the country.

Ironically, there are many peace groups in the country who wish you well, for if you can establish yourselves under the Fairness Doctrine you will in turn help achieve access to the media for peace groups such as San Francisco Women for Peace, the Baltimore Friends, and Businessmen Against the War. These groups and many more have prepared spots ready to roll—all they need is your interpretation of the Fairness Doctrine.

You'll find enclosed a recent Commission opinion on the matter. I thought you might like to bring yourself up to date.

Sincerely,

GARY G. GERLACH,
Legal Assistant to Commissioner Johnson.

COMMUNICATIONS FROM EXECUTIVE DEPARTMENTS, ETC.

The ACTING PRESIDENT pro tempore (Mr. ALLEN) laid before the Senate the following letters, which were referred as indicated:

REPORT ON LOAN TO CORN BELT POWER COOPERATIVE, HUMBOLDT, IOWA

A letter from the Administrator, Rural Electrification Administration, reporting, pursuant to Senate Report No. 497, on the approval of a loan to the Corn Belt Power Cooperative of Humboldt, Iowa for financing certain generation, transmitting and related facilities (with an accompanying paper); to the Committee on Appropriations.

REPORT ON LOAN TO CENTRAL IOWA POWER COOPERATIVE, MARION, IOWA

A letter from the Administrator, Rural Electrification Administration, reporting, pursuant to Senate Report No. 497, on the approval of a loan to the Central Iowa Power Cooperative of Marion, Iowa, for financing certain generation, transmission and related facilities (with an accompanying paper); to the Committee on Appropriations.

PROPOSED DISTRICT OF COLUMBIA MOTOR VEHICLE SAFETY ACT OF 1970

A letter from the Assistant to the Commissioner, Executive Office, Government of the District of Columbia, transmitting a draft of proposed legislation to amend the Motor Vehicle Safety Responsibility Act of the District of Columbia and the District of Columbia Traffic Act of 1925, in order to promote increased traffic safety, and for other purposes (with accompanying papers); to the Committee on the District of Columbia.

REPORTS OF THE COMPTROLLER GENERAL

A letter from the Comptroller General of the United States, transmitting pursuant to law, a report on the assurances needed that cost of the Cello-Mead transmission line project will be recovered, Department of the Interior, dated August 5, 1970 (with an accompanying report); to the Committee on Government Operations.

A letter from the Comptroller General of the United States, transmitting, pursuant to law, a report on the opportunity for accelerating construction and reducing cost of low-rent housing, Department of Housing and Urban Development, dated August 4, 1970 (with an accompanying report); to the Committee on Government Operations.

ENROLLED BILL SIGNED

The PRESIDENT pro tempore (Mr. ALLEN) announced that on today, August 5, 1970, he signed the enrolled bill (S. 2484) to amend the Agricultural Marketing Agreement Act of 1937 to authorize marketing agreements providing for the advertising of papaya, which had previously been signed by the Speaker of the House of Representatives.

REPORTS OF COMMITTEES

The following reports of committees were submitted:

By Mr. YARBOROUGH, from the Committee on Labor and Public Welfare, without amendment:

S. 4083. A bill to modify and enlarge the authority of Gallaudet College to maintain and operate the Kendall School as a demonstration elementary school for the deaf to serve primarily the National Capital region, and for other purposes (Rept. No. 91-1070).

By Mr. YARBOROUGH, from the Committee on Labor and Public Welfare, with amendments:

S. 3418. A bill to amend the Public Health Service Act to provide for the making of grants to medical schools and hospitals to assist them in establishing special departments and programs in the field of family practice, and otherwise to encourage and promote the training of medical and paramedical personnel in the field of family medicine (Rept. No. 91-1071).

By Mr. PELL, from the Committee on Rules and Administration, with amendments:

S. 704. A bill to amend the Act of October 15, 1966 (80 Stat. 953; 20 U.S.C. 65a), relating to the National Museum of the Smithsonian Institution, so as to authorize additional appropriations to the Smithsonian Institution for carrying out the purposes of said Act (Rept. No. 91-1072).

By Mr. JORDAN of North Carolina, from the Committee on Rules and Administration, without amendment:

S. Res. 431. Resolution to print as a Senate document the report "Manpower and Training Needs for Air Pollution Control" (Rept. No. 91-1073);

S. Res. 432. Resolution to provide additional funds for the Committee on Appropriations;

S. Res. 437. Resolution authorizing the printing of additional copies of part 1 of hearings by the Committee on Commerce on "Consumer Protection" (Rept. No. 91-1074); and

S. Res. 438. Resolution authorizing the printing of additional copies of part 2 of hearings by the Committee on Commerce on "Consumer Protection" (Rept. No. 91-1075).

BILLS INTRODUCED

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

By Mr. INOUE:

S. 4187. A bill to authorize the Secretary of the Army to convey certain lands at Fort Ruger Military Reservation, Hawaii, to the State of Hawaii in exchange for certain other lands; to the Committee on Armed Services.

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

By Mr. GRAVEL:

S. 4188. A bill to amend title 23, United States Code, relating to highways, in order to authorize the construction of marine highway facilities as part of the Federal-aid primary or secondary system; to the Committee on Public Works.

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

By Mr. SCOTT:

S. 4189. A bill to amend the Communications Act of 1934 to provide for television broadcasting of certain evening proceedings of the House of Congress; to the Committee on Commerce.

By Mr. CRANSTON:

S. 4190. A bill to amend Section 235 of the Housing Act of 1968; to the Committee on Banking and Currency.

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

S. 4187—INTRODUCTION OF A BILL TO CONVEY CERTAIN LANDS TO THE STATE OF HAWAII

Mr. INOUE. Mr. President, I introduce a bill that would authorize an exchange of land between the State of Hawaii and the Department of the Army.

The Army land involved in this exchange is located at Fort Ruger on Oahu and consists of approximately 57 acres located near the State-administered Leahi Hospital. In exchange for this parcel of land, the State will transfer to the Army approximately 700 acres near the Tripler Army Hospital. Two hundred and twenty-five acres of this land can be used for housing, of which 180 will be so utilized.

This transfer is important to the well-being of my State, and I believe that this bill merits the sympathetic consideration of the Congress. It is the hope of university officials that the Fort Ruger site will become the location of the State medical complex, which will include the University of Hawaii School of Medicine, hospital, and laboratories. Some of these facilities already exist, but an expansion of the center will require a large increase in the number of buildings. Medical officials hope that the construction of the medical complex will enable the university to expand its program. In this era of a severe shortage of medical personnel, I think this goal should be encouraged by the Congress.

The land which the Army will in turn receive is located close to Tripler Army Hospital. It is actually a much larger tract and is better suited for military housing than Fort Ruger, which is several miles away across the city of Honolulu, since it is closer to the major military bases.

The land to be transferred to the Army is currently owned by a Hawaiian estate. The Hawaiian Legislature has already demonstrated its commitment to this project by giving the State authority and funds to purchase the land that will be transferred.

This bill will cost the Federal Government nothing. Under the terms of my bill, the exchange must be equivalent in value. However, since the State will also be required to prepare the land in a manner similar to the site which the Army is surrendering, the actual cost to the State for purchase and preparatory services will be more than the market value of the Fort Ruger site. Appraisals and negotiations are currently being undertaken now.

The objective of this bill is important. I hope that the Congress will give the measure its sympathetic and rapid approval.

The ACTING PRESIDENT pro tempore (Mr. ALLEN). The bill will be received and appropriately referred.

The bill (S. 4187) to authorize the Secretary of the Army to convey certain lands at Fort Ruger Military Reservation, Hawaii, to the State of Hawaii in exchange for certain other lands, introduced by Mr. INOUE, was received, read twice by its title and referred to the Committee on Armed Services.

S. 4188—INTRODUCTION OF A BILL RELATING TO THE CONSTRUCTION OF MARINE HIGHWAY FACILITIES

Mr. GRAVEL. Mr. President, I introduce legislation to authorize the construction of marine highway facilities as part of the Federal-aid primary and secondary highway systems.

The pressing need for this legislation became evident during the joint Commerce/Public Works Committee hearings in Juneau, Alaska, on July 10, 1970. However, this legislation would also have application in many other areas of the Nation.

In 1963, the State of Alaska took a bold step in enlarging the range of its surface transportation system—the initiation of the Alaska Marine Highway. The system was first instituted in southeast Alaska, a region where the glaciers and mountains of the mainland and islands of the Alexander Archipelago have made conventional vehicular transportation between communities either prohibitively expensive or physically impossible. In 1964, another segment of the system was initiated in southcentral Alaska.

The first four ferries used on the Alaska Marine Highway, plus the necessary terminal facilities, were financed by an \$18 million bond issue authorized by Alaska voters in 1960. In 1966, the State's voters approved a further expenditure of \$15.5 million for the purchase of two additional vessels, the lengthening of an existing vessel, and new and expanded docking facilities.

The Alaska Marine Highway was conceived and is now operating as a substitute for conventional Federal-aid highways. At the present time, it provides the only means of vehicular travel between communities in southeast Alaska, including to and from the State capital; between Kodiak and the mainland; between Seldovia and road-connected towns on the Kenai Peninsula;

and between isolated communities on the Gulf of Alaska.

Much of Alaska's basic industry, particularly its fisheries and wood products segments, is located in relatively isolated coastal communities. Since statehood, these towns have expanded rapidly and their need for regular vehicular transportation to enable the movement of goods and personnel became increasingly evident. Yet, because of a variety of physical barriers, conventional highway and bridge connections were either not immediately feasible or were beyond existing technology. A Marine Highway System was therefore selected by the State as the only financially feasible means of connecting these isolated coastal communities with existing "normal" highway routes.

The Marine Highway System was initiated as a transportation service in the same manner that a formal highway would be constructed, not primarily as a moneymaking venture. The system is presently being subsidized by the State at an annual rate of approximately \$2 million. However, if the capacity of the major—Southeast—route is not expanded to meet rising demand and to provide a means of increasing revenue, the State will find it increasingly difficult to maintain a tolerable subsidy level.

In short, the system is a substitute for Federal-aid highways and, as such, should be authorized funding under title 23 of the United States Code relating to highways. It has become an integral part of Alaska's transportation network, serving as the "wheels" not only for the movement of Alaskan goods and services, but also for increasing numbers of tourists visiting our State.

The Marine Highway System has provided a successful demonstration of the potential of such a system. However, Alaska's citizens have expended more than \$33 million, unmatched by any Federal contribution, for capital improvements in the system and are currently subsidizing it at a rate of approximately \$2 million per year as a substitute for highway linkages which do not exist.

Marine highway facilities are a vital and essential element in vehicular transportation, not only in Alaska but also in many other areas of the country. As such, they are deserving of assistance under the Federal aid to Highways program for the construction of new vessels, for the building of loading ramps and bridges, and for comprehensive long-range planning of the various systems in relation to existing and future land highway routes and to the general vehicular movement of traffic on the Nation's waterways.

The PRESIDING OFFICER (Mr. GOLDWATER). The bill will be received and appropriately referred.

The bill (S. 4188) to amend title 23, United States Code, relating to highways, in order to authorize the construction of marine highway facilities as part of the Federal-aid primary or secondary system, introduced by Mr. GRAVEL, was received, read twice by its title and referred to the Committee on Public Works.

S. 4190—INTRODUCTION OF A BILL TO AMEND SECTION 235 OF THE HOUSING ACT OF 1968

Mr. CRANSTON. Mr. President, in 1968 the Congress passed and the President signed into law the Housing and Urban Development Act of 1968. As you know, there are many innovative and constructive provisions in that act.

One of the most creative provisions is contained in section 235. Under that section, low-income persons with little or no cash are given the opportunity to fulfill the American dream of homeownership.

The mortgage on the so-called 235 homes are insured by FHA and all of the interest on the mortgage but 1 percent is paid by FHA. This FHA interest subsidy allows a low-income person to move into a home with no more than \$200 as a downpayment.

Clearly, the program has provided an opportunity for many families to own homes who otherwise would not have that opportunity.

Since the passing of the Housing Act of 1968, more than \$165,000,000 has been spent by FHA for the purchase of new and existing housing under section 235.

This represents a total of 186,756 units which were purchased with the assistance of section 235 funds.

In my home State of California, over \$11.3 million has been expended since 1968 for section 235 subsidies. The actual housing represented by this figure is 12,508 units.

Although a large percentage of the funds spent under section 235 were for the construction of new housing, a substantial amount of this money was used to assist families to buy existing dwellings.

Since 1968 a total of \$22,856,562 was used to assist families to purchase existing housing, representing a total of 29,743 units assisted throughout the country.

In California, \$2,511,600 was used for FHA mortgage subsidies on existing housing under section 235.

With these funds—9,758 new units were assisted and—2,760 existing units were assisted.

Last Thursday, Congressman WRIGHT PATMAN revealed that many of the existing dwellings sold throughout the country under section 235 were substandard. Moreover, he revealed that large profits were being made on these dwellings by speculators.

I am shocked that the FHA has allowed funds appropriated by the Congress to help eliminate slums to be used instead to perpetuate slums.

There is no excuse for one penny of the taxpayers' money to go into the pocket of speculators while many of our low-income persons are again—under the guise of a Federal program—denied the opportunity to live in a decent home.

FHA appraisers have the primary responsibility to make sure that a home sold under 235 is not over appraised. Clearly if some speculators are making a 100-percent profit on 235 homes as charged by Congressman PATMAN, someone at FHA has fallen down on the job.

The law is clear that the Secretary

shall prescribe regulations to prevent profiteering by speculators in housing assisted under section 235. Section 235(g) reads as follows:

The Secretary shall prescribe such regulations as he deems necessary to assure that the sales price of, or other consideration paid in connection with, the purchase by a homeowner of the property with respect to which assistance payments are to be made is not increased above the appraised value on which the maximum mortgage which the Secretary will insure is computed.

I would hope that Secretary Romney of HUD and Commissioner Gullede of FHA will take immediate steps to see to it that the mandate of Congress contained in section 235(g) is carried out.

In addition to the responsibility of preventing undue profits on section 235 homes, I believe that FHA also has the responsibility of insuring that any home purchased under that section is a decent safe and habitable place to live. For too long we have allowed cruel hoaxes to be played on the poor and downtrodden in our society. I for one feel that the hoaxes must be stopped.

As noted by Congressman PATMAN, many families purchasing homes under section 235 have upon moving into their homes discovered unsafe and unhealthy conditions. Many of these homes have unsafe wiring, unsafe and leaky roofs, peeling paint, cracked foundations and floors, and lack fundamental facilities in the bathroom.

Clearly, we cannot continue to allow taxpayers' dollars or buyers hard earned savings and salaries to be squandered on homes which contain fundamental defects.

Today, I am introducing legislation which is intended to make sure that any existing home purchased under section 235 is in good condition.

Under section 1 of my bill, the seller of an existing dwelling under section 235 is required to give a warranty to the buyer that the dwelling being sold complies with all health, safety and zoning requirements of State and local law. Moreover, the seller must warrant that the dwelling complies with any additional requirements set forth by FHA.

Under section 2 of my bill, if an existing dwelling sold under section 235 is found in the breach of the warranty required under section 1, the FHA is required to reimburse the purchaser for any reasonable expenditures which he may incur in correcting the defects.

The last section of the bill requires the seller of any existing dwelling under section 235 to deliver to the purchaser a written statement of the appraised value and a notation of any condition in the building needing repair.

I know that the legislation I am introducing today will not guarantee every purchaser of a section 235 house that it will be free from all defects.

However, I do feel that this legislation will encourage sellers of 235 housing to take steps to remedy known defects before their houses are marketed.

I hope and trust that the overall effect of this legislation will be to get more families in decent housing at reasonable prices.

Mr. President, I ask unanimous consent that the text of my bill be printed at this point in the RECORD.

The PRESIDING OFFICER (Mr. SCHWEIKER). The bill will be received and appropriately referred; and, without objection, the bill will be printed in the RECORD.

The bill (S. 4190) to amend section 235 of the Housing Act of 1968, introduced by Mr. CRANSTON, was received, read twice by its title, referred to the Committee on Banking and Currency, and ordered to be printed in the RECORD, as follows:

S. 4190

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, S. 235 is amended by adding at the end thereof, a new subsection as follows:

"(m) with respect to housing assisted under this section, be it enacted that—

"1. Where the mortgage involves an existing dwelling the seller or such other person as may be required by the Secretary shall deliver to the mortgagor a warranty that the dwelling complies with the requirements of all state laws, or local ordinances or regulations, relating to the public health or safety, zoning or otherwise, which may be applicable thereto and that it complies with the requirements of any standards made applicable thereto by the Secretary.

"2. If an existing dwelling financed by a mortgage insured under this Section contains defective conditions in breach of the warranty required under paragraph (1) of this subsection, the Secretary shall compensate the purchaser for the reasonable expenditures required to correct such defective conditions and may recover from the seller such amounts paid to the purchaser.

"3. With respect to any existing dwelling, the seller, or any other person designated by the Secretary, shall deliver to the mortgagor prior to the completion of the sale along with a written statement of the appraised value a notation of any conditions in the building needing repair or any similar drawbacks considered by the Secretary in arriving at the appraised value. The Secretary shall make available to the seller or other designated person all information needed to make the required notation."

ADDITIONAL COSPONSOR OF A BILL

S. 37

Mr. HANSEN. Mr. President, I ask unanimous consent that at the next printing, the name of my colleague from Wyoming (Mr. McGEE) be added as a cosponsor of S. 37, to authorize the Secretary of the Interior to construct and operate and maintain the Polecat Bench area of the Shoshone extensions unit, Missouri River Basin project, Wyo., and for other purposes.

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

SENATE RESOLUTION 439—RESOLUTION REPORTED TO PAY A GRATUITY TO AUBREY P. WILKERSON, JOHN P. WILKERSON, DANIEL S. WILKERSON, DAVID J. WILKERSON, AND OLVIN M. WILKERSON

Mr. JORDAN of North Carolina, from the Committee on Rules and Administration, reported the following original

resolution (S. Res. 439); which was placed on the calendar:

S. RES. 439

Resolved, That the Secretary of the Senate hereby is authorized and directed to pay, from the contingent fund of the Senate, to Aubrey P. Wilkerson, John P. Wilkerson, Daniel S. Wilkerson, and David J. Wilkerson, sons; and to Olvin H. Wilkerson, stepson of Eleanor V. Wilkerson, an employee of the Senate at the time of her death, a sum to each equal to one-fifth of one year's compensation at the rate she was receiving by law at the time of her death, said sum to be considered inclusive of funeral expenses and all other allowances.

ADDITIONAL COSPONSOR OF A CONCURRENT RESOLUTION

SENATE CONCURRENT RESOLUTION 74

Mr. BYRD of West Virginia. Mr. President, on behalf of the Senator from Maine (Mr. MUSKIE), I ask unanimous consent that, at the next printing, the name of the Senator from Idaho (Mr. CHURCH) be added as a cosponsor of Senate Concurrent Resolution 74, to affect the treatment of prisoners in South Vietnam.

The PRESIDING OFFICER (Mr. WILLIAMS of New Jersey). Without objection, it is so ordered.

AUTHORIZATION OF APPROPRIATIONS FOR MILITARY PROCUREMENT—AMENDMENTS

AMENDMENT NO. 820

Mr. MCGOVERN (for himself and Mr. GOODELL) submitted an amendment, intended to be proposed by them, jointly, to the bill (H.R. 17123) to authorize appropriations during the fiscal year 1971 for procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, and other weapons, and research, development, test, and evaluation for the Armed Forces, and to prescribe the authorized personnel strength of the Selected Reserve of each Reserve component of the Armed Forces, and for other purposes, which was ordered to lie on the table and to be printed.

(The remarks of Mr. MCGOVERN when he submitted the amendment appear earlier in the RECORD under the appropriate heading.)

AMENDMENT NO. 821

Mr. BROOKE submitted an amendment, intended to be proposed by him, to House bill 17123, supra, which was ordered to lie on the table and to be printed.

SOCIAL SECURITY AMENDMENTS OF 1970—AMENDMENTS

AMENDMENTS NOS. 822 AND 823

Mr. BYRD of West Virginia submitted two amendments, intended to be proposed by him, to the bill (H.R. 17550) to amend the Social Security Act to provide increases in benefits, to improve computation methods, and to raise the earnings base under the old-age, survivors, and disability insurance system, to make improvements in the medicare, medicaid, and maternal and child health programs with emphasis upon improvements in the operating effectiveness of such programs,

and for other purposes, which were referred to the Committee on Finance and ordered to be printed.

NOTICE OF HEARING ON ENFORCEMENT OF THE FEDERAL COAL MINE HEALTH AND SAFETY ACT

Mr. WILLIAMS of New Jersey. Mr. President, last year Congress enacted the most comprehensive coal mine health and safety law in the Nation's history. Since enactment, however, there have been numerous complaints about the enforcement of this law. In fact, it has been alleged by many of the men who work in the mines that they were better off under the old inadequate law than under an improperly enforced new law.

In June, these grievances led to a series of work stoppages in the coal fields of Pennsylvania. At that time, the subcommittee held hearings in Washington, Pa. and Centerville, Pa., at which time I heard firsthand from the miners the complaints about the administration of the law.

Fortunately for the Nation's power supply those work stoppages ceased shortly after our hearings.

I have also met with coal miners here in my office and most recently in Charleston, W. Va., where the subcommittee held hearings last week. I might also note that a work stoppage was in progress in West Virginia's coal fields at that time. Since then, it is reported that most mines are back in operation.

It is my understanding that since the enactment of the law, the Bureau of Mines had conducted fewer inspections than in the same period last year. And, unfortunately, there have been more fatal injuries than in the same period as last year. This is completely inexplicable to me and cannot continue.

The Subcommittee on Labor, in fulfilling its legislative overview responsibilities, will hold hearings on the enforcement of the Federal Coal Mine Health and Safety Act of 1969 at 9:30 a.m. on Thursday, August 6 in room 4232, and Friday, August 7, in room 4200.

ADDITIONAL STATEMENTS OF SENATORS

SENATE INTERNS VISIT HOSPITALIZED VETERANS

Mr. MILLER. Mr. President, acting on their own initiative, a group of Senate interns has organized a visit to our hospitalized veterans at Walter Reed Hospital this Saturday.

The interns have enlisted the support of several Senators, some of whom will accompany them to the hospital on Saturday.

The organizers and the other interns who have indicated they will go to the hospital are deserving of the highest commendation. Whether this endeavor receives publicity is beside the point, although I hope they do get some press notice. What is important is that young people are demonstrating in clear and unmistakable terms that they care. Their concern is being expressed in their willingness to give up the beach or a sight-seeing trip in order to bring some friend-

lines and warmth to the lives of these veterans, hospitalized and far away from relatives and friends.

The undertaking involves no politics; it crosses partisan lines, as it should. They come from offices both of Republicans and Democratic Senators. They have the support both of Democrats and Republicans, including Senators MUSKIE, BROOKE, PERCY, HUGHES, FONG, GOODELL, BELLMON, CRANSTON, MURPHY, SAXBE, SCHWEIKER, and MANSFIELD.

I would urge that all Senators support this worthy endeavor.

WASTE IN GOVERNMENT SPENDING

Mr. MANSFIELD. Mr. President, exposing waste in Government spending is perhaps one of the most important endeavors that could be undertaken. One who has undertaken that chore with the greatest effectiveness is the able and distinguished Senator from Wisconsin (Mr. PROXMIRE). Last Sunday's edition of the Boston Globe featured an article about BILL PROXMIRE's outstanding efforts in this department, comparing his record with that achieved by President Truman during the wartime investigations into Government contracts while still a Senator.

I ask unanimous consent that the article, entitled, "Will Proxmire Follow in Truman's Footsteps?" be printed in the RECORD.

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

WILL PROXMIRE FOLLOW IN TRUMAN'S FOOTSTEPS?

Back in World War II, Sen. Harry S. Truman first came to national attention because he was the tireless chairman of a Senate committee that investigated scandals arising from war contracts. His effective work in keeping to a minimum the waste of taxpayers' money resulted in his becoming Vice President in 1945 and entering the White House the same year.

If exposing the waste of billions of dollars in Defense Department funds still means anything, Sen. William Proxmire (D-Wis.) could be in a fair way to repeat Mr. Truman's performance. Just as tireless and effective as was Mr. Truman, Sen. Proxmire has been at it for years.

Tomorrow the General Accounting Office will issue a 121-page report revealing that the Federal government's own watchdog is unable even to estimate how many billions of gallons of fuel supplies sent to Southeast Asia are missing or stolen. The report is the result of an investigation requested by Sen. Proxmire after receiving a letter from John McGee.

McGee is, or was, a civilian oil inspector for the Navy who had earlier uncovered, while stationed in Bangkok, the theft of millions of dollars worth of US fuel in Thailand. His "reward" was a transfer with practically no warning, to make-work job in Arlington, Va. There he described himself as "radioactive" and said, "They won't look at me. They won't talk to me." Only pressure from Sen. Proxmire's office won him a long-overdue promotion recently, but he is still regarded as a black sheep.

In the coming weeks the US Senate will be hearing about more such scandals as it begins sustained debate on a bill authorizing \$19.2 billion in weapons procurement and Pentagon research in the current fiscal year. Expenditures for ABM and MIRV missiles will be part of it.

Last week the Administration prepared in two ways for that debate. It made public the report of a presidential commission calling for a major overhaul of the Pentagon. And Secretary of Defense Melvin R. Laird ordered that his department adopt a "fly before buy" policy, to make sure that a prototype of a weapons system actually works before going into production with it.

This action, perhaps unintentionally, spoke volumes about what has been wrong for so long with the Pentagon. And while he naturally did not name Sen. Proxmire, the latter has been a persistent critic of the Pentagon's procurement policies and, in particular, of the Lockheed situation.

The subject of the Lockheed Aircraft Corporation is sure to come up in the Senate debate. Lockheed, the nation's No. 1 defense contractor, is in serious financial trouble, and the appropriation bill includes a highly controversial \$200 million "contingency fund" for Lockheed which 24 of the nation's major banks are insisting on before loaning Lockheed another \$100 million which they want the government to guarantee.

Sen. Proxmire has vowed to fight both the loan guarantee and the \$200 million appropriation.

It should be quite a battle. And it may well go to the very roots of the military-industrial complex against which President Eisenhower warned the nation in his Farewell Address a decade ago.

One can read the sordid details of the Lockheed scandal in the Aug. 1 issue of *The New Republic*. It is a story of costs far in excess of those agreed on, with the government bailing out the firm every time. Lockheed's C-5A jet transport program was an unmitigated disaster, with at least \$1.5 billion of its \$2 billion cost overrun clearly avoidable. "Thus far," reports James G. Phillips, "the Air Force has spent \$2.5 billion on the program and has received one operable plane!" Is it any wonder Secretary Laird now speaks of "fly before buy"?

Perhaps even worse than the waste of money was what happened to those who merely reported it to their superiors. Air Force Col. Joe Warren first blew the whistle as a cost-efficiency expert four years ago. He kept it up. Finally orders were cut sending him to Addis Ababa. This was blocked by friends, but he was still removed from the Lockheed program and assigned to a Pentagon computer manager job. Col. Larry M. Killpack was transferred to Vietnam. Col. Jack W. Tooley, a civilian adviser who had reported incredible loafing and inefficiency, quit in disgust.

Throughout all this, the press was deliberately bamboozled. Finally A. E. Fitzgerald, the Pentagon's deputy for management systems, was asked to testify before Congress, and the Pentagon hit the panic button, warning him his testimony "would leave blood on the floor." It tried to substitute another witness, but Proxmire ignored the latter and called Fitzgerald, who confirmed Proxmire's estimate of the \$2 billion overrun. Fitzgerald was immediately removed from the program, and later fired.

With the Senate debate now begun, the nation has not heard the last of the Lockheed scandal. Nor has it heard the last of Sen. Proxmire. He is a modest man and his official biography in the latest Congressional Record says only: "William Proxmire, Democrat, of Wisconsin; married to Helen Hodges Sawall."

Some day it may be longer than that.

AIR POLLUTION: THE MENACE GROWS, BUT STILL NO ACTION

Mr. PROXMIRE. Mr. President, this morning's Washington Post contains a number of excellent articles which reflect the truly frightening state of affairs in which we find ourselves regard-

ing the pollution of our air. For some time, now, we have heard ominous warnings that we were facing an air pollution crisis. At first, these warnings made interesting news. People talked about them in ominous tones. Soon, however, these warnings began to lose their freshness, and we began to lose interest. Ecology and the whole issue of the environment was labeled as just another fad—an issue, which like all others appears briefly in the press, and then fades away as everyone loses interest. This process goes unnoticed with most issues. Unfortunately, some issues do not just go away. Air pollution is one of them. Despite all our claims that we have lost interest in the issue, air pollution continues to get worse.

Several articles in this morning's Post point up the immediate threat. The first, an excellent commentary by Nicholas von Hoffman, reviews our efforts to date to curb air pollution. In the articles, Mr. Hoffman recounts the complete failure of these efforts. The lack of progress is truly appalling. In another article, entitled "Air, Water Pollution Warnings Issued," the problem was brought down to the local level. According to the Metropolitan Washington Coalition for Clean Air, we can expect much worse smog during the coming months than we experienced last week. A shift in weather patterns will lead to massive buildups of pollutants which could last for weeks. Finally, an editorial entitled "Clean Air and Automobiles," pointed up the need for immediate action by the District government to restrict the operation of automobiles within the downtown area.

I ask unanimous consent that these three excellent articles be printed in the RECORD. I commend them to all Members of Congress who are concerned about the need for strong, decisive action to curb air pollution before it is too late.

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

AIR, WATER POLLUTION WARNINGS ISSUED: RIVER SPORTS HAZARDOUS (By Stuart Auerbach)

Washington health officials warned yesterday against water skiing or other sports that put a person in contact with water from the polluted Potomac River and other local waterways.

Health Director Dr. Raymond L. Standard also cautioned against eating fish caught in the river unless they are thoroughly cooked to kill any potential germs.

"I wouldn't eat them," said Arnold Speiser, who is in charge of the city's water quality control program.

Although Potomac pollution has been an issue for more than 20 years and swimming has been banned there for at least that long, yesterday's statement is the strongest warning yet by a local health agency to restrict water sports on the river.

The health officials singled out four areas on the Potomac where they said untreated sewage flows into the river. Standard said much of this is caused by mixing of sanitary and storm sewage in an overloaded sewer system, "due in part to the expanding suburban population" whose sewage flows into District facilities.

These areas are:

The foot of 36th Street NW., where a continuous discharge of sewage has flowed for a

month into the river just west of Thompson's Boat Center.

Water Street NW, at Potomac and 36th Streets.

27th and I Streets NW., where the overflow goes into Rock Creek on its way to the Potomac.

13th Street and Ridge Place SE, where obstructions such as sticks and rags cause occasional overflows into the Anacostia River. "These areas should be avoided by boaters and fishermen, and parents are urged to caution their children accordingly," Standard said.

Spelser said the water in the Potomac and other rivers in the area is so polluted that no one should let his body come in contact with it.

He specifically listed swimming, wading, and water skiing as "water contact sports" to be avoided, and added that sailing and canoeing constitute "a gray area." Some sailboats and kayaks, he said, sit so low in the water that people in them "approach water contact."

Tests in the Potomac show that a fecal bacteria found in raw sewage is more than 10 times the allowable limit for human contact with water.

Spelser said there should be no more than 200 fecal coliform (a bacteria found in the human intestine) per 100 milliliters (one-tenth of a quart) of water. The average sample from the Potomac ranges from 2,000 to 3,000 organisms per milliliter.

FALL TO BE HARDER ON LUNGS

(By Aaron Latham)

Respiratory illnesses were up sharply last week when a noxious cloud of dirty air covered Washington, and clean-air crusaders warned yesterday that this was only the beginning.

They predicted that fall would be worse, with longer, more severe air pollution crises.

The Metropolitan Washington Coalition for Clean Air told a press conference that this fall and next spring weather conditions will favor buildups of pollution blankets that will lie on Washington and other cities without moving.

James Sullivan, Clean Air's weather adviser, said that in the summer the sun tends to "burn off" pollution while winter brings winds to clean the air.

But as the sun grows cooler this fall, he predicted more and more stagnant masses of polluted air.

Winter should bring some relief, but as the winds die down, pollution is expected to increase in the spring.

The gloomiest forecast was not for the immediate future but for the next 15 years.

By 1985 half of all passengers will have to ride buses or trains—not cars—if the city is even to hold pollution at its current level, the coalition said.

The coalition, an arm of the District Tuberculosis and Respiratory Disease Association, reported that Prince Georges General Hospital had 84 asthma patients brought to its emergency room last week, double the weekly average.

Children's Hospital, Washington Medical Center, Georgetown Hospital and the Washington Sanitarium and Hospital also reported increases in emergency cases brought on by dirty air.

The coalition said that a check with private physicians showed an increase including respiratory problems and eye irritation.

John S. Winder, director of the coalition, said that those seeking medical help represented only a small portion of the total numbers who had health problems aggravated by dirty air last week.

Last week's cloud of pollution was caused by a temperature inversion. Normally the air closest to the earth is warmer than that at higher altitudes. As this warmer air rises and cools, it carries away pollutants.

But last week the cool air was on the bottom while the warmer air rested on top like a lid, trapping pollutants next to the earth.

There have always been inversions, especially in the fall and spring, but they did not become pressure cookers for polluted air until cars and industry began pouring forth carbon monoxide, sulfur dioxide and other deadly wastes.

Last week, the Washington area recorded some of the highest air pollution levels since a coordinated monitoring system was established three years ago.

The coalition said that the District government asked both the Potomac Electric and Power Co. and the Hopfenmaier rendering plant to cut back their activities but that neither complied with the request.

The rendering plant said that it did shut down for a short time last Tuesday but refused to say how long.

Pepco said that they could not cut back burning the coal and oil, which produces their electricity, because their customers demanded a record amount of power last week.

The coalition, which opposes the construction of the Washington freeway system, predicted that by 1985 freeway traffic would dump an additional 200 tons of pollutants a day into the air.

Daniel Fisher of the coalition argued that the proposed freeway system was in violation of the National Environmental Policy Act since to date it has not conducted the "study of environmental impact" required by the law.

THE POLITICS OF POLLUTION

(By Nicholas von Hoffman)

Each year the air grows worse. These past few days New York, Philadelphia, and Baltimore have been under gas attack. It happens to every city in every season, and it's getting worse. We can look forward to what our ineffectual officialdom will call an "unfortunate atmospheric incident," a really horrible inversion that seals off one of our major cities, killing thousands of people at a crack rather than what we have now—the invisible shortening of our life spans.

You will be reassured to know that, in the event of such a contingency, the federal government is ready with no stand-by emergency plans whatsoever. There is no preparation to evacuate older people, infants, persons with lung diseases or severe allergic reaction to the toxic gases which are replacing the atmosphere that millions of evolutionary years have accustomed us to.

Although a chemical warfare attack launched from Detroit's automobile factories is much more a certainty than a Russian missile assault, our civil defense apparatus isn't plugged into any plan to repel environmental assault. Washington is completely unready.

The annual budget for the National Air Pollution Control Administration is \$100 million, which is less than what it costs to build the flight deck of one of those militarily useless atomic aircraft carriers. Mr. Nixon, Mr. Laird and many of our other officials who style themselves leaders, yap like milk-starved puppies about national security and, yet, leave the nation defenseless against real and immediate threats. We're ripe for an ecological Pearl Harbor, and if it comes by air, the National Air Pollution Control Administration will have exactly 1,050 employees—counting messenger boys and secretaries—to throw into battle.

Although our officials have spent billions on early warning systems, DEW lines and spy-in-the-sky satellites, no such system exists to monitor the quality of air over the United States. Our computers are stuffed with information about subversives, bad credit risks and holders of public library cards, but if the National Air Pollution Control Administration wants to know what the breathing is like in Boston, there's no automatic

system of telemetry; they must phone up and hope the municipal authorities are collecting air samples. The NAPCA isn't national and hasn't got the power to control the smoke given off by the District of Columbia garbage incinerators.

Like godless, international, materialistic communism, bad air is a problem that can't be licked at the local level. Washington must do something, but in every aspect of the problem, it's falling. New York City is screaming it wants low-sulfur, North African oil for its electric generating plants. But that would mean loosening up on the oil quotas and cutting high-sulfur, South American-Rockefeller oil out of the market, so let New York scream.

Between 60 and 80 per cent of air pollution is directly attributable to cars. The Nixon administration killed off its suit against the automobile manufacturers for conspiring to withhold anti-smog devices, deliberately settled out of court, leaving the public with nothing but bronchitis and a wracking cough.

The June issue of *Environment* points out that cars could be made considerably less hazardous to health if the manufacturers were forbidden to outfit them with grand prix racing motors: "The major obstacle facing the automobile companies in their attempts to solve the emission problem is their commitment to large automobiles, with large, high-speed, high-compression engines. A change to smaller cars with smaller, low-compression engines would accomplish more than all of their anti-pollution efforts to date."

The Detroit engine not only throws more garbage out of its exhaust into the air, but also, the magazine says, demands the most lethal kind of gasoline, which is loaded with anti-knock compounds, high and low speed additives, scavengers, deposit modifiers, antioxidants, metal deactivators, anti-rust agents, anti-icing agents, detergent additives and lubricants. And we have to breathe all of that bleep.

Beyond failing to regulate the death-dealing capacity of automobiles, the fine gentlemen who run the country are still hard at work accommodating the monsters. Since 1947, the year we got serious about beginning to choke ourselves to death, all the governments of the United States—local state and national—have spent \$249 billion on highways. The largest single source of this money is the inviolate Highway Trust Fund, which is so holy that, in years when some of it is left unspent, the Treasury is actually obliged to pay interest on the unused portion of this vast amount of dough which flows from the federal tax on cars, tires, gas, etc.

Sen. Gaylord Nelson (D-Wis.) remarks that no other government activity gets this kind of treatment, not even the war budget. The Senator has calculated that 75 per cent of all the money spent by the government on transportation in the last generation has gone into highways, while one per cent has gone into urban mass transportation; yet 84 per cent of all automobile driving is short trips, commuting to work, going to the store, taking the kids to school, the kind of things that mass transit can do without ruining our lungs.

CLEAN AIR AND AUTOMOBILITY

With smarting eyes we read last week that Tokyo has a bad air pollution problem, too. There is comfort in shared misery. But now we read that Tokyo is doing something about it—it is banning all cars from 122 of its busiest streets on Sundays, the busiest shopping day in Japan—and we have yet to hear of any drastic new measures our lethargic city is taking. Or the federal government, for that matter. It would be tragic and irresponsible if, just because, thank heaven, last week's smog has cleared, our officials were to clear their minds of its potential hazards as well.

Hot air inversions and double inversions, such as this city and the entire Atlantic seacoast experienced last week, can recur at any moment, meteorologists say. Hot, poisoned air can get trapped as easily as fresh winds arise to dispel it. It can happen in fall just as it happened in summer.

We are therefore supporting the appeal of Environmental Action, the antipollution lobby that coordinated last April's Earth Day (which in contrast to some, seemed to us a wholly constructive "confrontation") to work toward curbing combustion engines in our major downtown centers. Or rather, we support "pollution free" downtown areas "in principle," as the diplomats say, recognizing that in actual fact this city, for one, is not ready for any such drastic measure until the Metro, ideally supplemented by steam-engined buses, can bring people downtown to enjoy the delights of car-free shopping and city bustle—plus clean air.

By "working toward" we don't mean more evasive weaseling. We mean, first of all, that this city and region take a hard look at the instant lessons of Tokyo. One of them, it appears, is that by banning automobiles in just one congested area, the downtown pollution level has dropped to half the normal reading. Tokyo has a lot of polluting industry. Washington does not.

The other lesson is that banning cars from shopping districts, contrary to conventional merchant wisdom, does not hurt but considerably helps business. As city planner Victor Gruen has argued for years, "Not even a Cadillac, has ever bought a nickel's worth of merchandise." Car-free shopping streets, as Fresno and more recently the merchants along New York's Fifth Avenue (where cars are now banned on Saturdays) have found, draw large crowds. People can crisscross freely and shop on impulse. In Tokyo, sales ran as much as 50 per cent above the usual figure.

What follows from these lessons is that we can and should be far bolder and more decisive about curbing the automobile, rendering it less noxious and returning downtown streets to the people. Yes, we know. Our federal government is working on all this. But there is also no doubt that local government, in this area and elsewhere, can do more to hasten the day when we can breathe freely again.

Why can't this city, for instance, ban cars from at least one downtown shopping street—the F Street Mall seems ideal—on Saturdays, as part of the "Go Downtown" promotion? Why couldn't the City Council pass an ordinance to encourage, if not enforce, commuter car pools? If we double the number of passengers in private automobiles, we automatically halve the amount of carbon monoxide in the air. Why can't we pass local laws, as the California State Senate did last year, that prohibit the use of gasoline combustion engines three years from now? And why, among other things that might be done, can't we demand that Metro construction be speeded with emergency funds? An increase of three million tons of sulphur dioxide in the Washington area is surely an emergency.

We admit that such efforts may turn out to be largely symbolic. But we are not yet ready to admit that the declared will of citizens as expressed by their local government is but a futile gesture.

NATIONAL DISARMAMENT PROGRAM IS DANGEROUS

Mr. GOLDWATER. Mr. President, in an article published recently in the Arizona Republic, columnist Joseph Alsop reports that the United States is "oozing" into a program of national disarmament so dangerous that it presages an upset in the world power balance. Needless to say, the upset described by Mr.

Alsop would be unfavorable to the United States and beneficial to the Soviet Union.

As he explains it:

The current crisis-center of the bad news, of course, is to be found in the Middle East. But in totality, the bad news consists of a huge web of facts stretching from the Kremlin outward around most of the world.

The major point of Mr. Alsop's article is his belief that President Nixon is almost helpless in the face of these grim facts.

The article is so important, that I ask that it be printed in the RECORD.

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

NIXON'S CHIEF FAILURE AS THE PRESIDENT

(By Joseph Alsop)

WASHINGTON.—"Vietnam? Oh, that's the only place where the news is really very good!"

This literal quotation from a very high official of the Nixon administration is pretty luridly revealing. It does not reveal untruthfulness, however. The news from Vietnam really is very good, although it is little reported and seldom understood. And before the summer's end, with any luck at all, the news from Vietnam should get a lot better.

What the quotation reveals, rather, is the enormous difference between the way this country's affairs now look to the insiders and the way the same affairs look to the outsider. Here, in truth, is President Nixon's chief failure in office to date.

The President is being blamed for all sorts of other failures, with great vociferousness. His failure to scuttle-and-run in Vietnam has probably given the most displeasure; although his failure to ignore military realities, pre-Cambodia, has aroused much indignation, too. Then Sen. Strom Thurmond says he has failed the South. The Negro leaders answer that he has failed the blacks. And so it goes.

But a president's primary task is to lead, and especially to lead the country when the going gets really rough. All the commonly charged failures, cited above, have to do with problems that will sort themselves out in time. On present prospects, moreover, they will sort themselves out without doing fatal damage to this country or to any of this country's vital interests overseas.

Meanwhile, the very bad news from all sorts of places, except Vietnam, quite clearly threatens to do fearful damage to this country and its vital interests overseas. This was what the high official was thinking about when he made the above remark.

Essentially, all this news concerns the truth of an immense and appallingly dangerous upset in the whole world balance of power. This upset will surely occur, moreover, unless the United States does something drastic to stop it.

The current crisis-center of the bad news, of course, is to be found in the Middle East. But in totality, the bad news consists of a huge web of facts, stretching from the Kremlin outward around most of the world. This web will be tackled in a forthcoming series in this space.

For present purposes, however, the important point is the President's apparent helplessness in the face of these grim facts that so horribly worry the insiders. It is as though Vietnam had somehow used up all the President's time and largely exhausted his resources of sturdiness and courage.

So we are dithering about the Middle East. We are oozing into a program of national disarmament so grave that the Sixth Fleet may have to be pulled out of the Mediterranean. And in many other ways we are doing

nothing about the huge web of facts above-mentioned, although these facts clearly presage the kind of unfavorable upset in the world-power balance that this country has never in its history experienced.

In this situation, to be sure, the President deserves both sympathy and understanding. We are oozing into the most dangerous kind of national disarmament, for instance, for two interacting causes, both very hard for the President to tackle.

One cause is the built-in annual increase in spending for social purposes, for which the President and his budget-boss, George Shultz, have got to find the money somewhere. The other cause is the concerted attack on the national defense, from many political quarters, which makes it far easier to cut defense spending than any other kind of spending.

Or take the main current crisis point, as another illustration. In the Middle East, as the Soviets themselves are passing the word, this country faces a problem that is worse, in some ways, than the problem that the Kremlin created for itself by gambling on the Cuban missiles. And if the problem is not successfully solved, Israel will be the first casualty, but the most vital American and Western interests will also be fatally damaged.

Yet what would happen if the President proclaimed a national emergency, reinforced the Sixth Fleet and warned of possible mobilization? Or what would happen if the President asked for large increases in indirect taxation (as he would probably like to do) in order to meet our defense and social needs?

The fact is that he now faces a dilemma that resembles Stanley Baldwin's. But it is better to tell a deaf country the plain truth, and to ask an unwilling country to make the needed efforts, than to choose the horn of dilemma that Baldwin chose in the early 1930's.

U.S. FRIGATE "CONSTELLATION"

Mr. MATHIAS. Mr. President, the oldest American ship constructed for the Navy, the U.S. frigate *Constellation*, appears to have another first. Since it was decommissioned by the U.S. Navy in 1955, the ship has been under the sole care of the citizens of Maryland. Unlike the U.S.S. *Constitution*, which is still commissioned and thus manned by Navy personnel, the restoration of the U.S. frigate *Constellation* is a civic project.

The *Constellation*, which was constructed in Baltimore, was launched in 1797, 9 weeks ahead of the *Constitution*. By reading the ship's log, one can follow the course of American seapower.

It was the *Constellation* that captured *L'Insurgente* and sank *La Vengeance*. She carried the first marines to Tripoli to end the maraudings of the Barbary pirates, and her swiftness earned her the nickname, "Yankee Race Horse."

The proud ship is now open to visitors at pier 4 in Baltimore. The Metropolitan Civic Association and the Ensign C. Markland Kelly, Jr., Memorial Post No. 174 of the American Legion, both of Baltimore, are working hard for the issuance of a commemorative postage stamp in 1972 in tribute to the 175th anniversary of the *Constellation*. I am pleased to have supported their efforts, and I am hopeful that this distinguished vessel, now a national historic landmark, will be appropriately commemorated through the issuance of a special stamp in 1972.

OIL IMPORT QUOTAS: THE OIL LOBBY'S FINEST HOUR

Mr. PROXMIRE. Mr. President, this month's Washington Monthly contains an excellent and revealing article on the oil lobby by my Legislative Assistant, Martin Lobel. The article cites chapter and verse on the lobby's successful attempts to maintain a massive Federal subsidy for the oil industry consisting of such devices as permitting the offsetting of tax payments to foreign governments against their Federal tax liability; allowing all intangible costs of oil exploration and development to be written off for tax purposes in 1 year; condoning State production controls which regulate supply and demand rather than conserve oil; and finally—the principle subject of the article—regulating the importation of cheaper foreign oil at great cost to the American consumer.

Every thoughtful Senator will want to read this article because it gives a clear example of how an industry can buy benefits worth billions with just a few cents on the dollar through campaign contributions to individual candidates as well as the party in power. The article is a very serious indictment of a system of governing that permits a high pressure, highly paid, lobby to distort national aims and purposes for its own selfish ends through a misuse of such terms as "in the national interest" and "for national security purposes."

Fortunately the American people as well as their elected representatives are more than ever before looking behind sloganeering labels for true substance. We are all beginning to ask is this or that or the other program truly in the national interest. Mr. Lobel's article shows clearly that the oil industry fails this test when it is applied to the import quota program. I ask unanimous consent that the article be printed in the RECORD.

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

RED, WHITE, BLUE AND GOLD: THE OIL IMPORT QUOTAS (By Martin Lobel)

The American consumer pays high prices for oil products so that the United States can save its oil in the interest of national security—but the nation is using up its oil faster than is the rest of the world.

The consumer pays more for oil so that the oilmen will search more diligently for oil—but they aren't spending as much time looking as they used to.

The consumer is denied access to all but a fraction of the cheap oil produced overseas by American companies—even though the consumer, in his role as taxpayer, subsidizes those companies' payments to foreign rulers for the right to extract that oil.

These are highlights of the oil import quota system—a federal giveaway that has grown to be by far the largest of the public favors granted to the oil industry. The current estimate is that oil quotas alone cost the public \$5 to \$7 billion a year, and that the bill will grow to at least \$8.4 billion by 1980. For the consumer at the gas pump that means, today, close to an extra 5.7 cents a gallon.

The expensive absurdities of the oil quotas have not gone entirely unnoticed. Complaints from consumer-oriented Senators, such as

Hart, Kennedy, Muskie and Proxmire led in 1969 to the reluctant formation of a Presidential task force to study oil imports. Early this year the task force recommended a shift from quotas to tariffs that would have reduced the amount of the giveaway. President Nixon then sent the task force back to the drawing board with instructions to report again after the November election—ample time for the oil industry to demonstrate its generosity to Republican candidates. (Ample time also for the oil lobby to work on Congress for some additional insurance. At present, a simple executive order could alter or abolish the program; but the oilmen have already pushed a bill through the House Ways and Means Committee which would require an act of Congress to change the quota system.)

The struggle over the import quotas is taking place against the background of a long government involvement in the oil industry, an involvement that has always failed to meet its stated objectives, but has always met the desires of the industry. Each subsidy obtained by the industry has only weakened its ability to compete, requiring further subsidy, so that the American oil business today is an economic cripple dependent on government support—a wealthy welfare case.

COME IN THE BACK DOOR

The history and operations of the oil import quota program illustrate the ability of special interests to get what they want by administrative fiat and to retain it because few people are aware of what is going on. Established 11 years ago by President Eisenhower, the program was immediately decked out in the unassailable armor of national security and later brought within the provisions of the Trade Expansion Act of 1962. Ostensibly, the restrictions imposed on the importation of oil from abroad were for the purpose of encouraging the development of sufficient available domestic reserves to meet any shortage caused by an interruption in the flow of foreign oil.

The real reason for the establishment of the quota system was considerably less lofty. It was simply that oilmen in the United States were having trouble competing with imported oil. Partly by design, American wells produce at a comparatively slow rate; and the result is that domestic crude oil costs East Coast refineries roughly \$3.90 a barrel, while comparable oil from the Middle East costs only about \$2.25, including freight and tariff.

Rather than argue for assistance on the floor of Congress, under public scrutiny, the oil industry managed to prevail on President Eisenhower to help them out through the back door by means of an executive order. Today, the industry is still careful to discuss the program in the most pious of terms. "It is almost incredible," wrote Kerry King, Texaco's vice president for public relations, in a fund-raising letter not long ago, "how many Congressmen are willing to sacrifice the national security of this country to the siren song of low-cost foreign oil. Those of us in the oil industry know that the strength of our nation is dependent on an adequate supply of energy that cannot be cut off, interdicted, or held back according to political whim or national emergency. . . ."

Few people in the government have ever realized what the import quota system entails. Only those most intimately involved knew the extent to which profit, not emergency preparedness, was the issue. "The imposing of import quotas on oil," Sherman Adams writes in his memoirs, "was primarily an economic decision."

The quota program limits imports east of the Rockies to 12.2 per cent of estimated domestic production. For the five states west of the Rockies, the limit is the estimated difference between demand and domestic sup-

ply. Domestic producers are fully protected from foreign competition since imports are limited to the oil needed after all domestic oil is sold. In practice, foreign oil constitutes about 20 per cent of total U.S. oil consumption—about one billion of five billion barrels used annually—because of special exemptions like the one for residual oil. Residual oil, which is a cheap crude product, is used by utilities, industrial plants, apartment and office buildings, schools, hospitals, and other institutions. It has been exempt from restrictions since 1966, primarily because of its low profitability and the political power of its users.

The right to import any portion of the oil quota into the protected American market is indeed valuable, for it gives the importer a margin between the world price and the U.S. price for crude oil worth about \$1.50 a barrel. The government could have decided to sell the import licenses to domestic refiners at \$1.50, reaping a turnover profit of about \$1.5 billion on annual imports of one billion barrels. This bonanza could then have been returned to the taxpayers in the form of lower taxes or lower deficits—take your pick. Instead, the government decided to give the import licenses to the oil industry, allowing the beneficiaries to gather a double profit from the protected market; higher prices for oil produced domestically and the profit on retailing imported oil at the high domestic prices.

Import quotas are figured by the Interior Department's Oil Import Administration, which is headed by ex-Oklahoma oilman Jake Simmons, and "allocations" are made to refineries on a sliding scale: the smaller the refinery, the larger the percentage of its output that may derive from imported oil. Import tickets (each ticket representing permission to acquire one barrel) are allocated to all domestic refineries, including those too far inland to economically use foreign oil. Forbidden to sell their rights to the oil, these inland refineries "exchange" their import tickets with refineries on the East Coast, receiving in return the equivalent value of domestic oil—usually that produced in the inland area by affiliates of the coastal refinery.

The import quota system might be slightly more tolerable if it worked—that is, if the maintenance of high prices gave oil producers enough incentive to explore for new sources of domestic oil. It doesn't. On the contrary, import quotas protect a labyrinth of state proration laws which have proved inefficient, perhaps even counterproductive, as stimulants to oil discovery.

Proration, or the setting of quotas for domestic production, is the oldest form of government intervention in the market mechanism of the oil industry. The practice grew out of the wasteful methods which characterized oil extraction until after World War I. Before that, oil producers often engaged in mad scrambles to get oil out of the ground, regardless of waste, because the courts had established that any number of drillers could tap a single pool of oil and that the riches belonged to whoever pumped them up.

Oklahoma enacted the first conservation statute in 1919, but such legislation was largely ignored in the Twenties because high oil prices made producers extremely wary of any regulation. The federal government prodded the states and oil companies toward conservation measures during the roaring years, partly by hinting to the fiercely independent oil corporations that they were overlooking the virtues of regulating production. The Oil Conservation Board, created by President Coolidge in 1924, pushed this line through such documents as the February, 1929, report, whose principal recommendation was: "Federal legislation which shall (a) unequivocally declare that agreements for the cooperative development and operation of single pools are not in violation of

the Federal Antitrust laws, and (b) permit, under suitable safeguards, the making in times of overproduction, of agreements among oil producers for the curtailment of production."

Conservation legislation lay dormant until the Depression and the discovery of the East Texas oilfield (1930) drove oil prices as low as 10 cents a barrel in another round of cut-throat drilling and heavy waste. Oklahoma, Texas, and Louisiana began to enforce laws designed to stop the physical waste by setting maximum efficient rates (MER) of production. Such MER proration sets quotas for all rigs drilling into a single reservoir, so that each rig can pump efficiently.

MER proration is undoubtedly the most benign of the government interventions in the oil market, for its conservation provisions were sorely needed. But the machinery of conservation was extremely vulnerable to a second kind of proration—market demand—which used conservation regulations to curtail production in the interest of artificially high prices. Texas led the way with the Market Demand Act of 1932, allowing the Texas Railroad Commission to expand its duties as the administrative arm of MER proration to prevent "economic" waste by rationing production to meet demand. In effect, the Railroad Commission held together a cartel of Texas oil producers, restricting output and raising prices. Other oil states followed suit, and by the end of the Depression the proration system was too lucrative to be abandoned. Enforcement of the state restrictions has been aided by the Connally "Hot Oil" Act, which prohibits interstate shipments of oil produced in excess of state regulations.

The oil companies and oil state officials employ some of the most specious economic reasoning on record to deny that market demand prorationing has any price-fixing effect. They argue that the restrictions merely insure that no more oil will be supplied than consumers demand. Thus, William J. Murray, Jr., chairman of the Texas Railroad Commission, told the Senate Subcommittee on Antitrust and Monopoly that "market demand proration simply means that the production of crude oil will be restricted to that amount which, when refined into petroleum products, will supply the needs of all the consumers of the nation for each and all of the multitude of petroleum products." He ignored the basic economic law of supply and demand—if the price is low, users will demand more oil. In reality, the major oil companies set a high non-competitive price for crude oil, and then the state regulatory authorities protect that price by making sure no excess oil is produced.

By the end of World War II, prorationing had insulated the domestic oil industry from competitive price cutting. At the time, foreign oil did not seem to be a threat to domestic prices. In 1948, the United States produced about two-thirds of the world's crude oil and possessed one-third of the world's proven reserves, so we set the trends in world petroleum prices. We imported only about 200 million barrels annually; few foreign companies could produce oil more cheaply than the Americans. A decade later, in 1958, the United States produced only one-third of the world's oil and possessed one-ninth of the proven reserves. New oil fields were opening in Canada, North Africa, and Kuwait. The proration system held U.S. oil prices up, even though the prevailing world price began a long downward trend. High American prices, combined with rapidly growing domestic consumption, caused imports to triple over the 10-year period.

The oil industry realized that domestic prices could not be kept high without protection from inexpensive foreign oil. Having built market demand proration on the back

of conservation measures, the crowd from Texas determined that yet a third form of government intervention was required—import quotas to make sure that a free market would not operate. This was sold to the public (insofar as it was impossible to avoid saying anything) on the grounds that domestic production was essential to national security and high prices stimulated the discovery of new oil reserves.

NOTHING OF VALUE

The high prices have not succeeded in protecting the domestic supply. Each year, Americans consume more than one-third of the 14-plus billion barrels of oil used in the world. We do so by using about one-ninth of our reserves, at high prices, while the rest of the world uses only 1/39th of its collective reserves, at low prices. The margin between U.S. and world prices has continued to grow behind the barrier of the quota program as foreign oil prices fall. A barrel of Arabian light crude, for example, could be delivered to the United States for \$2.48 in 1959, \$2.08 in 1963, and \$1.87 in 1966.

United States proven oil reserves, which had risen from 20 to 30 billion barrels between the end of World War II and 1958, are still at about 30 billion barrels, and we are now using oil more rapidly than it is being discovered. Seismographic crew time, a measure of the basic oil seeking activity in the industry, has declined from about 7,000 crew weeks per year in the middle Fifties to 3,337 crew weeks in 1967. The success ratio of wild-cat drillings has declined.

Moreover, government intervention in the oil market actually discourages the seeking of new low-cost oil. State proration restrictions exempt small wells from the quotas and restrict larger wells in proportion to their size. Thus, small marginal producers are allowed to pump at full capacity, but large producers, who are more efficient because of economies of scale, must restrict their output. The result is that average costs are much higher than they would be in a free market. There is accordingly less loose capital which might be used on exploration. Furthermore, underuse of existing capacity reduces the industry's inclination to seek new sources. And underutilization has often been quite extensive. In 1968, for instance, proration required that Texas wells be shut down 201 days, or 55 per cent of production time. In 1962, Texas wells were shut down 268 days, or 73 per cent of production time.

The import quota system was to have provided an additional spur to exploration, since the revenues from the import tickets would be largely devoted, in the industry's reasoning, to the quest for cheap oil. But that never happened, for the federal government decided to allocate the tickets to the refiners, not to producers. The distinction would not be important if most domestic exploration were done by the integrated major companies such as Standard Oil and Gulf, which can shuffle funds at will among their subsidiary producers, refiners, distributors, and retailers. But nearly 80 per cent of onshore exploratory drilling is done by non-integrated independent producers, who receive no benefit from import tickets. As one independent Kansas producer put it, "Giving import tickets to refiners is like giving a grain subsidy to the miller." The result is that the refinery makes higher profits, but the scattered thousands of oil producers have little incentive to increase production. In fact, far from helping the small producer, the quotas put him at a disadvantage in competing for the lucrative domestic sources, offshore and Alaska, with the major companies who are in effect capitalized by the quota subsidy.

As the Kansas oilman's statement demonstrates, the petroleum industry is not unified in its support of the present import quota system. The independents, who origi-

nally pushed for the program because their small size made them vulnerable to foreign competition and because they had no holdings of foreign oil, are now split over the issue. The independent refiners ardently support the quotas, becoming nearly apoplectic whenever anyone verbally tampers with the import ticket system. Independent producers, however, find that much of the government money is siphoned off elsewhere and are consequently disgruntled, but they cannot agree upon an alternative. Several small producers have suggested that the government directly subsidize the exploration for new pools of cheap oil. Such subsidized wells could then be capped as stand-by sources of oil for emergencies.

The major oil companies see little humor in the capping proposal. It threatens their profits from domestic production. The majors have found that they benefit enormously from the quota system—world markets continue to expand for their foreign oil, while domestic price supports augment their coffers at home. They have it both ways, and the major oil companies (the top five of which had net incomes of more than \$5 billion in 1967) combine with the independent refiners to provide the muscle of the import quota lobby.

The petrochemical companies (including Union Carbide, DuPont, Monsanto, Dow, and Olin Mathieson) which make plastics, chemicals, fibers, and rubber from oil derivatives, object to the system because it deprives them of access to cheap raw materials, making competition in the international petrochemical markets difficult. Their opposition, however, could probably be quelled by special dispensations from the quotas.

COUNTING OIL'S BLESSINGS

For the American taxpayer, the import quota system is a disaster. The import ticket program provides an indirect transfer payment of \$1.5 billion from taxpayers through the federal government to the oil companies. In addition, a 1970 study for the White House Office of Science and Technology estimates, the import quotas transfer \$4.3-\$5.6 billion from consumer pockets to the oilmen by protecting their cartel-level prices for domestic petroleum. Thus, the total cost to consumers is estimated at \$5.6-\$6.9 billion per year. There are slightly lower estimates, such as the 1969 Office of Emergency Preparedness figure of \$5.2 billion (and which, to illustrate the influence of the industry, was the first cost analysis of the program ever made). Even this conservative estimate means the average American family of four paid \$96 more for oil in 1969 than it would have without the quota system, although on a state-by-state basis the cost varies from a high of \$228 in Wyoming to a low of \$44 in Hawaii.

The quota systems (domestic proration and import restriction) are far from the whole blessing bestowed by the government upon those who traffic in black gold. There is, of course, the oil depletion allowance, which, before it was reduced this year, transferred \$2.25-\$2.8 billion from taxpayers to the oilmen, according to different estimates. Now, after a fierce Congressional debate, which somehow fixed the bounds of discussion around whether to leave the depletion alone, reduce it from 27.5 per cent to 20 per cent, or compromise, the 22 per cent depletion affords the oilmen only \$1.6-\$2.5 billion.

As another incentive to discover more of that low-cost domestic oil, the government throws the "intangibles" allowance on to the heap of subsidies. This provision of the Internal Revenue Code allows oil producers to capitalize all the intangible costs of oil exploration and development; lease rentals, wages, fuel, power, materials, supplies and repairs. The oilmen get special treatment in that they can write off these items in one year (whether the exploration is suc-

cessful or not), whereas other businesses must depreciate them over a period of years.

Finally, the government allows the major oil companies to write off their "tax" payments to foreign governments dollar-for-dollar against their U.S. income tax liability (not their taxable income). These payments, which are often in the range of 85 cents per barrel, would be treated as rents or royalties—normal costs of doing business—if they took place within the United States. Oil companies generally do not bargain hard over these royalties, since they pass the entire cost on to the American taxpayer.

There is a superordinate layer of absurdity to the foreign tax credit arrangement. National security, when defined for purposes of the import quota, requires that we forego the much lower prices on foreign oil. But the foreign tax credit law is defended with the argument that the Russians or some other unscrupulous foreign power will get the oil if we don't. In other words, national security demands that the American taxpayer underwrite the acquisition of foreign oil that national security prohibits him from using.

In addition to insulating the oil industry from competition and subsidizing its activities, the federal government allows the oil industry to virtually escape paying taxes. In 1965, the Internal Revenue Service found that only 44 to 51 per cent of the oil industry's actual income—depending on how one treats the foreign credit—was considered taxable, whereas 97 per cent of the actual income of all other manufacturing concerns was considered taxable. In 1968, the petroleum refining industry paid only 11 per cent of its pretax earnings in federal income taxes, whereas other industries averaged 40.8 per cent. There are some particularly egregious tax blessings among corporations with foreign oil holdings. Atlantic Richfield Company, for example, reported net income of \$377,942,000 from 1965 through 1967 but paid no federal corporate income tax. Texaco reported a net income of \$892,986,000 in 1967 and paid only 1.2 percent in corporate income tax.

The economic return to the citizenry for this package of goodies for the oil industry hovers around zero, and there are costs not included in the list above, such as oil slicks. Oil slicks come from offshore drilling, most of which would not be economical without the import quota system and domestic rationing. The average offshore oil well costs nearly \$250,000, while the average onshore well costs about \$60,000. Drilling in the ocean stems from one of the true economic costs of oil quotas: artificially high prices allow otherwise inefficient operations to stay in business. Residents of Santa Barbara and the Gulf Coast can chalk up their recent disasters to the import quota system.

The economics of the quota system, indeed of the entire oil industry as it relates to the government, are so patently contorted that the oilmen must owe their favors to some cruder, less refined science. Such a massive boondoggle must rest on political foundations, where raw clout and the mystical shroud of national security can dignify the sores of frauds.

The national security argument has always been the backbone of the rationale for import quotas. In dissenting from the 1970 report of the Cabinet Task Force on Oil Import Control, Secretary of the Interior Hickel and Secretary of Commerce Stans objected that reducing quota protection "would risk the national security in fundamental respects. It would make us dependent on insecure foreign supplies by discouraging the exploration and development necessary to build our own reserves of oil and gas." These two Cabinet members, who generally represented the oil industry on the task force, also managed to conclude that reducing governmental controls to let the price of domestic oil fall toward world market levels was

"not only impractical, but would be a further retreat from a free market."

The task force had a difficult time conceiving of a situation in which foreign oil supplies could be cut off long enough to threaten the United States. A nuclear exchange would be short-lived, and refineries at home would be much more vulnerable to "interruption" than foreign supplies of crude petroleum. In order to make even a strained security argument, the task force had to postulate a prolonged, World War II-type conventional war, or an international political conspiracy against the United States. The prolonged conventional war was considered (a) unlikely, (b) unlikely to persist without nuclear exchange, (c) unlikely to persist without rationing, and (d) unlikely to persist without a major increase in domestic oil production.

The political conspiracy hypothesis has at least three weaknesses. First, the boycott would require the sustained cooperation of at least six diverse governments (Saudi Arabia, Libya, Kuwait, Iran, Iraq, and Algeria) to even approach effectiveness. Major producers such as Venezuela, Canada, Nigeria, Indonesia, and Mexico, would still be exporting. Second, the conspirators could not boycott only the U.S. (we could get oil from our allies), but would have to boycott most of the major world markets. On these two grounds, the Cabinet task force concluded that "a difficult world supply problem would arise only if all or most of Middle Eastern and North African supplies were to be cut off to all major markets." The third weakness, of course, is that most oil exporters could not shut off their buyers for very long without destroying their own economies. Many Middle Eastern countries derive more than 50 per cent of their GNP from oil exports.

Short-term crises could scarcely produce a security crunch. The petroleum industry normally maintains production stocks of 1.5 billion barrels, or about three times the annual oil requirements of the military at the peak of World War II. Anyhow, there may be plenty of domestic oil. One possible source is the petroleum which can be extracted from shale. Witnesses before Senator Philip Hart's subcommittee on Antitrust and Monopoly estimated that the richest shale deposits in Colorado alone contain about 600 billion barrels of oil more than 100 years' supply at current consumption rates.

Even if there were a massive, prolonged curtailment of foreign oil combined with no major new domestic oil pools, removing import quotas would not lower domestic production below emergency needs. The Charles River Report for the Office of Science and Technology estimated that free trade in oil would lower the price of crude petroleum to about \$1.75 per barrel and increase domestic consumption to 5.9 billion barrels. Of the 5.9 billion barrel figure, 3.4 billion barrels would be produced in the United States and 2.5 billion would be imported. Of the imports, 1.3 billion barrels would come from the Middle East and North Africa, 1.0 billion from Venezuela, and 0.2 billion from Canada. The report estimated that one year's total embargo of Middle Eastern and North African oil could be offset by increased production in the United States, Canada, and Venezuela from existing reserves. The Cabinet task force concurred in this general assessment of the national security argument for import controls. Its report found that if the Middle East were to shut off oil for one year in 1980, we could still supply 104 per cent of our domestic oil needs without rationing.

In short, with appropriate estimations of the countervailing factors, with crosscutting discounts for unforeseen negative developments, and with conservative estimates of operations requirements and foreign power macro-intentions, the national security argument may be classified as idiocy.

THE THREAT OF REFORM

The structure of the quota program was clearly not sturdy enough to survive unquestioned forever. As the public slowly awakened to some of the most glaring incongruities, pressure for change began to build up. The catalyst was Machiasport.

Machiasport is a little town in a depressed county of Maine. Its only economic asset is that its harbor, among the best on the East Coast, can accommodate the largest oil tankers yet envisioned. It was this harbor which, early in 1968, caught the eye of Occidental Petroleum Corporation as a potential solution to some problems of its own. Occidental, a newcomer to the ranks of the majors, had gigantic reserves of low sulfur oil in Libya, but, because it had no refineries, it lacked access to the rich American market. Machiasport offered a way in; and Occidental was so anxious that it was willing to share some of the bounty with New England consumers. In the summer of that year the state of Maine, on behalf of the company, applied to the Department of Commerce for the establishment of a foreign trade zone at Machiasport into which oil could be freely imported, refined, and then "exported" into the U.S. If it were granted the right to ship 100,000 barrels a day of home heating oil, residual oil, and gasoline into the New England market, Occidental pledged, it would give a 10 per cent price reduction and about \$7 million a year to a conservation fund.

Obviously, this scheme had great appeal to New Englanders. It would promote economic development, alleviate the shortage of home heating oil, and lower oil prices throughout the region. Just as obviously, the other major oil companies were made nervous about the possible disruption of their marketing patterns. During the long wait for a decision on the Occidental proposal, which has still not been made at this writing, the industry girded itself for a fight. It was not long in coming. For after many years of ignoring the subject, unwelcome attention and opposition were developing in Congress.

Galvanized by Machiasport, New England Congressional representatives vigorously attacked the quotas. Senator William Proxmire also took up the cudgel against subsidizing an entire industry to the point of inflation. Senator Hart provided the forum in the Antitrust and Monopoly subcommittee hearings for attacks on the quota system by a number of academic economists.

Two groups led the fight to retain tight oil import controls: the independent producers and the major integrated companies. They were represented by the Independent Petroleum Association of America and by the more powerful American Petroleum Institute, headed by a former member of the House Ways and Means Committee, Frank N. Icard.

The oil lobby hit upon a familiar method of burying a problem one doesn't want dealt with—have it studied into obscurity. Frank Icard and Mike Halder, Chairman of both the API and Standard Oil of New Jersey, met with Arthur M. Burns, Counselor to the President, to request such a study. On March 25, 1969, the President announced the appointment of the Cabinet-level task force to investigate oil import controls. It was composed of Secretaries of Labor, Commerce, State, Treasury, Defense and Interior, and the head of the Office of Emergency Preparedness. Secretary of Labor George J. Shultz (now director of the Office of Budget and Management), a noted economist, was to serve as chairman. The staff of the task force gave the industry something of a shock. It was headed by Harvard law professor Phillip E. Areeda, who proceeded to appoint a collection of lawyers and economists generally acknowledged as both brilliant and independent of the industry.

The oil industry began to have serious misgivings about having pushed for the study in the first place. Industry concern over the fate of the quota system grew so intense, in fact, that at one point the companies appeared willing to accept a cut in the oil depletion allowance in return for saving the quotas. Although not the most extravagantly sacrificial gesture on their part, this offer nevertheless won them the sympathy of Representative Wilbur Mills, whose Ways and Means Committee was then mulling over legislation that included the depletion cuts. Mills sent a telegram to the task force, urging them to be lenient. As the members of the task force met in theoretically secret session to consider the staff recommendations, they were reminded who supported the Republican Party with money and votes. Attorney General Mitchell is said to have told Chairman Shultz, "Don't box the President in." The oil state Senators and Congressmen inundated the White House with expressions of support for the oil industry. The squeeze was on.

At the moment of truth the task force recommended that the quotas be replaced by tariffs which would keep domestic prices at about the same level they were before the last price increase. However, the task force report was something of a Trojan Horse for reform. Tariffs, although not giving the consumers any direct benefit, do have same advantages over quotas. The tariff system would offer an environment in which any company that wanted to compete could do so and might even be tempted to cut prices—the situation most feared by the oil industry. It would also allow the federal government to set oil prices directly rather than letting the oil states set them and thus would give consumers at least the chance to be heard. And, finally, tariffs would put into the federal Treasury the \$1.5 billion a year that now goes to the oil companies via the import tickets. All this was more than enough to set the industry against the task force proposal.

Choosing a specific level for the tariff was where political reality weighed heavily on the members of the task force. The majority rejected the professional staff's recommendation of a tariff that would let the price of oil sink from \$3.90 a barrel to \$2.50 a barrel, which would have been a considerable gain for the consumer. Chairman Shultz went along with the professional staff. (The struggle over the import quotas did not deter the industry from seeking ever greater gains. In March of this year, it raised the price of gasoline by one cent a gallon, an added cost to the consumer of \$800 million a year. This was in keeping with the philosophy set forth by oil consultant Richard J. Gonzalez of Houston that "the import program must not be perverted to impose unauthorized price and profit controls that would be discriminatory against the petroleum industry . . . and contrary to the national interest.")

President Nixon seized on the fact that the report was not unanimous as a reason for "restudying" the issue. He also set the date for ultimate decision after the November elections and named his campaign manager, John Mitchell, as chairman in place of Shultz, who had voted for low tariffs. These circumstances gave the impression that the President's message to the oil industry was "fill 'er up." The President seemed to be saying that, unless the industry heaps high its campaign contributions, he might consider the proposal to abandon quotas.

The sheltered oil industry is clearly unwilling to give up its government subsidy for, as is well known, living on welfare saps the ability to compete, instead, the oilmen prefer to return a small portion of their favors to the party in power giving consumers the rare honor of paying protection money for their own exploitation. All that remains to be determined, when the campaign con-

tributions are added up, is this: what is a proper payment for subsidies worth five billion dollars a year?

A BALANCING ELEMENT IN POLITICS

Mr. DOLE, Mr. President, during this session of the Senate I have had occasion, as have many other Senators, to comment on certain statements, viewpoints, and positions of the Vice President. On several issues, I have felt Mr. AGNEW has displayed a blunt honesty which has too long been missing from the Washington scene. I have always felt the Vice President is motivated by the highest principles, and I feel that his remarks—especially those concerning the news media—have lent a much-needed element of rebuttal and balance to the political dialog in this country.

I find it somewhat remarkable that those whose voices went so long unanswered by any opposing spokesmen have reacted to the Vice President with such indignation and such hypocritical accusations of intimidation and prophesies of impending facism.

John P. Roche, in a column published by the Washington Post today, has interpreted Vice President AGNEW's role in the political process with a much less dramatic but eminently more sensible pen than many of his colleagues in the publishing world.

I ask unanimous consent that the article be printed in the RECORD.

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

AGNEW'S POLEMICS BRING BALANCE TO U.S. POLITICS

(By John P. Roche)

I wondered how long it would take for the high theorists to catch up with Spiro Agnew. Now the parade of analyses has officially begun with a New York Times Magazine piece by Arthur Schlesinger, Jr., and one can predict that before the year is out every journal in the Western world will feature a similar exercise. It will be discovered that Agnew is a symbol of American "status displacement," a paradigm of the "paranoid style" in American politics, a model of the "authoritarian personality," and—of course—a harbinger of "facism."

This is good, clean fun and keeps a number of people off the streets, but one can anticipate with considerable accuracy that the results will tell us more about the anxiety of the authors than about Spiro Agnew. Take, for example, the statement that "Agnew is terrifying dissenters" (or TV producers or professors or effete snobs). I can easily imagine a dissenter being terrified by a tough cop or a longshoreman or a hard-hat. But only a person born terrified could possibly flee an onslaught by the Vice President of the United States. It is in the same class as fear of college presidents.

Take the quote from Orson Welles that Schlesinger seemed to take seriously. Asked how anyone today could scare people the way his "War of the Worlds" radio drama did 30 years . . . say unlimited air time to Spiro Agnew." It is possible that Agnew scares hell out of Welles, but again I submit that this tells us something about Welles, not Agnew.

The key to Agnew's success is not that he touches some profound psychic nerve in the American character, triggering authoritarian, fascist reflexes. It is rather that he has provided some rough entertainment, some polemical balance to American politics.

I don't know who started the rumor that Americans thrive on consensus—perhaps President Lyndon Johnson, who had his own patented consensus in mind and was delighted to let others have his way. In fact, Americans have always looked on politics as a body-contact sport and were by 1969 extremely bored by the one-sidedness of the match.

Everywhere the average citizen looked from about 1966 onward, the President and his administration were getting the leather. The antiwar groups escalated their rhetoric to a level that would constitute sedition just about any place else in the world. When you turned on the tube, what did you see? Some militant calling the President a "murderer" and calling for a revolution.

Americans, contrary to rumor, are not passionate devotees of sedition laws (or, for that matter, of any other kind of laws). But when the rhetoric gets rough, they expect a good verbal brawl with two contenders in the ring. Thus when the antiwar spokesmen started laying it on the Johnson administration, the citizenry waited for some solid counterpunching. But aside from a reference to "nervous nellys" and a couple of other side shots, the President "hunkered up like a jack rabbit in a hailstorm." This was no bout!

Into this polemical vacuum came Spiro Agnew. Actually his first "hard" speeches were pretty mild, say, by comparison with any of FDR's assaults on his opponents. By 19th century standards, Agnew wouldn't even have made it into the big ring. But his victims responded as though they were en route to labor camps, and the populace suddenly awoke to the fact that a brawl was on. Agnew achieved the status of a dragon killer without ever drawing his sword. He became first-class entertainment.

Yet the American people are quite capable of keeping their categories straight. Asked if they think Agnew is doing a good job, a majority will say "yes"; asked if they think he would make a good President a majority will say "no." Their attitude reflects that of the frontier woman in Abe Lincoln's story who saw her husband wrestling with a bear: "Go it husband," she would yell—then "Go it bear!" The jackrabbit in a hailstorm is not the American ideal of a politician, and Spiro Agnew is capitalizing on our fondness for a scrap, not our desperate quest for an authoritarian womb.

NATIONAL BLOOD DONOR MONTH

Mr. MATHIAS, Mr. President, I invite the attention of Senators to the impending crisis threatening our time-honored voluntary blood donor system. Some disturbing facts have been revealed to me, and I should like to share them with the Senate. Blood banks throughout our Nation are facing critical shortages. Since blood is a living resource which cannot be manufactured or synthesized, this situation demands our serious attention.

In the fall of 1969, representatives of the American Association of Blood Banks testified at hearings conducted by the House Committee on Ways and Means and estimated our current need for blood at more than 6,500,000 units, or pints, annually. This need is increasing at the rate of 10 to 12 percent a year. We have been told that each year one out of every 80 Americans will require a blood transfusion. The rise in the number of auto accidents, the casualties of the Vietnam war, the increasing longevity of persons with blood diseases—all these factors

contribute to the heightened demand for blood supplies.

Yet in the face of this growing demand, we are unfortunately being confronted with diminishing sources of supply. It has been estimated that while more than 90 million Americans between the ages of 18 and 60 are medically eligible to donate blood, only 3 percent actually do so. What is more, it is becoming increasingly difficult to recruit voluntary donors.

The situation is particularly acute in the large cities of the East. Not long ago in one major city over two-thirds of the blood used was supplied by voluntary donors. Now, however, more than 50 percent must be bought from commercial donors, many of whom are reported to be more likely candidates for transmission of the dreaded hepatitis virus. Very disturbing are the findings of a recent National Institute of Health study. Out of 110 open-heart surgery patients, 51 percent of those who received commercial blood were found to develop hepatitis—whereas the disease occurred in none of the recipients of volunteered blood.

Every day, researchers are discovering vital new uses for blood and blood plasma. Unless we can supply ever increasing quantities of these essential resources, we shall seriously undercut our breakthrough medical advances, such as organ transplants, transfusion treatment of cancer, and prevention of hepatitis and measles.

The need for blood grows more crucial every day. From 12 to 20 pints of blood are necessary to prime the heart-lung machine used in open-heart surgery. An artificial kidney machine requires eight pints of blood just to start. The victim of a serious gastrointestinal hemorrhage may need as many as 40 pints of blood. Replacement transfusions are a matter of life or death for infants born with the RH incompatibility factor.

Why is it that in this Nation we must rely so heavily on commercial donors, with the greatly increased risk of transmitting debilitating viruses? Part of the problem may stem from confusion in the minds of many as to where the responsibility lies for blood donation. We live in a society which makes great demands on our time, such that unless the life of a friend or loved one is in danger, it becomes all too easy to shift the responsibility to someone else. Many of us may regard the donation of blood as an unpleasant experience, one to be avoided unless absolutely necessary for the survival of someone near and dear. But by avoiding our responsibility, we ignore the fact that blood cannot be manufactured, and that blood reserves, which can be stored safely for only 21 days, must be constantly replaced.

What is vitally needed are new approaches, increased communication to alert the public to the need for increased voluntary blood donations. For this reason, Mr. President, I am pleased to give my support, as a cosponsor, of the Senate resolution this year to establish a "National Blood Donor Month." The month to be so designated is January when the Nation has repeatedly faced

especially critical shortages of blood, owing to the sharp reduction of potential donors because of the high incidence of respiratory illnesses.

Americans have long been known for their public-spirited support of humanitarian and community-minded causes. Volunteering one's blood represents one of the highest and most personal forms of giving. I am confident that the establishment of "National Blood Donor Month" will have significant impact in awakening Americans to this urgent need.

STRICTER REGULATIONS BY CIVIL AERONAUTICS BOARD NEEDED FOR CHARTERS

Mr. GRAVEL. Mr. President, the recent unfortunate experience of many students in Europe this summer which resulted from the bankruptcy of World Academy, a tour operation in Cincinnati, Ohio, and the consequent disappointment of thousands of young people who had paid for a summer of study and travel abroad underscores, in my opinion, the need for stricter regulations by the Civil Aeronautics Board with respect to charters.

An initial step toward more stringent regulations in this area was taken recently when the CAB announced its proposals which call for more vigilant and forceful efforts in the future in order to preserve the essential distinction established by Congress in 1962 between scheduled and supplemental air operations.

The law passed at that time required the Board to maintain the difference between individually ticketed services and charter services and to make certain that individually ticketed passengers would not be permitted to pass themselves off as members of a charter group. There was no distinction intended between the scheduled and supplemental carriers insofar as charters were concerned; the proposed provision would apply to all classes of carriers operating pro rata charters.

The international air transportation policy recently issued by the President is most timely in reasserting the difference between supplemental and scheduled operations and to make certain that the carriers, both scheduled and supplemental, adhere to the distinction which separate them. The text of the policy statement clearly sets forth these distinctions as follows:

Scheduled services are of vital importance to air transportation and offer services to the public which are not provided by charter services. Only scheduled services are expected to offer regular and dependable frequent schedules, provide extensive flexibility in length of stay, and maintain worldwide routes, including routes to areas of low traffic volume. Substantial impairment of scheduled services could result in travelers and shippers losing the ability to obtain these benefits. Accordingly, in any instances where a substantial impairment of scheduled services appears likely, it would be appropriate, where necessary to avoid prejudice to the public interest, to take steps to prevent such impairment.

The statement clearly underscores the philosophy adopted by the Congress that

the supplemental carriers should "supplement" and not duplicate the scheduled system. This is precisely what the Board is attempting to do—to prevent a distortion of the charter principle and, at the same time, prevent an undermining of the scheduled system.

By preventing practices which blur the distinction between scheduled and supplemental operations, the Board is carrying out a mandate established not only by Congress, but by the international air policy enunciated by the President.

THE FB-111

Mr. GOLDWATER. Mr. President, during the course of the current debate much will be heard about the FB-111. In fact, I intend to speak at some length on the subject myself.

It is interesting to note, however, that last week the first FB-111 returned to SAC after completing its inspection proof test and mod cycle. Since that time, the 340th Bomb Group at Carswell has made seven training flights. They expressed themselves as most pleased with its operation.

Last week the first TAC airplane to complete the inspection was ferried to Nellis Air Force Base by Colonel Bobbett of the 474th Tactical Fighter Wing. Both SAC and TAC have now resumed F-111 combat training activities.

I always like to go, as they say, to the horse's mouth to get to the truth of anything, and there is no better way to get it when talking about airplanes than discussing them with the men who fly them. The Fort Worth Star-Telegram in its issue of July 20, 1970, indicates what many of us close to the Air Force have known for a long time, that the men who fly this airplane think highly of it. I ask unanimous consent that the article be printed in the RECORD.

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

FB-111'S GIVEN HIGH PRAISE BY MEN WHO FLY THEM

(By Ernest White)

Who likes the FB111?

The pivot wing plane built by General Dynamics-Fort Worth has its critics, but the persons who fly and maintain the planes are not among them.

Col. David Chacey, cigar-puffing commander of the 340th Maintenance Section at Carswell Air Force Base, said "I have been in the bomber business most of my life and have never seen anything like it."

Lt. Col. James L. Hodge, an Air Force veteran with 16½ years of avionics, said he has nothing but praise for General Dynamics: "This is the first plane in which maintainability was engineered into the airplane."

Master Sgt. Ward Hogue uses two words when he talks about the plane: "Utterly fantastic."

"It's a digital world now," Hogue said as he explained some of the highly complicated digital computer systems of the F111.

Col. Kenneth Green, commander of the 340th Bombardment Group, says the FB111 is the first plane used by the Air Force which makes the navigator feel he is part of the crew. Previously, he said, the navigator has been put in a dark corner with his instruments, away from the other crewmen.

In the FB111, Col. Green said, "the navigator is just as knowledgeable of the plane's systems as the pilot."

Col. Green said the first ride an experienced navigator takes in an FB111 during a Terrain Following Radar flight "is good for a gulp factor." TFR flights are made at low levels with the plane flying itself over obstacles, like mountains, without the pilot touching the controls.

Maj. Bob Reynolds, an instructor, stated, "I am thoroughly impressed with the complete program. It is a more stable airplane and can operate very well on short fields, and with the TFR system it is quite effective."

"I would take the F111 because of the TFR," Reynolds replied. "Sure you could fly at 60,000 feet and get to the target faster, if you got there at all. The TFR system is the best piece of navigation equipment that I have ever seen."

MRS. MAXINE VANDEN, VOLUNTEER TO WALTER REED HOSPITAL

Mr. MATHIAS. Mr. President, recently I read a story in the Washington Sunday Star which illustrated to me the capacity of man for goodness—a capacity which far too often we forget. Every week for over 3 years—for no more reward than "just a smile and a thank you"—Mrs. Maxine Vanden of Savage, Md., visits hospitalized veterans at Walter Reed Hospital.

After losing one son in Vietnam and finding another wounded, Mrs. Vanden began her hospital rounds as a living memorial to her eldest son, Marine Cpl. Thomas O. Green.

One of the most gratifying aspects of her work is the fact that many individuals and companies have joined her initial efforts.

I ask unanimous consent that the feature article about Mrs. Vanden be printed in the RECORD. I hope that the story of her visits may be an example for others.

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

A LIVING MEMORIAL TO HER SON TOMMY (By Ruth Dean)

Maxine Vanden probably doesn't think of herself as "a profile in courage," but her husband George, and youngest son Kirk think so, and so do about 150 hospitalized veterans at Walter Reed Hospital.

The blonde mother with eyes the color of corn flowers and sunshine smile has been visiting six wards at the Army hospital for the last three-and-a-half years as "a living memorial" to her eldest son, Marine Cpl. Thomas O. Green, killed in Vietnam in November, 1965.

It was the wounding just a year later of her second son, Army Capt. Ronald A. Green, that started Mrs. Vanden on her hospital rounds.

BITTERNESS

"I'd accepted the death of the first one, but I wasn't prepared for a second blow in a year. When Ronnie was brought back wounded I felt bitterness," she recalled.

"I'd worked hard to raise the three boys. Kirk was 8 and at the age when he hero-worshipped his two brothers. Now all of a sudden something had happened to both of them.

"All I could think was that I had no right to inflict my bitterness on him. One had died for his country, and it wasn't my right to take that away from him.

"They wouldn't let me see Ronnie. An 81-millimeter mortar had gone off three feet behind him and his leg wounds were so

severe they had to keep him in isolation for four months to avoid any danger of infection, even from his family."

As she sat in the sunny kitchen of her Savage, Md. home individually wrapping the pieces of pie and cake she takes on her hospital visits, she recalled:

"Those were hard days, long days of waiting. So, for time consumption I started visiting Ward 35, where the amputees are."

It was about then that she and her husband, a National Security Agency employe, began thinking of a fitting memorial for her son.

"We hadn't decided just how we would remember Tommy. I don't believe in marble and grass. They don't do a lot for humanity and in five years who would know that boy's name on a plaque," she said.

So the Vandens chose Mrs. Vanden's visits to the hospital as "a living memorial" to Tommy and set aside \$15 a week with which to purchase edibles like popcorn, candy and bubblegum to take to the men in the ward.

GOODY CART

"I didn't feel it was right to solicit, and it was hard work at first stretching that \$15," she said. "But soon word got around, and people came to me with things to take to the men. Some brought me money.

"Now I visit six wards with my goody cart and still spend only \$15 a week to feed 150 men. I'm not a religious fanatic but I believe in bread coming back upon the waters. A chain grocery store in Laurel gives me surplus pies, cakes and doughnuts each week. And people call bringing me books and magazines all the time.

"I found that visiting these men was good therapy. I forgot my own troubles," Mrs. Vanden said. "There's a lot of humor, a lot of good times and very little gloom in those wards, and so much courage."

Mrs. Vanden realizes she is one of several civilian volunteers who donate their efforts to the hospital in addition to the regular staff of more than 200 Red Cross volunteers.

Jokingly she says the Red Cross calls her "their competition."

"I kind of sneak in and sneak out," she says of her Sunday afternoon stint through the wards.

She has two rules she abides by. She observes the hospital's visiting rules to the letter, and she doesn't make a definite commitment to be there at a certain time, or day.

Usually Mrs. Vanden chooses Sunday to visit "so I won't interfere with hospital routine, and because parking's easier." Her day begins at 7:30 a.m. when she goes to her kitchen to pop the popcorn, and bag it. "It takes about six pounds of popcorn and four pounds of margarine," she said with a laugh.

The "goody lady" arrives at Walter Reed, usually accompanied by son Kirk, about 2 p.m. to begin her six-hour rounds. With his help she loads the goodies from the car trunk onto an aluminium hospital cart. Then they're off up the corridor. She heads first for Ward 35, "my home base" she affectionately refers to it now.

She goes to each bed, often with a different occupant from the previous week because of the rapid send-home turnover, and repeats her cheery spiel of her cart's wares.

When they ask how much they owe her, she grins and says: "Just a smile and thank you."

BRIEF VISITS

Sometimes she'll tell one she had a son in this hospital a few years ago, more times not because she keeps visits brief.

She sees an old friend and stops by his bed to ask how his leg is. She learns he's been on home leave and is back for an operation on the other leg. He is cheery and kids with her, but like so many of the others it is all too brief a light moment in a long, long day.

In another ward, a veteran in a chest cast chides her on her fattening wares. "Don't

give me too many of those sweets," he jokes, "or I'll pop this cast right open!"

A patient in the paraplegic ward marvels: "You've got everything on that cart," and finds the detective mystery he's been looking for. Mrs. Vanden jiggles a coffee can containing a miniature jigsaw puzzle for takers, and another patient eagerly raises his hand.

Another patient kiddingly calls her cart "the traveling PX" and it is almost that. In an old straw handbag she carries bubblegum, and chewing gum for those diet watchers. And in what she calls her "grab bag" she carries an assortment of key chains, pencils, note pads and gadgets.

"I brought you some blueberry pie," she calls to a blind, one-armed young man who lies face down on a Stricker frame electro bed, which allows him to be turned without disturbing him.

And to another she says, "take two pieces. It's not mother's pie; it's just bakery and I know only the filling's worth eating."

Her rounds include the officers' ward where her son Ronnie was hospitalized. She likes to point out the room where he was. And to recall the happier moments after the dark months of waiting when "my husband and I couldn't get in the door because of the student nurses crowded around it."

MARRIED NURSE

Ronnie married an operating room nurse he met at Walter Reed, and both volunteered to go to Vietnam, he for the second time she's proud to relate. They're back in the States now.

By the time she drives around to the separate building where the eye patients are, sometimes to leave a box of cakes if it's getting late, it's close to 8 o'clock.

When a friend notes she's spent nearly six hours straight on her feet, she laughs and recalls how she almost wore out another friend who told her "Maxine, you must have the constitution of a plough horse!"

Mrs. Vanden feels her "living memorial" to Tommy, coupled with the knowledge that Ronnie is all right now, has wiped away all the bitterness she once had.

As for the war itself, she says: "I've tried very hard not to get involved in the pros and cons. I want peace just as everyone else does. But the dissent about the war has been upsetting to me."

"All a mother can do is teach her children right and wrong, and I'm glad both my sons were men enough to make their own decisions.

"A lot of youngsters go through life giving absolutely nothing to humanity; then they're killed in an auto accident and what have they left behind. I'm pleased my sons felt loyal enough to their country to serve it.

"It would have wounded me deeper to see a son I'd worked for and reared, creep out of the gutter than to see him laid to rest with honor."

INTERNATIONAL CONFLICT AND THE GENOCIDE CONVENTION: THE NEED FOR SENATE INITIATIVE

Mr. PROXMIRE. Mr. President, the section on individual rights and responsibilities of the American Bar Association has made many significant points in favor of Senate ratification of the Genocide Convention. In their recent report on the convention, they discuss the convention and its relevance to all mankind. As they so eloquently state, one massive horror anywhere on earth affects everyone and every country; and the kind of issue comprehended by the term "genocide" is nearly always associated with threats to or breaches of international peace or security.

The chief example of genocide, which gave rise to the convention, was the massive and comprehensive extermination of at least 6 million Jews by the Nazis during the Second World War. This was, most certainly, one of the worst holocausts that the world has ever seen.

Just a glance at some of our more recent disputes, such as between India and Pakistan, between Nigeria and Biafra, the Greeks and Turks on Cyprus, between black and white in Rhodesia and South Africa, between Arab and Jew in the Middle East shows dramatically how closely ethnic hatreds, national combat, and world peace are tied together. Thus, the relevance of concern over genocide, seen as an international problem, cannot be ignored. When genocide is seen as a threat to international security and peace, its occurrence anywhere in the world is as much a matter of international concern as is the spread of nuclear weapons.

The responsibility for ratification rests now, after 20 years, on the shoulders of all of us. We must take the forward step to peace that is so long overdue. As the world shrinks in size, and the interdependency of nations becomes more evident, we must act on our responsibilities as a world power. As Chief Justice Warren has said:

We as a nation should have been the first to ratify the Genocide Convention. . . . Instead, we may well be near the last. . . .

This sad record and the responsibility for it lie squarely with those who have a parochial outlook on world problems. They have failed to measure the element of change in the world. They have failed to recognize men and their institutions do not stand still in the face of great changes. We are not so uncertain of ourselves and our future that we cannot make our institutions conform to our needs as a progressive people.

INTERNATIONAL PROBLEMS FACING THE NATION

Mr. ALLOTT. Mr. President, Prof. Stefan Possony, director of the international studies program at the Hoover Institute on War, Revolution, and Peace at Stanford University, has been kind enough to prepare for me a series of memorandums setting forth his views on various aspects of the most vexing international problems facing the Nation.

So that all Senators may be exposed to Professor Possony's thinking, I ask unanimous consent that two of his memorandums be printed in the RECORD.

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

POINTLESS WAR?

On May 18, Senator Church stated that the United States spent over a 100 billion dollars on this "pointless war" in Vietnam. He added: "It honestly can be said that never in the history of our country has so much been spent for so little." I believe myself that we spent too much in Vietnam and that the objectives we are looking for can be obtained at lesser cost.

It is well known that, for example, the selection of bombing targets was not done professionally. I do not imply that destructiveness and lethality are the criteria of effective bombing; far from it. Twenty years ago I published a text book on selective

bombing which, to a large extent, was based on the findings of the United States Strategic Bombing Survey. In Vietnam we ignored many of the lessons that were learned in the strategic air war against Germany and Japan. We did not lack professionals but those men were often over-ruled, sometimes from ignorance.

Some limitations were imposed because of legitimate political considerations, others were due to the unsatisfactory command structure which has developed during the last decade. The air weapon was often used skillfully (for example at Khe Sanh) but, on the whole, a reduction of effectiveness was imposed by the top civilian echelon. The rationale of this self-denial was very shaky.

I think the U.S. Army has a long way to go before it will make optimal use of guerrilla forces which are the key instrument of ground operations in most Asian theaters. The Army probably needs a special guerrilla command. It also is a pity that the pioneering work in the field of civic action which was done in I Corps area by the Marine Corps was not followed up. The original technique may now have been overtaken by events but we still have much to learn about "economic weapons" and related tactics.

This list could be lengthened but I do not care to discuss operational strategy. I agree that the overall price tag was too high.

I emphatically disagree that we accomplished little in Vietnam. How do we measure such accomplishments? Do we measure the distance from the starting point or from the ideal goal? How do we estimate time requirements?

In such measurements it is necessary to ask oneself first, what the enemy was trying to do in 1965. Their aim, briefly, was to take over the whole of Southeast Asia including Thailand, to seize Indonesia and Malaysia, and to initiate operations in the Philippines and India, not to mention diversions in Africa and Latin America.

This world-wide strategy did not get very far. The communists had correctly estimated that the battle for South Vietnam was decisive for the entire undertaking—and this battle was *not* won. I do not ascribe the strategic failure of the communists exclusively to our intervention in S. Vietnam, but I affirm that without the U.S. intervention in South Vietnam, the communists would have achieved very substantial successes. They probably would have seized Indonesia, one of the richest areas in the world; if so, a larger conflict probably would have been unavoidable.

I accept the objection that this is an "iffy" argument. But the contrary assertion that nothing was achieved is equally as "iffy". If our strategic achievement is to be evaluated, we must consider the enemy's plan, we must take into account events that occurred throughout the region, and we must assess the happenings in the battle zone. If we only gaze at the fact that this very difficult conflict is not yet terminated (and while gazing forget that counter-insurgency is always time-consuming), the analysis is anamnestic, i.e., incomplete.

Military successes are never the sole cause of important events, but military events always are very potent contributing factors. If our intervention in South Vietnam only "contributed" to protecting Indonesia against communist take-over, it would have paid for itself.

I will now add that the escalation in Vietnam severely aggravated the sino-soviet conflict and was followed by the soviet military deployment along the Chinese borders. In a hearing of March 17, 1970, I presented the data to the Senate Internal Security-Sub-Committee.

It should, furthermore, be added that the combined impact of the U.S. intervention, the communist failure in Southeast Asia and Indonesia, and the soviet deployment

against China have been major inputs into the "cultural revolution". No doubt, Mao launched this incredible undertaking for many reasons, but it was obviously one of his objectives to steel his followers for the conflict against "social imperialism" and "capitalist imperialism". The cultural revolution, of course, destroyed the magic of Maoism and discredited the myth that the Maoist regime is forever going to rule China.

I doubt very much that these portentous events would have taken place if, once again, we had abandoned containment, had disregarded our commitments and had sacrificed S. Vietnam.

I will not discuss what was accomplished in South Vietnam. If despite the war, we increased the GNP, as we did despite inflation, and created the "Honda economy", we didn't do so badly. Some of the articles inserted by "dovish" Senators illustrate the economic improvements impressively even when their authors don't want to admit them. (See Robert Shaplen's piece in *Congressional Record*, May 22, 1970, pp. 16759-16763.)

What is the value for the United States if the population of South Vietnam which is not much smaller than that of California, is saved from a terroristic and totalitarian dictatorship and is permitted to grow into a modern and functioning free state? The tendency of many liberals—who are persuasive proponents of political liberty—to ignore this elementary point and to seek refuge in a rather superficial version of *Realpolitik*, is hard to understand and even harder to swallow.

The notion that in Vietnam we are fighting for a very small stake and that that country is not worth our efforts, is based on a rather elementary misunderstanding of strategy. Battlefields rarely possess intrinsic value. What was the intrinsic value of Waterloo or Valley Forge? The Suez Canal had an intrinsic value during World War II but its fate was decided at El Alamein, the value of which was zero. Japan fell because of naval battles in the Pacific and of surface battles for small islands whose value was negligible.

It is a strategic advantage if the decision for a big area can be achieved through battle in a small area. Surely, a small battle is cheaper than a big battle. Battles in thinly populated rural areas also are cheaper than battles in industrial areas. Why complain if such a situation prevails?

For that matter, South Vietnam does not lack value. Value is a relational term and the question is—value for whom? The United States obviously doesn't need South Vietnam, but for Hanoi, whether acting alone or as a stalking horse for China, South Vietnam with its capable manpower, its food, and its potential as major food producer, as well as its geographic position, is indispensable if the communists want to establish control over the whole of Indochina and South Asia.

Laos is the key to South Vietnam, the unification of Vietnam under Hanoi is the preliminary to the seizure of Thailand, which in turn is the bridge to the very substantial resources of Burma, Malaysia, and Indonesia. I don't want to spin out this simple course in geography. The artichoke strategy could easily be applied through a different sequence. I am making this argument on purely geographical terms without any implications pro or con with respect to the so-called domino theory. The resources of Southeast Asia are large and South Vietnam is the place where the decision is presently being made whether those resources will be controlled by the communists or will be utilized by the local people themselves.

Robert S. Elegant recently interviewed S. Rajaratnam foreign minister of Singapore (*San José Mercury*, June 9, 1970). Rajaratnam expanded his thesis "admittedly 'not very original,' that history is entering the 'Pacific Age,' having passed through the Mediterranean and Atlantic Ages.

"All the powers are now represented on the shores of the Pacific, where the destiny of mankind will evolve. Raja hopes cooperation will spring from the unprecedented gathering of representatives of major civilizations. He fears 'confrontation' if the U.S. withdraws from the new arena of world history, shrunk by technology to the 'proportions of a lake.'

"... Can the United States really opt out of Asia?" he questions. "For to opt out of Asia is to opt out of the Pacific; to opt out of the Pacific is to opt out of world history. It can opt out politically and emotionally, but it cannot remain unaffected for better or worse, by what happens on the other side of the Pacific.

"History will not come to an end merely because the Americans have withdrawn from the arena. It will be made by others more determined to go on with the game—for the smaller countries, the game of survival; for the bigger countries, the relentless pursuit of global influence. The big power with the will to carry on the struggle' (Russia, China and Japan) 'will determine the course of world history, even for those who think they have opted out.'"

Singapore is a unique spot for gaining an overview of Asia as a whole.

As a country we understand the importance of Western Europe and to a somewhat lesser extent that of the Middle East. We hardly understand the significance of East Asia, nor of the confrontation of the two communist super-powers with one another and with Japan, now the second power of the Free World. Strange though it may seem, Americans don't quite grasp the implications of the fact that the United States, too, is a Pacific power.

Senator Stevens has ably re-stated the so-called domino theory. (*Congressional Record*, May 28, 1970, pp. 17396-17400.) He explained that "there are two conditions which must be present if the 'domino theory' is to apply. First, there must be a series of contiguous states whose geography and ethnic and political structure provide no substantial opposition to engulfing conquest. Second, there must be a force with the desire and the ability to carry on this extended conquest."

Senator Stevens stressed the importance of ethnic factors, geographic obstacles like high mountains and open seas, the nationalist orientation of Hanoi, the lack of a North Vietnamese navy, and Hanoi's unwillingness to be "an extension of Chinese will in Southeast Asia". He concluded that "while the 'domino theory' does extend to Indochina and northeastern Thailand, it does not extend outside this area". This area includes—in terms of Hanoi's "desire and ability for extended conquest"—the Mekong river basin. But, the Senator argued, "North Vietnam's national interests are not served by expeditionary incursions into southwestern Thailand or Malaysia. Nor does North Vietnam have the navy to carry revolution to the Philippines."

I agree that the entire Mekong river basin is at stake—and this would be dangerous enough. But the domino theory is applicable to an area larger than assumed by Senator Stevens. In ethnic terms, quite a few Thais are living in North Vietnam, Laos is a Thai state, and so is the Shan state in Burma; there also are several millions of Thais in southern China. The Thais are more numerous than the Vietnamese and a conflict between the two groups is likely. The North Vietnamese would, therefore, be interested in communizing and/or dismembering Thailand.

This single addition renders to Senator Stevens' parameters the contention of the domino theory—namely that conquest would be continued—more significant.

I agree that North Vietnam's own territorial ambitions are limited. But Hanoi wants communist neighbors and will be desirous to instigate communist expansion. It will be

eagerly facilitating the operations of communist guerrillas and helping them wherever feasible. The unrest created by a major communist victory would produce the climate in which the guerrilla operations that already are underway would prosper. High mountain ranges and open seas are no obstacle to exporting people's wars. North Vietnam has been providing training to Palestinians and Algerians. The exporting is done mostly by propaganda which nullifies geographic hindrances. The North Vietnamese can place instructors and "cadres" anywhere throughout the entire region, and they wouldn't need to take care, alone, of the logistics indigenous forces require.

Senator Stevens' analysis is logical and it defines the minimum range of Hanoi's intentions, assuming Chinese concurrence. But the scope of intended communist conquest would be much larger. The Lao Dong party is not the only communist combat party in Southeast Asia.

VIETNAM AND ISRAEL

A majority of U.S. Senators have come out in support of supplying aircraft to Israel. But if it is right to help Israel, why is it wrong to help Vietnam? If the Israelis are right in attacking the areas from which they are being struck, why is it wrong for us to attack the communist staging bases in Cambodia?

Israel does not own more resources than Vietnam. It does have a productive agriculture and an excellent industry which, predictably, would fall to pieces if the country were destroyed. (Israel's aviation industry is now on the same level as that of Italy.) Israel is ahead of Vietnam which, however, will develop its agricultural resources and light processing industry.

In terms of manpower, Vietnam is substantially larger than Israel. The educational levels of Vietnam, although they have been lifted during the war, still are low. The Vietnamese are very gifted and in due time will greatly improve the quality of their manpower. About 80% of their school-age children are now going to school.

In terms of location, Israel is close to the Suez Canal which is important, but otherwise Israel is not a significant location in the Middle East: Israel could disappear in the Dead Sea and there wouldn't be much change in the geography of the Middle East. This remark is directed at phoney yardsticks that are used to measure the importance of an area. Size, place, topography, and the whole set of physical data are important, but they should not determine strategy.

Some Senators have pointed out that Israel has a growing and modern democracy, while the South Vietnamese government, which usually is described in pejorative terms, is not to their liking. Thus Senator Goodell (*Congressional Record*, May 19, 1970, p. 16086) explained that Israel is a democracy, "a tiny democracy", which is fighting all alone against the "intrusion of the Soviet Union." This is correct. He added that "we sent American troops into a civil war within South Vietnam." The Senator regarded this assessment as not debatable at all and said: "If there were a civil war in Israel, I wouldn't be in favor of sending American troops into that civil war."

This is unsatisfactory thinking: (1) The utilization of "civil war" in international aggression is improper. (2) The full communist strategy can hardly be described as only a civil war in South Vietnam; it also embraces North Vietnamese military operations in South Vietnam, Laos, and Cambodia. (3) The North Vietnamese instigated the civil war in South Vietnam. Since these are two different states such instigation is an act of international aggression. (4) The two states are ethnically more or less the same but this does transform the international conflict into a civil war, just as little as the German aggression on Austria was a civil war or a war between Syria and Lebanon

would be civil war. (5) The South Vietnamese also are fighting against forces which are supported by the USSR. (6) Since the Palestinian Arabs were or are citizens of the same state as the Israelis, there also exists a civil war element in the Middle East conflict, in spite of the fact that there are ethnic differences. One can argue about the respective importance of the external and internal factors in the two conflicts, yet in both cases insurgency is related to external aggression and is a tool of an external aggressor.

Note that in terms of U.S. security, it does not matter one whit whether the communists conquer through the technique of civil or international war. Strategically speaking, the means are really irrelevant, and only the outcome counts.

The point that "the Government of Israel is a democracy," was made by six Senators in a letter to President Nixon urging him to sell aircraft to Israel. (*Congressional Record*, pp. 16875-16876.) I am quite willing to give an A- or A+ grade to the government of Israel, but there are people who would discern a far lower grade. I have been told that there are some Arabs who believe the Israeli government shouldn't exist at all... In any event, the United States does not engage in military operations as reward for excellence in government but for the attainment of strategic purposes.

I do not question the judgment of professors and Senators who would give D or F grades to the Saigon government, but personally I would not grade in this fashion. If I have a student from a university in a developing country, I surely don't grade him as severely as a graduate from Harvard or Stanford. This type of grading is actually difficult; and it is easy to misunderstand foreigners.

Israel is not much older than South Vietnam, but from the very start it incorporated the know-how of a modern democracy. The Israeli state was established in 1948 but it was not at that time created from scratch, and it already had a large stable of first-class administrators. By contrast, South Vietnam was created from scratch in 1954, in the sense that the state organisms had to be built from the bottom up and the top down, and that a modern political structure had to be carved out of a Confucian society organized largely in the form of autarkic and self-reliant isolated villages. The new state had to overcome enormous difficulties and obstacles such as lack of cadres, ethnic and religious diversity, private armies, lack of communications and schools, etc., etc. Israel had its military and ethnic troubles but it never lacked cadres, roads, schools, capital, and help.

It is easy to say the Vietnamese should have done a better job. Unfortunately, the critics never mention that communist guerrillas systematically murdered government officials, village leaders, policemen, teachers, and educated people. No less than 50,000 cadres were killed—an equivalent of 600,000 persons in comparative American terms. Moreover, there was war. Thus, the development of a modern state in South Vietnam was rendered triply difficult. Not surprisingly, there is a long way to go.

In the face of the difficulties they were facing, the South Vietnamese have done a rather remarkable job. Who says they should have reached perfection after 16 years of unceasing trouble and against the power of military traditions? What is any person's authority for such criticism?

Six Senators who wrote to the President in favor of Israel, believe that the U.S. "must disengage from the Indochina war." One reason for the differential treatment is that Israel only wants to buy "the military equipment she needs to defend her freedom." I applaud this, too, and I know a little bit about economic hardships in Israel. But Vietnam has a *per capita* income of \$140, against Israel's income of \$1,400, and it has little chance to earn enough dollars soon.

Do we subordinate strategy to the purchasing power of our allies?

The Senators "are concerned that the Soviet Union may be misinterpreting the spirited national debate in America . . . as a sign that our nation will not take effective steps to protect our vital national interests in the Middle East." It follows from this excellent statement: (1) It is mandatory to prevent communist miscalculation. (2) Since delivery of aircraft to Israel is designed to "protect our vital national interests," presumably the Senators would advocate such delivery also if Israel would not pay. (3) Vital national interests must be defended; and obviously we have major vital interests in the Far East.

Consequently, the statement that "South Vietnam, Cambodia and Laos ask that we give them . . . the military equipment to defend their own forms of repression against other forms of repression," is irrelevant, aside from being a gratuitous insult. If the communists must be warned off in the USSR, they also must be warned off in East Asia, and they must not be stimulated to further aggression.

Even if the South Vietnamese are not as non-repressive as the Israelis, they are not guilty of aggression. They simply want "to defend their own forms of repression," while Hanoi wants to impose its form of repression on others.

The arguments for protecting our national interests in the Middle East are neither better nor worse than those for protecting our interests in Southeast Asia and the Far East. National interests must be protected wherever they are threatened. Period.

The courting of American defeat is *not* a way of defending national interests.

The structure and performance of a government must necessarily be a factor in our strategic calculations. But this factor must be assessed with objectivity. I will not even start presenting a comparison between the governments of South and North Vietnam. If South Vietnam is "corrupt" because there is fixing and nepotism, is this a reason to turn it over to a totalitarian dictatorship? The doves avoid the question. If, naturally, totalitarianism is no improvement, then, if one deplores Saigon's deficiencies, the logical conclusion would be to help South Vietnam overcome its handicaps and shortcomings. This is what we have been doing.

Let those who think that the communist dictatorship is preferable to a fledgling and struggling democracy, be happy with their predilection. But I do not accept such persons as spokesmen for freedom and democracy.

Mr. George W. Ball, former Under Secretary of State, formulated four questions which, in his judgment, must be answered to decide for or against deployment of U.S. military forces. (CONGRESSIONAL RECORD, p. 17044.)

"(1) Is the geographical area at issue vital to the United States national interest?" The answer is "yes" for both Vietnam and Israel, despite significant differences in the underlying situation. But the question is formulated far too narrowly because the case for help to Israel is only secondarily geographical or geopolitical: the *primary* arguments are moral and political. If the question is properly enlarged beyond location and material factors, the case for Vietnam will be seen in a more revealing perspective.

"(2) Does the struggle threaten to result in the extension of the power of one of the great communist powers beyond the post-war lines and in a manner that could seriously affect the power balance on which world peace still unhappily depends?" The answer to the main thrust of the question is that the fall either of Vietnam or Israel, or both, would increase communist power and would have dangerous repercussions all over the world. But the question is improper.

(a) It should not have been restricted to "the great communist powers" but it must apply to all *aggressive* communist powers, for many obvious reasons including the need to deter aggression by proxy. Note that on the strength of Mr. Ball's criterion, the U.S. would not have any reason to help Israel. (b) The criterion of the "post-war lines" seems to reflect the existence of an often suspected secret understanding on Soviet and U.S. spheres of influence. I'll let this pass but if we adhere to this particular rule, we should ask for the freeing of North Vietnam. (c) Peace does not depend on the balance of power—we have such a balance now, and there are two shooting wars plus 30 war areas. CONGRESSIONAL RECORD, p. 18230.) This list does not include Berlin and Czechoslovakia, nor the strategic nuclear contest. Peace depends, at this stage of world history, on the United States and its allies in time reclaiming *superiority* of power.

"(3) Is the physical terrain such that the military power of the United States could be effectively used?" We can use our power everywhere and we can develop optimal armaments for every environment. That we sometimes fail to adjust quickly to a particular situation, is another matter. We have demonstrated that we are able to use our military power effectively *both* in Southeast Asia and in the Middle East.

"(4) Does the political regime governing the area under attack have a sufficiently solid base to support the introduction of U.S. military power?" Yes for Israel; and yes for South Vietnam since we effectively introduced U.S. power into the area. This question begs the question, so to speak. We may have overriding interests to move into a political no-man's land. Should we abstain from helping a country because the communists just knocked out its government—should we thus *reward* them for insurgency? And can't we help a knocked-about government to solidify its base?

Mr. Ball has had "intensive past experience" in foreign affairs, and no one would doubt this. But when he drew up his questionnaire, he did not sufficiently draw on this experience. He favors, without specifying the means, containment of Soviet aggressive moves in the Middle East. Yet his own criteria do not fully support his recommendations. He is right, of course, that we must contain the Soviets in the Middle East, but his checklist is not good enough. This list was formulated as a rationale for leaving Indochina. Mr. Ball is caught in a glaring contradiction.

It is too bad that our strategy in Vietnam must suffer from confusions which, if there were less emotion, could be sorted out easily. The argument that we must get out of Vietnam to help Israel is invalid because if there are good reasons to abandon Vietnam, there would be good reasons to abandon Israel or, conversely, if there are good reasons *not* to abandon Israel, there would be good reasons to continue helping Vietnam. But the proponents of "down on Vietnam, up on Israel" overlook one key fact: if the country accepts defeatism as its national policy in Vietnam, this same defeatist policy will, inevitably, be applied to Israel.

ANOTHER VIEW OF THE POPULATION BOMB

Mr. DOLE. Mr. President, population increase is a subject which has lately been treated to much publicity and no little emotional fervor. Many studies have been made, and numerous headlines have proclaimed grim warnings of a population "bomb" or "explosion" which threatens the very future of mankind.

While the world-wide trend of population growth, especially in some of the

underdeveloped countries, raises many serious questions, a clear-sighted and unemotional view of the issues involved is highly important to any sound policy decisions in this area.

An article by Dr. Thomas Jermann, of Rockhurst College, published in the Kansas City Times, was recently carried by the National Observer. Dr. Jermann takes an essentially unalarming approach to population growth and points out some interesting facts which have been somewhat obscured by recent publicity and rhetoric.

I ask unanimous consent that the article, published on July 25, be printed in the RECORD.

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

FIGURES TELL ANOTHER STORY: IT'S TIME TO DEFUSE POPULATION "EXPLOSIONISTS"

(By Thomas C. Jermann)

(NOTE.—Dr. Jermann is a professor of history at Rockhurst College, Kansas City, Mo. This essay originally appeared in the Kansas City Times.)

Americans have been overwhelmed by an avalanche of scare rhetoric about the "population explosion." We have been assured that it is not only the greatest problem facing the world, but also our greatest problem.

The rhetoric goes something like this: If growth rates continue unchecked, in 600 years there will be one person for every square yard of the earth's surface. In 900 years a building 2,000 stories high covering the whole world will be needed to house the immense throng. The exploding U.S. population will keep pace: 375,000,000 Americans by A.D. 2000, 939,000,000 by 2050, and 2,350,000,000 by 2100.

BIRTH RATE DECLINES

Explosionists advocate unprecedented measures to stem the force of this impending tidal wave of humanity. Suggested solutions for the United States range from tax disincentives to nearly unlimited abortion and eventual government control.

All of this is in the face of a steadily declining birth rate in the United States. The birth rate and the number of babies born each year from 1957 to the present are:

Year	Births	Rate
1957	4,308,000	25.3
1958	4,255,000	24.5
1959	4,295,000	24.3
1960	4,257,850	23.7
1961	4,268,326	23.3
1962	4,187,362	22.4
1963	4,098,020	21.7
1964	4,027,490	21.0
1965	3,760,358	19.4
1966	3,616,274	18.4
1967	3,520,989	17.8
1968	3,470,000	17.4

The birth rate has declined every year from a high of 25.3 per 1,000 in 1957 to a low of 17.4 in 1968. The latter figure is the lowest in U.S. history.

The death rate, at 9.6, has remained almost unchanged in the last 20 years. As our population grows older (which is beginning to occur in consequence of the smaller number of babies born each year) the death rate must eventually rise to 15 in accordance with our life expectancy of 70 years.

(If, in the face of the declining birth rate, the death rate remained at 9.6 permanently, everyone could expect to live to be 104 years old.)

AN OVERCAPACITY

A total of 800,000 fewer babies were born in 1968 than in 1961. The consequences of

this have not yet been fully appreciated, but these figures mean that in 1976 there will be 800,000 fewer third-graders in the nation's classrooms than there are today. This is not a hazy prognostication, because these children have already been born. There will be an *overcapacity* in teachers, schools, and educational facilities.

In view of these declining numbers and the recent record-low birth rates, it is probable that the U.S. population is already moving toward stabilization. It has become apparent that the Census Bureau's 1967 population estimates for the year 2000 are already outdated and must be revised sharply downward.

These estimates varied from a high of 398,000,000, to an intermediate range between 336,000,000 and 308,000,000 to a low of 283,000,000. The high and the intermediate estimates now seem to be completely out of the question; even the low estimate may be too high. Some demographers now think that the U.S. population will stabilize around the year 2000 at 245,000,000 to 265,000,000.

EXTENDING TOO FAR

The impact made by the explosionists results partly from their extending trends far into the future. Such lengthy extensions are invalid, for they assume that all population factors will remain constant. Since population factors have a way of not remaining constant, the longer a "trend" is extended, the greater is the likelihood of error.

It is possible, moreover, even with the use of reasonably short extensions, to achieve forecasts that contradict those of the explosionists. One can note, for example, the "trend" in the U.S. birth rate from 25.3 in 1957 to 17.4 in 1968. If this "trend" is extended only 22 years into the future, the birth rate will be down to zero.

Similarly, the birth rate declined steadily from 30.1 in 1910 to 18.4 in 1936. If in 1936 this "trend" had been extended only 39 years into the future, births in the United States would have ceased altogether by 1975. This is not only invalid, but ridiculous. Such procedure is, however, not nearly as ridiculous as extrapolations that are mechanically extended for 600 or 900 years.

The chief danger, however, in the scare rhetoric of alarmists is that they tend to reduce many of our major problems to numbers of people. They thus divert attention away from the actual *causes* of the problems. To the extent that the distortions and half-truths find credence, they will retard much-needed solutions.

CRIMES AND CROWDS

The ever-increasing rates of violent crime are attributed to population growth and density. If crowded conditions cause crime, the most crowded areas of the world might legitimately be expected to have the highest crime rates.

Holland, for example, where people are crowded together at a density of almost 1,000 per square mile (compared with 57 per square mile in the United States), should be a very dangerous place indeed. The Dutch, however, who have one of the lower crime rates in the Western world, seem to be unaware of their predicament. Perhaps they have not yet read such books as Paul Ehrlich's *Population Bomb*.

To take another example, Great Britain has 50,000,000 people crowded into an area smaller than California. On the basis of the explosionists' rhetoric it is hard to understand why there are fewer murders in the entire British Isles every year than there are in Chicago or Cleveland, or greater Kansas City. These examples suggest that population density, *in itself*, does not produce crime.

HINDERING REFORMS

There is danger, however, that irresponsible scare tactics may divert public atten-

tion to mere numbers of people. Progress in eliminating slums may be retarded, increased educational and vocational assistance may be delayed, and much-needed reforms in prisons and courts may not be undertaken.

Another favorite theme of the explosionists is environmental pollution. This is, of course, a problem of paramount importance. It cannot, however, be reduced to mere numbers of people. Although more people produce more pollution, they also produce the wealth and the technology to combat it. The crucial factor is determination. Alarmists, by directing attention solely to numbers of people, tend to obscure the fact, admittedly unpleasant, that combating pollution requires large sums of money.

Oversimplification is heard even from government officials. Robert H. Finch, former Secretary of Health, Education, and Welfare, when asked what people could do on a voluntary basis to improve the environment, said: "I would begin by recommending that they start by having only two children."

This is not the heart of the problem. If population growth in the United States ceases today, rivers will remain ecological slums, and air over some cities will remain unbreathable until massive and costly efforts are undertaken to remedy these deplorable conditions. To the extent that environmental problems are obscured by simplistic rhetoric, they will continue to go unresolved.

CONGESTION IN CITIES

Finally, the explosionists delight in exploring the ever-increasing crowds in our cities and in our national parks. They ignore the fact that a large part of the urban congestion is a result of the continuing flight from the farm to the city. Fewer farmers are producing more food on less total acreage. As a result of the continuing exodus from the country, one-third of the counties in the nation are losing population; more and more of the populace is being concentrated in metropolitan areas.

Forty-four Kansas and 49 Missouri counties lost population between 1960 and 1966. The latter state, with 69,000 square miles of territory, has three-fifths of its people concentrated in two urban areas. Similar concentrations of people are occurring throughout the United States.

It is apparent that more cities are needed, not merely additional growth in a few metropolitan areas. Most of all planning is needed, so that the cities, new and old, will not be hampered by unrealistic political boundaries, segregated housing, and antiquated transportation systems.

VISITORS TO NATIONAL PARKS

National parks, as noted by population alarmists, are much more crowded than they were just a few years ago. Attendance has in fact increased by 450 per cent in fewer than 20 years while the population increased by 30 per cent. These figures might suggest all of the following: (a) we are indeed becoming an affluent society, (b) camping is becoming more and more popular, (c) we need more national parks.

Some developing countries have severe population problems. The United States does not. The serious difficulties facing our nation can only get worse if they are simply reduced to numbers of people. Crime, environmental pollution, and urban congestion cannot be eliminated by such simplistic thinking.

It is time to deflate the "population bomb" rhetoric so that we can have a clear view of the real problems.

PROCLAMATION OF LIBERTY

Mr. MATHIAS. Mr. President, in a time of tension and anxiety, one of the prime sources of turmoil is a lack of trust

among Americans. The problem is not that we may disagree, but that we often fail even to listen to one another. In his sermon on the Fourth of July weekend, the Reverend Emmanuel J. Hoover, of Zion Lutheran Church, Middletown, Md., reaffirmed the fact that sincerity is essential if man is to live up to his ideals.

The text of his sermon was based on a quotation from Leviticus:

"Proclaim liberty throughout all the land unto all the inhabitants thereof!"

In his sermon, Pastor Hoover has captured the essence of true liberty, a condition which can never be achieved until we learn to respect what each other says. One of America's greatest heritages is her ability to accommodate a great diversity of people with liberty for all. Pastor Hoover discussed the essential point, that we must consider our country "above partisan and political interests and considerations." I ask unanimous consent that his thought-provoking sermon be printed in the RECORD.

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

WITH LIBERTY AND JUSTICE FOR ALL!

This weekend we celebrate the 194th anniversary of the founding of our nation with the signing of the Declaration of Independence and the formal beginning of the War for Independence.

One hundred and ninety four long years have gone by and America has developed into the world's greatest nation, having come to be known throughout the world as "the land of the free!"

There have been many American flags displayed this weekend in apparent commemoration of that event of one hundred and ninety four years ago. We have been encouraged to display the flag at our homes and on the rear and side windows of our automobiles in an effort to revive the sagging of patriotism evident in our land. All of this is fine, if, when we display we really believe what it represents and symbolizes; otherwise, it is gross hypocrisy and a cover-up!

When we salute the flag we say: "I pledge allegiance to the flag of the United States of America, and to the republic for which it stands, one nation, under God, indivisible, with liberty and justice for all!" If we really believe those words, then we have a right to fly the flag, and to fly it as briskly and as often as we may desire. But if we do not really believe those words, then we have no right to fly the flag, for then to fly the flag becomes sheer hypocrisy; saying by the outward display of the flag that we are believers in what it symbolizes when in our hearts and minds we do not so believe. And this is what the younger generation says concerning many of us of the older generation—that we are guilty of hypocrisy! By which they mean that we say many things we do not do, that we say many things we do not believe, so that they see us as guilty of gross hypocrisy.

Our nation was founded by religious men. If you will study the Declaration of Independence, the U.S. Constitution, and all the early documents leading up to them, you will find in each an overt recognition of the part God plays in the life and destinies of men and nations. God played a most important role in the events which led to the founding of America.

This Leviticus text, perhaps 2800 years old, is the Biblical text inscribed on the Liberty Bell. Our founding fathers took a text from the Bible and had it inscribed on the Liberty Bell when they had it made: "Proclaim liberty throughout all the land unto all the

inhabitants thereof!" This was not a new idea; it was an old idea, as old as the world because it existed in the mind of God. All men, by God's Will, are to be free, and nations are to administer justice impartially for the benefit of each individual man. Liberty and justice are not just for a few, a privileged few; they are for all people, for all the citizens of the land, and for aliens too! God revealed those truths 2800 years ago, but it has taken hundreds and hundreds of years for them to become evident reality for many peoples. America was probably the first nation, and possibly the only one, to inscribe these words of the text on a bell which was to ring out liberty and justice for all its people!

It required 2800 years for God to develop a nation which came to be known as "the land of the free!" Other nations contributed to this historic development: there were the Greeks with their City States and ideas of freedom, and there were the British with their Magna Charta. But liberty is a precarious business. Nations which have had liberty and freedom have had to care for it, because liberty and freedom can easily erode and vanish. It takes eternal vigilance and the kind of ingredients which go into the making of true and lasting liberty!

America didn't just happen to happen! America became what she is because of the character of the people who founded America and who have kept America and the American dream alive through one hundred and ninety four years of history. They were people who believed that in America liberty should be proclaimed throughout all the land to all the inhabitants thereof. If everybody in America today believed this, we would not be the divided nation we are. We are a divided nation because there are groups of citizens who do not believe that liberty should be proclaimed throughout all the land to all the inhabitants thereof. If the Liberty Bell were to be struck today, many would insist that the Leviticus inscription be eliminated!

Some folks want liberty and justice for themselves but are not in the least concerned about the same for others. There are groups that want liberty and justice to maintain their selfish interests, but who couldn't care less about liberty and justice for the other groups in our society. Selfish interest groups who look out for their own welfare primarily and who do not consider the welfare of the nation as a whole constitute one of the major weaknesses in our American society today. Lobbies and lobbyists can very easily be dedicated not to what is good for America but solely what is good for the special interest they represent. Lobbying can easily become the most selfish expression of political exploitation. The result of much such selfish expression and self-seeking can be the erosion in liberty and freedom!

The Liberty Bell didn't ring very long until it suffered a crack, and someone has suggested that we have a crack in the Liberty Bell today! It is quite true; America's Liberty Bell is cracked and is not sounding a clear and resonant call for liberty and justice for all! No longer do we seem willing as a united people to proclaim liberty throughout all the land to all the inhabitants thereof!

America was known for many years as "the melting pot of the world." People came here from all lands and continents. They spoke diverse languages and represented differing cultures. Here in the land of freedom and opportunity, after a generation or two, they were assimilated into our citizenry and many of them came to be recognized for unique contributions they gave to the life of the nation. Among these immigrants were many of our immediate ancestors.

But we seem to have ceased being the world's melting pot; instead of being assimilated into a living union and commonwealth, we now seem to stand in opposition to one another and to withhold goodwill and opportunity to one another, especially so if the color of our skin is different. There are groups and individuals in America today who, looking back to the past, think of the wonderful life in America of fifty or seventy five years ago, an America which was much different and more desirable for living than the America of today, an America in which people did tolerate one another and respected differing opinions; and they wish to go back to that America, to the manifest patriotism which reigned in those former years. Well, we can go back to that America if we will but fulfill the same conditions which created that America of fifty or seventy five years ago, if we are willing to work together, to understand one another, to love one another, and if we really will believe with our heart and soul in the freedom and justice for all for which the American flag stands!

There is a consistency between what we say when we repeat this ancient text from Leviticus and when we pledge allegiance to the American flag, and what we confess in both instances is among the noblest acts and sentiments of man. It represents God as having a position of recognition and honor in the history and life of our nation: "One nation—under God!" Some citizens will hang out the flag on national holidays, affirming that they believe this nation's life is built on a recognition of God, but they themselves are never found at worship in any House of God helping sustain the godly foundations of the nation—all of which has something of the air of hypocrisy about it! For to say that this is a nation under God and then refuse to do your little bit to keep God and the Will of God alive in the life of this nation is indeed hypocritical, is to forfeit one's right to display the flag, because then one doesn't really believe in this truth and ideal which the flag symbolizes.

To display the flag is to believe in the unity of America: "One nation, . . . , indivisible!" This is to mean that priority is given to the nation above all other national goals or local loyalties. The flag says that America is for "all the inhabitants of the land! Americans are united regardless of the color of skin, of financial position, of educational attainment, or of political opinion. All groupings and allegiances are subservient to the unity of the nation. In the true America no distinctions are made where unity, love and loyalty to nation is involved. And this is one of the great things we say when we salute the flag. Groups may separate us, but the nation should unite us. If we are a divided nation, you see, it is because some of us have fallen prey to the temptation to put local, sectional or group interests ahead of national interests, and to the degree we have done this we have violated the pledge of allegiance to the flag and nullified the will of God as set forth in the ancient Leviticus commandment to "proclaim liberty to all the people!"

There is something genuinely un-American about permitting local, sectional or personal interests to divide us as a people. In America there should be no North or South, no capital or labor, no rich or poor, no black or white to disrupt our unity or to delay the achievement of our national goals and ideals. And we will believe this if we are honest when we salute our flag and seriously consider God's Will for all men.

To genuinely salute the American flag means to accept the ancient Leviticus text as God's command to us as a nation: that here liberty and justice shall be proclaimed and administered evenhandedly to all. The flag of our nation was bought with a great price; it is not something cheap, to be spit

upon and torn into rags. Men by the thousands have died for the nation, believing in what the flag symbolizes: their blood is represented by the red stripes. The white stripes are emblematic of the pure and lofty ideals for which our nation stands. And the blue should represent the loyalty of the living to those ideals for which our dead heroes shed their life blood. A great deal of dedicated living and heroic dying is represented in the American flag; purchased at such a price, we dare not treat it lightly or desecrate it lightly. Our loyalty does not mean perfect acceptance of the nation as it may be, but rather to the nation's high and lofty ideals toward which we should always be striving. It is not a blind loyalty, such as is evident in such catchwords as: "America: Love it or Leave it!" but a loyalty which ever works to make America's performance more faithfully duplicate and attain its ideals. We dare never forget that America stands under the vast judgment of God just as do individual men, but we seem to have lost this sense of the judgment of God in the affairs of nations. One of the truly great traits of Abraham Lincoln was that he believed devoutly that God sits in judgment upon nations, as well as He sits in judgment upon individual men and women.

We are called upon always to try to make America live up to the high and lofty ideals represented by our flag and historic documents—the ideals that liberty, freedom and justice shall be proclaimed from one end of the nation to the other end, to every single citizen and inhabitant thereof.

There are many American citizens who consume civil, economic and political liberty for themselves, but who are not willing to grant similar liberties to the poor and underprivileged among our citizenry. At times when our government has tried to elevate the living standards and educational opportunities for the thirty million Americans living in Appalachia and in our ghettos, we have found some of our most highly privileged citizens among the most vocal opponents. We are not all equal when it comes to economic and social opportunity; anyone who has been closely and sympathetically identified with the poor of our land, the depressed of Appalachia, the ill-treated American Indian, or the down-graded Mexican-Americans, knows full well that these inhabitants of our land do not have the opportunity, they do not have the freedom, to develop themselves into the most constructive citizens possible in a worthwhile society. That's the heart of liberty—not license, not freedom to do as we please, or to be what we want to be—but freedom to become what we ought to be, freedom to become the best we can possibly be, to be elevated in mind ennobled in positive usefulness in the society of man.

Yes, true Americanism consists in more than the periodic display of the flag. Not everyone who displays the flag is a good American, but only they who work daily in life to make America a better and a more democratic society, who strive to assist their fellowmen in realizing the ideals and hopes expressed in the flag. These ideals, rooted in Jewish and Christian history and teaching, can be summed up in Jesus' great commandment: "Love God fully and love your neighbor as you love yourself!" Christ's love consists of goodwill, tolerance and an understanding helpfulness towards our neighbor—it means liberty, justice, goodwill, and a helping hand for every soul striving to climb upward!

So, to truly obey this Leviticus command and to genuinely display the flag, one must not be viciously opposed to, must not hurt or harm a fellow citizen in any manner, but, as Luther said, must seek to assist him, to understand him, to wish only the best for

him, and to put the most charitable construction on what he does and says!

This means that in America we will not call each other derogatory names and separate ourselves into opposing groups; but white and black, rich and poor, citizens and aliens, educated and illiterate, will live and work together, side by side, in understanding helpfulness, living and letting live, striving to achieve together what we cannot achieve alone—the American dream and the dream of God for all mankind!

"I pledge allegiance to the flag of the United States of America, and to the republic for which it stands, one nation, under God, indivisible, with liberty and justice for all!"

"Proclaim liberty throughout all the land, unto all the inhabitants thereof!"

So, if you believe in these American ideals, go home and display your flag as a testimony to your faith in these ideals. But if you do not genuinely believe in these ideals, then go home and take down the flag you may be displaying, wrap it up in moth balls and store it in your attic until the time comes when you may be able to truthfully display it. But don't be guilty of hypocrisy!

FUSION POWER: EXCITING PROMISE

Mr. GRAVEL, Mr. President. An article of exceptional interest to everyone who is concerned about the brownouts, and the power shortage, and the environmental consequences of generating electricity, appeared in the June issue of *Fortune* magazine. Pleasurable and exciting to read, the article describes "the hot new promise" of fusion power.

Unlike nuclear reactors, whose inherent dangers result from their production of intensely radioactive byproducts in enormous quantity, controlled thermonuclear fusion will be inherently safe. The radioactive threat from early fusion model will be several hundred thousand times less than from the present and planned nuclear reactors. It is possible that later fusion models might produce no radioactivity at all. Furthermore, their heat-conversion efficiency might be as high as 90 to 95 percent, which would virtually eliminate the thermal pollution problem associated with reactors.

How many years away is fusion power? That largely depends on the funding which Congress provides.

It appears possible that, if there were a "crash program" in fusion research like the well-funded one in reactor research, fusion power might catch up and pass reactor development. It must be remembered that all the nuclear power reactors now operating and going into operation are still experimental models, and that it will be another 15 years before the first big breeder reactors are working, if they ever do.

It is impossible to compare the speed of fusion development with the speed of reactor development, which is receiving about four times more Government money. However, Dr. C. M. Van Atta, of the Lawrence Radiation Laboratory, thinks that kind of fusion feasibility could be demonstrated in 5 years, if there were money now.

Unfortunately, the Atomic Energy

Commission has funded fusion research at a static level for the last 10 years—which means a decreasing effort under inflation. Russian manpower in fusion research is reportedly five times the American level.

I am certainly not the only Member of Congress who is dismayed by the meager ceiling set on fusion research again this year by the AEC authorization. On June 18, 1970, the House Appropriations Committee Report No. 91-1219 for Public Works, including atomic energy, stated the following:

The committee has long been concerned at the slow pace of the development of this program which, if successful, could be the answer to the energy problems facing the Nation and the world . . . The committee hopes that future budget submissions will make more adequate provision for acceleration of this research and development effort.

I ask unanimous consent to place the well-written *Fortune* article in the *RECORD*.

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

THE HOT NEW PROMISE OF THERMONUCLEAR POWER

The best index of a nation's living standard is the average amount of energy at the disposal of each citizen. Energy underlies most of the necessities; it is needed to produce fertilizers, extract materials, distribute goods, dispose of wastes, and supply warmth, among other things. But assuming that populations and living standard around the world will generally increase, future societies appear headed for energy starvation if they have to rely on present energy sources. As time goes by, it will take more and more energy to obtain a given amount of benefit. Materials will be won from lower-grade ores at a larger cost in energy. Food will be transported from farther away. More energy will be consumed in the disposal or conversion of wastes, many of which are themselves by-products of the energy-conversion process.

Two methods of energy conversion should become available late in this century for averting at least this particular crunch. The closest to hand is the fast-breeder fission reactor, the technical and economic feasibility of which seem assured. The other, and potentially far better, is controlled thermonuclear fusion. In some ways complementary to the breeder, in some ways competitive, the fusion principle is inherently safer and cleaner. And if direct conversion of fusion energy to electricity can be achieved, as many now believe, civilization might obtain its energy at a price far lower than ever imagined. But hopes for fusion power have to be tempered: eighteen years of broad international effort and at least a billion dollars spent have yet to bring nuclear fusion to the stage that nuclear fission reached twenty-eight years ago when the first self-sustaining reaction went critical on a University of Chicago squash court.

Both fission and fusion take advantage of the fact that atomic nuclei have an optimum size range in which the forces that hold a nucleus together and the forces that tend to tear it apart are most nearly in equilibrium. This size range lies near the middle of the periodic table of elements and represents the state at which the least possible energy is needed to hold all the nuclear components together. Heavy nuclei such as uranium will decay radioactively or fission (i.e., split) in an attempt to reach this state, giving off energy in the process. Similarly, very light

nuclei, such as hydrogen and helium, will fuse together, giving off energy in the process also.

While the heavy nuclei teeter on the brink of spontaneous fission, however, the light nuclei put up heavy resistance to fusion. The reason is that it is hard to bring them into contact—each possesses a positive electric charge, so they repel each other. The principal task of thermonuclear-fusion technology is to overcome this repulsion, or coulomb barrier, by physically forcing the nuclei into violent collision.

In atomic accelerators this collision contact is accomplished by firing nuclei at one another like bullets. In the hydrogen bomb it is done with violent temperature produced by a fission-bomb "trigger." In the sun it is accomplished by means of tremendous heat and pressure produced by the sun's own gravitational force. The main hopes of fusion research have been pinned upon processes that somewhat resemble the sun's except that magnetic forces are substituted for gravity.

THE FOURTH STATE OF MATTER

In several respects, initiating a self-sustaining fusion reaction is analogous to kindling a fire: the kindling flame must be hot enough and be held long enough; fuel must be closely spaced to heat itself and keep the fire going. But the fuels used in the fusion fire are like no others. The fuel upon which most research has been done to date is a combination of deuterium and tritium, the two heavy isotopes of hydrogen. Other combinations are possible—deuterium will fuse with deuterium or with isotopes of helium, for example—but the deuterium-tritium reaction is easiest to ignite.

At the temperatures required for fusion ignition, on the order of a hundred million degrees, all materials have not only long since vaporized but ionized—i.e., broken up into a mixture of negatively charged electrons and positively charged nuclei. This mixture, called plasma, resembles a gas in some respects, but it is often regarded as a fourth state of matter because it has some properties unlike gases, liquids, or solids. Plasma's unique properties are simultaneously the only hope for fusion and yet so maddeningly complex that only recently, after years of effort with expensive research apparatus and computers, have theorists begun to comprehend its behavior.

For fusion, this violently expansive fuel must be compressed into a small volume, yet kept from contact with ordinary matter, which would chill the plasma instantly. It might be impossible to accomplish this except for one fortunate property of plasma: it consists of independently moving electrically charged particles, which means it can be deflected to a limited extent by magnetic fields.

The main efforts of fusion researchers over many years have gone into arranging magnetic fields as "bottles" for plasma. Such bottles fall into two general types. In the "open" type, squeezing fields of magnetism form the sole "stopper" preventing plasma from escaping out the ends of a tube. In the "closed" type the tube is bent into a doughnut shape, or toroid, and here the purpose of the magnetic fields is to confine the plasma to the middle of the tube, away from material walls.

Even in the best of circumstances, no such magnetic bottle can be perfect. There will always be some leakage of plasma particles striking one another and bouncing off in directions that the fields cannot inhibit. This irreducible rate of leakage, called "classical diffusion" because it is explainable by well-established theory, represents the ultimate goal of all magnetic confinement schemes, even though controlled fusion is theoretically possible at a higher rate of leakage. Such

classical confinement has recently been achieved.

Confinement alone is not enough, however. Generally speaking, fusion theorists calculate that they also need a plasma density of 10^{24} to 10^{25} particles per cubic centimeter (i.e., a hundred trillion to a thousand trillion particles per c.c.). Actually even the higher figure is a near-vacuum compared with air at sea level, which is 100,000 times denser. This plasma must be heated to a temperature above 60 million degrees. And particles must remain confined for an average of a tenth of a second or more before diffusing out. To a limited extent these parameters are variable: higher density can partially compensate for shorter confinement time or lower temperature, etc., and different sets of standards apply in different types of confinement schemes. A common rule of thumb for a fusion reactor capable of producing more energy than it consumes is Lawson's criterion, named for British physicist J. D. Lawson. For net power, according to his formula, the product of the density times the confinement time must equal or exceed the figure 10^{16} (a hundred trillion).

AFTER THE PERHAPSATRON

In the earliest days, before much existed in the way of plasma theory, researchers were innocent about the immensities of their tasks. The U.S. Government initiated a highly classified program in 1952 under the light-hearted code name Project Sherwood. The name was a pun on the answer, "It sure would," to the question, "Wouldn't it be nice if we could achieve nuclear fusion?" One early reactor attempt, designed largely out of optimism and happy guesswork, was dubbed Perhapsatron.

Lightheartedness dissolved after Perhapsatron and numerous successors were turned on. For plasma simply refused to be confined: no matter what the shape or the strength of the magnetic bottle, it always managed to wriggle free before the nuclear fire could kindle. In the earliest machines, which were open types, the particles simply escaped out the ends or through weak regions in the magnetic fields. In later, more elaborate devices of the closed type they appeared to interact electromagnetically in unanticipated group behavior. This enabled the particles to ignore the fields altogether or actually to receive a magnetic kick that drove the plasma to the chilling walls.

As time went on, the fear began to plague many of the Sherwood scientists that they were up against a law of nature, a law as implacable as the thermodynamic principles that, for instance, preclude the possibility of perpetual-motion machines. The fear arose largely from a relationship that had been announced in the early Forties by the American physicist David Bohm, who had been doing research on plasma and magnetic fields for purposes not related to fusion. Bohm discovered that plasma usually diffused through a magnetic field at a rate that was related to the temperature and strength of the field. The equation appeared to be a reflection of the cooperative behavior of plasma particles. When Bohm's equation was applied in context with Lawson's criterion of density and temperature for successful fusion, the equation always predicted that confinement time would be at least a hundred times too short for fusion.

More ominous yet was the actual behavior of the plasma. At first, as new machines and new principles were tried, confinement times gradually increased. But by 1954 they had climbed to just about exactly the level predicted by Bohm—"Bohm time," as it was called—and there they stopped. And, from then on, no matter what new apparatus was tried, no matter how tempera-

tures and magnetic fields were altered, the maximum confinement never exceeded Bohm time.

From 1952 to 1958 the American Sherwood researchers fought the battle of plasma confinement in secrecy. Meanwhile, in the U.S.S.R. and Great Britain, similarly classified fusion programs were also in trouble, as were smaller unclassified programs in other countries. It turned out later, in fact, that all these independent efforts had been pursuing remarkably similar approaches, and, of course, encountering the same elusiveness in plasma. Word of each other's troubles did seep out over the grapevine, however, and in 1958 the Soviet Union proposed wholesale reclassification of all fusion research. The proposal was accepted by all the countries. At first simply a huddling together for warmth in the face of chilling difficulties, the worldwide fusion effort has demonstrated itself to be an exemplary case of open international cooperation for general benefit.

Initially, the U.S. program was the largest and contributed the most in the way of theory and accomplishment. But for more than a decade now, funding in the U.S. program has remained nearly level despite inflation and increasing need for larger, more expensive research apparatus. Next year the Atomic Energy Commission's funding for fusion amounts to \$28,600,000. In the same period the size of the Soviet program has steadily increased until now it is three times larger than the U.S. program in manpower. It also contributes the most in the way of progress.

After declassification revealed that their troubles were universal, the scientists realized the inappropriateness of their trial-and-error approach to fusion. In the absence of detailed theoretical knowledge about plasma behavior, expensive machines were being put together just to see what would happen. Most programs went back to plodding research aimed at understanding the complicated behavior of plasma in the presence of magnetic fields.

BEATING BOHM TIME

By the mid-Sixties some hope was glimmering through the gloom. Soviet physicist M. S. Ioffe had proposed a way to place special exterior magnets around the plasma so that the plasma particles always encountered stronger and stronger opposing magnetic fields whenever they tried to escape. This proved useful in improving confinement in some Soviet devices. Shortly afterward, two American devices independently employed a similar "magnetic-well" principle. One of these was at the University of Wisconsin, the other at General Dynamics' General Atomic Division (which was sold to Gulf Oil in 1967 and renamed Gulf General Atomic). Both of these devices demonstrated that they could confine plasma for roughly thirty Bohm times. Still, the plasma was far too cold and dilute to be very interesting from a fusion standpoint.

The most significant step came early last year when researchers at Russia's Kuratshov Institute announced that one of their machines, called Tokamak 3, had confined an even hotter, denser plasma one hundred Bohm times, though both plasma density and temperature were still too low by a factor of about ten. The Soviet claim met with considerable skepticism, since plasma measurements are notoriously difficult to make and interpret. A British team, whose members were recognized as leading experts in plasma measurement, was invited to examine the performance of Tokamak 3, while the fusion world awaited in suspense. When the British team returned last fall it announced that far from overstating their achievements,

the Russians had actually done better than they claimed.

Though some mystery still attend the precise reason why Tokamak works as well as it does, in general, physicists believe that the secret lies in the way fields from separate magnet systems cross each other, an arrangement called "shear." The result is a spiraling combination of fields that apparently breaks up the troublesome group behavior of plasma particles.

Even before the British team returned last year, the AEC was already sufficiently impressed to have begun work on two variations of Tokamak. One is Ormak at Oak Ridge National Laboratory. The other is an elaborate modification of the expensive Stellarator C device at Princeton. Other Tokamak-type machines are planned at M.I.T., the University of Texas, and Gulf General Atomic.

Tokamak's success is merely one sign of a general thaw that has set fusion progress in motion again. By now, several entirely different approaches to plasma confinement have been reporting steady progress. Early this year Gulf General Atomic announced that its new apparatus had confined plasma some 300 Bohm times—close to the long-sought classical confinement. At the Lawrence Radiation Lab the open device called 2X has almost achieved classical confinement for that type. Meanwhile progress is also being made in the long-neglected areas of plasma temperature and density. At the Los Alamos Scientific Laboratory another open machine called Scylla is regularly achieving densities and temperatures in the fusion range, though confinement times are much too short.

Most of the new optimism, then, stems not so much from Tokamak or any other specific success as from the grasp of basic plasma principles the successes represent. Most heartening of all, none of the principles discovered rules out ultimate success for controlled fusion. "Nature is not against us in this work," exults Dr. Robert Hirsch, until recently acting director of the AEC's controlled-fusion program. "It appears that all we have to do is be careful and do the right things."

This burgeoning of plasma theory and new ideas has brought a need for new apparatus to extend experience, a resurgence of interest in empirical research, and a new impetus to move toward an actual prototype fusion reactor. All this really spells hardware, and hardware, of course, always spells money. "We're now at the point where a lot of money could do a lot of good," says Hirsch. "We could triple the size of the program over the next five years and still not waste money—something we couldn't have said a year ago."

THE THREE UNCERTAINTIES

But, cautions Dr. Herman Postma, director of fusion research at the AEC's Oak Ridge National Laboratory, scientific feasibility is scarcely the whole story. Postma identifies three overarching uncertainties that stand in the way of actual commercial reactors, and scientific feasibility is only the first. The second is engineering feasibility, specifically whether a practical reactor can be built with real materials and real engineering techniques. To illustrate the severity of the engineering challenge, Postma points to the virtually unexplored question of whether a fusion reactor could long survive its own radioactivity. When deuterium and tritium—the "easiest" of fusion fuels to ignite—react together, some 80 percent of the energy produced emerges in the form of very-high-speed neutron particles.

Man has never dealt with very energetic neutrons in such abundance, but engineers know that the sheer impact will damage virtually any solid material over time. In

most metals, neutrons shatter the crystalline structure, reducing strength to nearly that of chalk. Another common symptom of neutron damage in a material is swelling, due to the presence of tiny helium bubbles created by the transmutation of atoms deep inside the material. If a deuterium-tritium reactor is to become a practical reality, materials must be found for vacuum-chamber walls and magnet structures that can withstand powerful stresses despite neutron damage, and designs must be developed that minimize damage from swelling. M.I.T. engineering professor David Rose believes that the neutron problems may ultimately prove at least as troublesome as plasma confinement itself.

Related to engineering feasibility in some respects is Postma's third unknown: economic feasibility. The justification usually offered for fusion research in earlier days was the promise of low-cost power. The premise was that fuel costs would be but a fraction of the cost of the energy equivalent in any other fuel. Nowadays, most of those involved in fusion tend to avoid discussions of what fusion power will actually cost if and when the technical problems are solved. The reluctance stems partly from a conservatism instilled by fusion's long history of disappointments. But it also reflects a little better grasp of both the knowns and the unknowns that have emerged with the sharp-pencil stages—as opposed to the arm-waving stages—of fusion engineering.

Last September, for the first time, scientists, engineers, economists, and others sat down together in a large international conference at England's national Culham Laboratory for nuclear research and engineering. Much of the conference was devoted to economic and engineering considerations of fusion power. One thing that surfaced at Culham is that the capital cost of the plant itself, not the cost of the fuel, will determine whether fusion power will be cheaper than, say, power from a breeder reactor. Even more than is the case with other power sources, the unit costs of fusion power will decline with increasing plant size, therefore the economics may turn on how big a reactor can be, this side of folly. A big fusion plant even promises to be less difficult to design than a small one. For one thing, some of the difficulty of confinement time automatically tends to solve itself, because it takes a longer time on the average for a plasma particle to get to the walls of a big chamber than a small one. Even at the present state of knowledge, suggests Lawrence Lab's Richard Post, it would probably be possible to build a reactor of the toroidal variety that would actually produce power. The trouble is, he adds, that the plasma chamber and magnet system alone might occupy roughly the space of a baseball infield.

The most detailed cost estimates for fusion power so far were presented at Culham by M.I.T.'s David Rose, who also has broad experience with fission plants and breeders. According to Rose's broad-brush estimates, a fusion plant is most likely to match the cost of power from breeder reactors—expected to drop to around 2.5 mills per kilowatt by 1990—when the fusion plant has a generating capacity of between 2,000 and 10,000 megawatts. By comparison, today's largest existing thermal-power reactors are still under 1,200-megawatt capacity and Grand Coulee Dam produces only 1,974 megawatts. New plant capacities, to be sure, have been increasing tenfold every twenty years since the beginnings of the industry, and most of the new nuclear plants now ordered for the early Seventies will be in the 1,000-megawatt category.

THE END OF THE STEAM AGE IN POWER

Doubts about the economic viability of fusion power—and many conventional as-

sumptions about what is and is not economically feasible—would alter radically if direct conversion of fusion energy to electric power could be developed. Most proposed schemes regard the fusion reactor simply as a source of heat, equivalent to a fossil-fuel furnace or a fission reactor. In such a "conventional" approach, the heat would be produced by the impact of the reaction's neutron, proton, and electron byproducts within a "blanket" of some molten material surrounding the reacting plasma. The blanket material would then be used to heat water or some other working fluid in a more or less conventional thermal-cycle electric plant.

But in principle fusion is uniquely capable of a far more elegant approach. In the early Fifties, Richard Post was trying to find ways to offset the disadvantages of open devices (Post's specialty), which are inherently "leakier" than closed devices. He thought of turning the leak to advantage. Much of the energy released from fusion—especially from fuel combinations other than deuterium and tritium—emerges in the form of charged particles, such as electrons and protons, traveling at very high speeds. Since electric generators and the flow of electricity through a wire also involve moving charges, Post reasoned that it ought to be possible, in effect, to pump electricity from the reaction into wires, bypassing the costly, inefficient steam cycle.

RUNNING AN ACCELERATOR BACKWARD

Several hypothetical designs for accomplishing this direct conversion have been proposed. One envisioned by Post would employ a reactor of the open type. During the reaction the leakage of charged particles from one end of the plasma chamber would emerge into a 100-yard-long, fan-shaped vacuum chamber surrounded by magnets. Guided by the magnets, the particles would be collected upon electrodes, charging the electrodes to high voltages. The scheme resembles a nuclear-particle accelerator, but one that is being driven in reverse to produce electric current rather than consume it.

The potential advantages are several, an obvious one being high efficiency. According to laws of thermodynamics discovered more than a century ago, the ultimate efficiency of any thermal device such as a steam engine or turbine generator depends upon the difference between the operating temperature inside the engine and the surrounding outside temperature. Melting points of materials in conventional devices limit temperatures and therefore efficiencies, which rarely exceed 40 percent today. The other 60 percent of the energy is lost as waste heat, the pollutive effects of which are a source of so much worry about power generation. But magnetic fields don't melt, so a fusion direct-conversion device could be driven by temperatures of hundreds of millions of degrees—and, in principle at least, heat-to-electricity conversion could approach 100 percent efficiency.

The cost of the heat source and generating equipment in today's very large electric plants runs to about \$90 per kilowatt of electric-generating capacity. But according to some calculations, these costs could be reduced to about \$20 per kilowatt through Post's direct-conversion scheme. Many of the economic advantages of direct conversion would also apply in small-scale plants, severing fusion's ties to mammoth reactors.

Direct conversion would work best with fuel combinations such as deuterium and helium 3, which need higher temperatures to ignite and impose severer confinement problems. Most fusion researchers have been too involved in getting even the "easy" deuterium-tritium reaction going to take on a more difficult combination and exotic methods of power generation as well. Recently,

however, with emerging confidence in achieving fusion and preliminary experimental evidence that the principles of direct conversion are sound, Post's scheme is getting a lot more attention.

Setting aside the question of direct generating costs, the decisive justification for pursuing fusion diligently is that it promises to be a much better neighbor than its fossil or fission competitors. Fossil plants especially the coal-burning variety that will predominate for many years to come, emit a variety of air pollutants, despite expensive measures to remove them (see "Some Burning Questions About Combustion," *FORTUNE*, February). Associated with their operations must be elaborate transport arrangements to supply fuel and remove ash, or else the plants must be located near the fuel source and hence some distance from the power market.

Fission plants have less cumbersome fuel logistics and, except for a troublesome waste-heat discharge in today's designs, they present fewer pollution problems in normal circumstances. Inherent in the fission process, however is a certain possibility that a cooling-system breakdown can occur. Without expensive precautions, the result could be a meltdown of the fuel elements and, in the worst circumstances, a release of radioactivity to the atmosphere. The problems will be particularly acute in the case of fast breeders. These have tightly packed, critically placed fuel elements, thin as knitting needles. Elaborate automatic controls will be needed to damp out touchy tendencies toward surges of power. Huge volumes of exotic coolants such as liquid sodium, must be pumped through the core to extract the heat from the confined space. Even a small obstruction in the flow can result in a fuel meltdown like the one in 1966 that disabled the pioneering commercial breeder, Detroit Edison's Enrico Fermi plant.

Other aspects of fission operation embody other hazards. For instance there is the large amount of highly radioactive materials that a fission reactor core represents just sitting there. And periodically the fuel elements must be removed and transported somewhere else for chemical processing to extract spent fission products and newly bred fuel.

A fusion reactor, by contrast, appears inherently safe. It contains no more than a second's worth of reacting fuel at any instant and there is no possibility of a runaway. Even assuming some disaster—internal failure, bombing, or earthquake—fusion is still about a million times safer. In terms of volume of radioactive materials and the length of time that they would be retained by the human body if ingested, a 5,000-megawatt fusion reactor presents roughly the same degree of radioactive hazard as a 5-kilowatt fission reactor. Among the most hazardous fission wastes are strontium 90 and iodine 131, both of which the body tends to incorporate into its structure. The primary radioactive component in a fusion device would be tritium, most of which the body eliminates relatively quickly.

A DOWNTOWN REACTOR

In the new era of environmental concern, fusion safety and environmental advantages should wield increasing economic leverage. Not only should they result in lower plant costs and insurance premiums, but they should also permit fusion plants to be located closer to power markets. If generating costs decline as promised, then transmission and distribution costs will assume far more significance. Thus whether a fusion reactor can actually put cheaper electricity into the transmission line than, say, a breeder may become less important than the economies that spring from the fusion plant's siting flexibility.

In a number of interesting ways, moreover, fusion could muster a combination of benefits greater than the sum of the parts. If, as seems realistic, a fusion plant proves sufficiently innocuous to be located within city limits, it could actually bring about a sharp diminution of other forms of pollution as well. Between two and three times as much energy in the U.S. goes directly into heat for buildings, households, and industrial processes as goes into the production of electric power. Proposals have often been advanced for using the waste heat from power production for these purposes, and in a few places such as New York this is now done. Most such schemes, however, run afoul of the prohibitive expense of transporting heat—in the form of either steam or hot water—more than a few miles. But, according to recent calculations by Oak Ridge engineer Arthur Fraas, assuming that a fusion reactor could be sited near a downtown area, it might even pay to operate it at less than top electrical efficiency simply to get more useful heat. One advantage of a combined power-heat utility would be both cheaper power and cheaper heat—as well as, of course, a drastic reduction in the dirt and air-pollution threats from conventional residential and industrial heating. Oak Ridge engineers calculate that steam produced in association with power production in this manner might be generated at an average cost of around 5 cents per million B.T.U. versus present-day costs of around 75 cents.

Demand for such heat is not necessarily a seasonal matter as might be supposed. Air conditioning, whose surging growth imposes the greatest demand on straining power grids, can just as easily be accomplished with heat as with electricity. Many heat-driven air-conditioning systems are already in use. Some are driven by steam turbines, others operate on the absorption principle used in old-fashioned gas-burning refrigerators.

ROUND AND ROUND THE WATER GOES

The potential economic and environmental advantages to urban communities of having a downtown fusion reactor go beyond cheaper electricity and heat. Conventionally, fresh-water and sewage-treatment systems have been regarded as separate entities, each with its own aesthetic and environmental drawbacks. But one way to purify water—whether seawater or sewage—is simply distillation, a process that automatically brings it to drinking-water standards. This, after all, is the ultimate process used by nature itself in purifying and distributing water through evaporation and rainfall. At present, water distillation is usually regarded as prohibitively expensive, except in some locales that have to use desalted seawater. But if the sewage-treatment and water-supply problems are considered together with a large-scale local heat-electricity utility, the economic equation changes. Existing water and sewerage systems in Philadelphia, for example, represent an investment of some \$375 million. But Fraas has estimated that a distillation plant to perform all sewage treatment, producing potable water in the process, could be attached to a fusion electric-heat utility plant for an additional cost of only \$50 million—so long as the plant were not too far away from the city.

Considerably more speculative is an ingenious new suggestion for putting fusion energy to work upon the problems of resource shortage and waste simultaneously. About a year ago, physicist Bernard Eastlund and electrical engineer William Gough, both on the AEC's fusion-research management staff, proposed that the leakage of fusion plasma from confinement might be put to use as a kind of ultimate blowtorch, valu-

able for many other purposes than electricity and heat. Among other things, they suggested, such a "fusion torch" would be capable of converting any substance, including garbage, right back to its constituent elemental atoms: pure oxygen, carbon, hydrogen, iron, silicon, copper, and so forth. Then through a variety of methods it would be possible to collect and sort these elements for total re-use. By the year 2000, according to the extrapolations of Eastlund and Gough, a city of ten million could simultaneously derive its electricity from fusion and recoup the costs of its waste disposal by selling the waste's constituents.

THE EFFECT OF GARBAGE ON WEATHER

The whole idea of the fusion torch has, to be sure, generated considerable skepticism from other scientists. Some are appalled by the immense amount of energy that would be required, say, to dissociate garbage into high-speed atoms and then to sort these out and re-collect them. But the torch's proponents contend that most of the energy could be recovered as heat and used to generate electricity. In any case, they add, the combined problems of resource scarcity and waste disposal will eventually make waste recycling inevitable. They challenge their critics to come up with a better approach. As one example of the magnitude of the problem, they point to oft-used estimates that by the year 2000 the U.S. alone will be faced with getting rid of some 400 million tons of municipal refuse annually. Today the most advanced method of disposal is usually considered to be incineration. But incinerating 400 million tons of refuse would not only leave 100 million tons of ash, but even worse, it would consume 300 million tons of oxygen and would produce, among other things, 444 million tons of carbon dioxide. Already, carbon dioxide from fuel combustion is looked upon with worry because of possible effects it might have upon the world's weather.

The practicality of such ideas as those of Eastlund and Gough and Fraas remains to be proved, of course, as does the practicality of fusion itself. But if current energy, resource, and waste-disposal arrangements continue, future communities appear headed for sharply diminishing returns on additional energy. Dr. Alvin Weinberg, director of Oak Ridge Laboratory, foresees that to provide the present U.S.-scale standard of living for the global population after the year 2000 would require the capacity to produce the equivalent of 20 kilowatts of energy of all kinds per person. (Capacity in the U.S. now amounts to about 10 kilowatts per citizen, while the worldwide average is about 1.5 kilowatts.) Weinberg further calculates that at this future worldwide rate of consumption, all the known and reasonably assured reserves of fossil fuel—coal, oil, and gas—would last but thirty years, while the reserves of nuclear fuel, if "burned" in reactors of present-day type, would last only a few decades longer. In any case, current energy-conversion practices—the primary sources of chemical, radioactive, and thermal afflictions in the environment—would appear intolerable if practiced on the scale that Weinberg envisions. Without more abundant but at the same time cleaner energy, life on Weinberg's globe appears to face a future as bleak and curt as microbial existence on a spoiled apple.

Weinberg points out that if fusion is possible, bringing it to the stage of full-scale power production could scarcely cost more than one day's share of the U.S. gross national product. If energy production involves the very survival of man on this planet, as it appears to, the price would be a bargain.

"THE POLITICS OF PEACE" BY SAM BROWN

Mr. McGOVERN. Mr. President, the August issue of the Washington Monthly, a magazine of increasing importance and excellence, carries a most perceptive article entitled "The Politics of Peace," written by Sam Brown, former coordinator of the Vietnam Moratorium.

Mr. Brown's article reveals that he is adding to his brilliance, already recognized, a new political maturity that will make him an increasingly effective force in American politics. He calls for a recognition of the fact that many Americans "make political decisions largely on issues of tone and style rather than on the basis of rigorous foreign policy analysis."

Recognizing this political fact of life, Mr. Brown appeals to those interested in reversing our disastrous course in Indochina to give more attention to the political methods and tools they use as a means of reaching a broader spectrum of Americans.

I do not agree with all of Mr. Brown's observations, and especially his tendency to give primary importance to student dissent and to underestimate the importance of congressional initiatives in the antiwar movement of the past 5 years. It may also be true that Mr. Brown does not fully appreciate yet some of the frustrations and limitations which confront Members of Congress in efforts to compete with the President in affecting the course of American foreign policy and American public opinion.

Because I agree, however, with the essential thrust of most of what Mr. Brown has had to say in his article, and because I am hopeful that my colleagues in Congress and other citizens will read what he has to say, I ask unanimous consent that this perceptive article be printed in the RECORD.

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

THE POLITICS OF PEACE (By Sam Brown)

When I visited the North Vietnamese and NLF representatives in Paris last February, they made it clear that they had never counted on the American left to end the war. Madame Nguyen Thi Binh, the foreign minister of the Provisional Revolutionary Government (of the NLF), remarked that she found student radicals very sectarian and reluctant to touch political power. She continued that the confused assortment of political objectives on the left—from legalizing marijuana to overthrowing the government to providing free abortions—dilutes the political impact of the peace movement. The result, she suggested, is that the Vietnamese people and American soldiers carry the burden of America's social problems. Insofar as unrelated issues are tied to the peace movement, weakening it, Vietnamese people and American soldiers die every day because the peace movement has exported the costs of America's social problems to Asia.

I found these Vietnamese revolutionaries far more thoughtful than most young American revolutionaries. Their private conversation was radically different from their strident, ideological press releases, and they seemed to bear little malice toward the American people. They didn't express hatred for

Middle America, or even for the soldiers in Vietnam. The negotiators seemed to be tough-minded realists, who expect a long war and don't believe that America is anywhere near collapse. In short, these communist leaders are very connected to reality, where political self-delusion can cost people their lives.

One such delusion within the American peace movement has been the notion that we can retain private dimension of political morality for ourselves. We define the significance of peace rallies in such a way that we cannot lose our purity. So if Jerry Rubin or the Black Panthers offend people from a peace platform, we conclude that Jerry Rubin's style is his own business and the Black Panther platform is logically separable from the war—therefore the offended people should pay attention to the anti-war political message independently of its context. We cannot be responsible for their confusion or stupidity.

Thus doves reason that they have the best of situations: if the war ends, they can take credit for political effectiveness; if it continues, they have personally separated themselves from the war policy. The problem, as Madame Binh pointed out, is that there is no private realm for people dealing with the politics of war. The significance of our acts in the peace movement is politically determined, not privately defined. Every time a 16-year-old high school student steps off the curb for a demonstration, there is a political effect. The war may be nearer or further from its end, according to the political impact of his action. This places an awesome responsibility on those who lead others into action.

The responsibility will be increasingly important as it becomes clearer that President Nixon is committed to some kind of non-defeat in Indochina which he calls "winning the peace." There is no evidence in his history that he could withdraw all troops from Vietnam and stop all bombing if doing so would be described as a defeat. This means that building peace politics is not superfluous. American, Cambodian, and Vietnamese bodies are still being blown apart every day, and only a peace movement which reaches Richard Nixon's constituency can stop it. Doves must find lessons in the past five years of anti-war activity to avoid both the errors of previous strategies and the fiction that the war will dissolve of its own accord. Neither Vietnamization nor a naive peace movement can end the war.

Since November, 1969, the President and Vice President have used the apolitical purism of many committed peace people to split the non-moral opposition to the war away from the anti-war activists. They realize that most American voters make political decisions largely on issues of tone and style rather than on the basis of rigorous foreign policy analysis. The right wing of potential peace supporters—those opposed to the war for a variety of non-moral reasons, ranging from its economic cost to the futility of seeking a conventional military victory—tend to cave in to Presidential authority, especially when the tone of his message is more congenial and positive than that of the doves who hold that we cannot grind an honorable peace out of a dishonorable war. The potential peace voters respond favorably to the calm, authoritative demeanor of the President behind the mahogany desk during a television broadcast, and they like neat, clean, thoroughly American behavior. They don't like long hair, campus protest, or, in short, anything which irritates the nerve endings of middle-class values. They may dislike the war, but they dislike radicals far more. Moreover, they inherit this country's anti-intellectual legacy, so that if the Presi-

dent calls for "team spirit" and the peace movement calls for "communal solidarity," they go with the President. For them, "communal solidarity" smacks of the red specter and academic snobbery.

The Middle Americans who favor an early end to the war hold the political balance between continued Nixonian Vietnamization or worse, and an early end to the war. A substantial majority of them would vote for "withdrawal from Asia as rapidly as possible commensurate with the safety of the troops" if the arguments pro and con were presented in equivalent styles. But the President can commune and communicate with the non-ideologies who want to end the war, and his message is not one of rapid withdrawal but of "winning the peace" and avoiding humiliation. And except for the 1968 campaigns and a brief moment last October 15, the peace movement has not been able to talk with, or feel with, its potential allies. The apparent result is that the President has disarmed his domestic critics while the peace constituency has grown larger than ever. I think he will lose on his peace-with-victory tightrope in the long run; but for now, even after Cambodia, the combination of support for this President and a peace majority is another paradox in the string of Catch-22 insanities which have characterized the war—prepared by a liberal President who spoke of ending the Cold War, begun by a President elected on a peace platform, waged by executive order to export democratic self-determination to half of another country, escalated in the interest of protecting the troops, and continued on the grounds that it is the shortest road to peace.

Those of us in the peace movement who have worked for five years on campuses, in campaigns, and in community activities like the Moratorium bear a large share of the responsibility for our alienation from the potential doves in Middle America. The fact that they support the President in a crunch follows partly from historical accident, partly from errors in political judgment by the morally committed, and partly from a lack of courage among the politically astute.

Insofar as the split within the peace movement stems from the student base of most anti-war activity, historical accident is largely to blame. I do not think students would have taken themselves seriously as a political force had the war not begun during the civil rights movement. In the early Sixties, young people learned that voting and precinct meetings were not the only effective forms of political activity, that extra-legal demonstrations worked in the face of a moral horror, and that American leaders often displayed both cowardice and hypocrisy in race relations. The civil rights movement, with all its implications about American politics, was almost a necessary condition for anti-war activism on the campuses.

It was also important that the war was begun by a Democratic President, for Lyndon Johnson's presence in the White House silenced many of those who are now doves against a Republican President. Hubert Humphrey, Arthur Goldberg, Edmund Muskie, Larry O'Brien, Adlai Stevenson III, Birch Bayh—none of the party establishment came close to breaking with Johnson. Even the intellectual community, which might have been expected to provide some leadership was so closely tied to the Administration that its members—McGeorge Bundy, Francis Bator, Richard Neustadt, Zbigniew Brzezinski, and so on—were reluctant to speak out at first. So were the foreign policy experts, such as Roswell Gilpatric, George Ball, Averell Harriman, and Cyrus Vance. The

result was that students were the original peace constituency almost by a process of elimination. Through the draft, we felt the war with the kind of harsh self-interest which motivates most political activity. The first major anti-war demonstration took place in front of the White House in the spring of 1965, organized by SDS. Senators Morse and Gruening spoke, sealing the alliance between students and brilliant eccentrics. When Eugene McCarthy announced his candidacy in November of 1967, everyone assumed that students would be his most consistent supporters, although all the pros, including Robert Kennedy, advised McCarthy against stressing student support.

To say that students have formed the core of anti-war activism does not mean that young people are overwhelmingly dovish relative to other age groups. That is part of the silent majority myth. But I do think that young peace activists tend to have made certain moral judgments about the war, beyond pragmatism. This is a source of strength for the peace movement in that it provides the strongest motive for opposition to the war and also removes the recurrent trap of wavering doves: the victory wish. People who believe that the war is immoral are not tempted to dampen their activity when a vision of conquest is dangled before their eyes. In fact, most of us who have worked to end the war for some time believe that any semblance of a military victory in Vietnam would be disastrous for the United States. It would convince many Americans that the war was right and that it could be successfully repeated elsewhere. Also, a military triumph would go a long way toward replacing the Jeffersonian-revolutionary image of America as a place of hope with a Roman image of this country as a conquering empire.

If the conviction of young people has been a source of strength, it has also been responsible for much of the self-containment of the peace movement. And the significant fact is not that active dissent began on the campus, but that it has largely stayed there.

When anti-war activities began on the campuses, most of us were convinced that political education could end the war and that America was sufficiently biased against foreign conflicts to make it impossible for the government to wage war with substantial internal opposition. The draft forced us to confront the war early; and since we reached our decision to oppose American Vietnam policy largely through an intellectual process, we were confident that the country could do the same. So there were teach-ins on Vietnam in 1965 and 1966, and the Vietnam Summer of 1967 was originally called Teach-Out, a campus effort to reach into the community.

The weaknesses of the citizen education campaign became apparent very soon. For one thing, students presupposed a level of basic knowledge about Vietnam that simply didn't exist in most voters. If, in 1965, a student went to a doorstep and the lady said, "I don't know, the President knows more than we do," he became quickly frustrated with such blind deference in the face of facts about the war.

Students found that most voters employed a contorted decision-making process to analyze American involvement in Vietnam. It seemed that they should have been against the war until they knew enough about the issues to argue for it. Instead, people supported the war until convinced that America was wrong, placing the burden of proof on the students and then being fairly complacent about studying the evidence. Many students found it morally repugnant that a citizen could support Lyndon Johnson's war without having read Bernard Fall, the Vietnam hearings, or even Douglas Pike and the SEATO Treaty, without knowing the history

of the Viet-Minh or of French colonialism in Indochina, and knowing little about Ho Chi Minh, Marshal Jean De Lattre, or Ngo Dinh Diem.

It became quite easy for students to react against Lyndon Johnson's use of Middle America's historic anti-intellectualism with a kind of academic chauvinism readily learned from prominent professors. Thus it followed that since every intelligent person was against the war, anyone who supported LBJ was a fool, immoral, or both. With President Nixon reduced to visceral patriotism and respectable demagoguery to carry the war, the argument has been pushed to its conclusion: that people who support the war for immoral or irrational reasons should not count. This judgment is often felt but seldom expressed, because it runs headlong into the left's emphasis on participatory democracy. Unfortunately, irrationalities matter in democratic politics, and peace is not here just because we want it, or even if we can demonstrate on paper that it's a good idea. In order to build a successful peace movement, one must believe that Middle America should count, even after a week's canvassing in Ogallala, Nebraska, or Peoria, Illinois. The alternative is to join with classical aristocrats, who find the paper ballot a rather crude and absurd method of making political decisions.

Students found it difficult to break the ethos and life style of the campus in order to spend their time in homes and businesses. Canvassing operations and education campaigns require a great deal of organization and commitment to work which is generally tedious. A demonstration, on the other hand, only requires going someplace for a few hours, at least for the non-organizers. The atmosphere at a demonstration is one of a communion of peers, often with recreation and a heady emotional sense of solidarity. Moreover, the civil rights movement had given demonstrations an overtone of moral outrage, and that was precisely the message that the peace movement wanted to communicate: that the Vietnam War is a moral outrage.

Unfortunately, anti-war demonstrations did not succeed in dramatizing the moral aspects of the war, largely because the war was taking place halfway around the world. The sit-ins in the South could demonstrate the moral imperatives of the civil rights movement. One could see the violent clash of behavior against principle, and the connection to the law was clear. Peace demonstrations at draft boards and troop shipping stations attempted to make the same point regarding Vietnam, but the appeal to conscience was too vague or too strained. McGeorge Bundy and Robert McNamara were tucked away in an impeccably proper bureaucracy. They never delivered any napalm in person, and certainly never wore the coarsely hostile face of a Bull Connor.

Civil rights demonstrations had another advantage: they could appeal to the political self-righteousness of 75 per cent of the country in order to defeat the South. This was a significant political lever which the anti-war movement has never had. In order to accept the idea that the Vietnam war is immoral, one must admit that his whole country is capable of perpetrating great wrongs and that he himself is partly culpable. This is difficult for any of us to do. It is far more difficult than deciding that the South's brutal racism is immoral in the face of the non-violent courage of Martin Luther King.

Vietnam demonstrations also developed a high existential content, especially as the war dragged on beneath Russian platitudes. At some point it became necessary for all of us to do something, regardless of the political

effect, in order to separate ourselves from the government. This year's May 9 demonstration was a good example. There had to be some response to the Cambodian invasion and Kent State. Because something had to be done and peace people knew how to produce demonstrations, a quick demonstration was put together. The May 9 rally in Washington was cathartic for everyone already committed against the war—a communion of the wounded, complete with a mass swim-in in the Lincoln Memorial reflecting pool and speeches about every conceivable issue on the left. But the rally had little political effect on those not already on our side.

The failures of demonstrations as a peace tactic tended to restrict the morally-based anti-war movement to the campus. And, during gestation on the campus, it continually moved toward the left. The enemies became generalized into the System and the solution into revolution. Anyone who added a new plank to the canons of the left was considered purer than his predecessor, and the movement shifted in order to identify with its purest elements. People became unwilling to accept those opposed to the war for less comprehensive reasons. They had to be written off as opportunists and moral reprobates.

This is the first vicious cycle of the student peace movement: the longer it fails to end the war, the farther left it moves, splintering itself into multiple groups in the process, which in turn makes it more difficult to develop the new constituencies necessary to end the war.

I cannot argue strongly for a single-minded peace strategy without considering the emotional costs. Obviously, there are reasons for leftward sectarian impulses, growing out of the history of the Sixties—when this country identified many domestic problems and solved almost none. There is good reason for a healthy cynicism. A young person in this country has seen little but war, the draft, riots, racism, assassinations, pollution, and governmental ineptness since he came into political awareness. A person who is 21 has dim memories, if any, of the early Sixties, when there was a great deal of hope in America.

On a deeper level, there is a strong sense among young people of alienation from the values which built the American economy—impulse repression, acquisitive drive, and status mobility. These frustrations add up to a strong motive for believing that America's problems are insoluble, and that the war is but a symptom whose termination will be of little use.

Finally, there is a feeling that the war cannot be ended on terms other than the Carthaginian Peace acceptable to the Veterans of Foreign Wars. Obviously, any tough-minded political discipline toward ending the war is senseless if the chances of success are zero. The existential alternative is to keep one's purity, protect one's life style, and demonstrate a personal separation from the war policy.

This is a dilemma for those who believe that the war is wrong: defeat appears likely and recommends that people withdraw into a personal purity, while ending the war requires that people move toward Middle America and become politically effective.

To unravel this problem, I think a few false issues must be separated out. First, personal appearance, language, and life style have nothing to do with the substance or purity of one's political views. Behavior that is offensive to Middle America neither establishes nor identifies real political differences; it merely offends Middle America. Burning the flag or shouting obscenities at an anti-war rally is for many doves a shortcut for the years of hard work which would make real political enemies on substantive issues.

If done for its political effect, such action creates needless liabilities and fosters the self-deception that one is politically righteous in proportion to how much he is despised.

Another kind of false purism follows from an inquisitorial tendency on the left to exclude as many people as necessary to insure the holiness of the group. This is the opposite of the political instinct, which is to include as many people as possible in the interest of achieving an objective. You take your allies where you can, not necessarily making heroes of them, but keeping them in the camp.

It's very dangerous to generalize a personal code of moral absolutism into politics. Many of us cannot accept the draft for this war on personal, moral grounds. But I find it ethically untenable to suggest that everyone who doesn't agree with us is automatically immoral—unworthy of respect and human consideration.

Such absolutist judgment would represent a curiously non-situational ethic for a generation which accepted and popularized situational ethics in sexual relationships. Middle America is still sexually Victorian on the whole, but politically pragmatic, while students are politically absolutist and sexually situational. One could, as Richard Nixon has, drive a truck through the gap.

On either side of this gap, the combatants act like members of the old religious sects, where different rules govern one's conduct toward people outside the group as opposed to those within it. Thus, it becomes possible for an honest, fair-minded judge to display a total disregard for due process in dealing with a long haired radical. On the other hand, it is possible for people on the left—whose internal ethic calls for a loving ethos, an understanding of human weaknesses, concern for the poor, and non-violence—to direct blind hatred toward Middle America, to call people pigs, to glorify militance, and to display considerable cultural condescension toward "hewers of wood and drawers of water," from tobacco farmers to cab drivers to hard hats. The response is obvious.

Sect-like behavior is the source of a second vicious cycle within the peace movement. People in the middle respond to the sign language involved and to the external codes of conduct, not the internal ones. Sectarian violence on the left is the most salient aspect of what the press calls a peace-youth cult.

Perhaps strategic violence in the antiwar movement is yet another legacy of the civil rights movement, during which young people have seen that pompous official statements on the futility of violence consistently ring false against the scramble of politicians to throw money and concern into any urban riot area. But most Americans don't feel guilty about the war, nor do they feel that young demonstrators are its victims. Again, the moral imperatives of the peace movement have been different and weaker than those of civil rights. In any case, I find political violence wrong in principle, and anti-war violence is also strategic nonsense, creating even more needless enemies than flag-burning.

Sectarian violence on the left is the complement of the hard-hat phenomenon on the right. They represent the culmination of the familiar process of polarization.

The real crux of the dilemma over protecting principles comes when it is necessary to make judgments about issue priorities—to choose among contending goals in the interest of effectiveness. This is particularly difficult for young people, who dislike the notion of effectiveness itself because it represents to them the very craving for success that alienates them from America. They have seen too many allies announce with super-

cilious dignity that they are going to be effective within the system and then drown all moral commitment in self-advancement.

Many older doves not so alienated from success or the work ethic are also wary of the effectiveness trap. Some can remember the Cold War Fifties, when liberals adopted Brooks Brothers suits to "effectively" protect those falsely accused by Joe McCarthy. And liberals continued to adapt themselves to the times until they decried the missile gap in 1960 so they could be effective in making social reforms and finally began the Vietnam war to demonstrate that they were more flexibly effective anticommunists than the hawkish Republicans. In a sense, the trap is responsible for the whole Vietnam mess; for the last generation of liberals made an ideology of effectiveness and finally came to believe in their own tactical compromises.

In order to handle the effectiveness trap, people must have enough self-confidence to believe that the steps necessary to end the war will not erode their commitment to other issues. Adopting a style that does not offend Middle America is itself no compromise of principle. The danger comes when liberals transform Brooks Brothers suits into political disaster, and today's doves must be able to tell when an acceptable style becomes a substantive sell-out.

People must also believe that the war can be ended. Otherwise, they join many students in the non-effectiveness trap—if you decide that it is impossible to win on anything, it makes sense to go down to defeat shouting the pure gospel on as many moral issues as possible. If, on the other hand, doves decide that the peace movement can in fact end the war, then the purest anti-war position is the one which ends the war fastest without compromising the principle that the war is wrong. That position would undoubtedly be tough-minded in that priorities must be chosen and sacrifices made in the interest of ending the war. Jerry Rubin may have to be excluded from a platform to keep John Lindsay, because, coldly, Lindsay is far more politically valuable than Rubin in any successful anti-war strategy. The position would also be painful—it would even be necessary to cultivate dovish potential among racists. But the position would also recognize the daily blood-cost of the non-effectiveness trap.

I think everyone who has a moral commitment against the Vietnam war feels some of these drives toward left sectarianism. Certainly I do. On the night of the Cambodian invasion, part of me wanted to blow up buildings, and I decided that those who have waged this war really should be treated as war criminals. There must be a certain point in the midst of an insanely malevolent situation at which any sane person wants to become a maniac. Discipline and caution appear deceitful.

But despite past frustrations and failures, I think that political self-discipline is precisely what is necessary to end the war. My own feeling is that this war is in fact less intellectually intractable than the long-run problems of pollution or the distribution of wealth in America, and less emotionally deep-seated than alienation from the Protestant work ethic or the overwhelming problem of race. But it throws up an enormous psychological barrier to the perception of these problems, simultaneously draining the nation of lives, resources, hope, and conscience. Therefore, I think that ending the war is a necessary first step toward meeting more difficult problems, even though ending the war may mean short-run sacrifices of efforts to cope with them.

Also, you have to have faith that the American people will choose the more humane political path when confronted with clearly stated alternatives, and then you

work to state the peace choice persistently in the most acceptable style. Until you lose that faith permanently, left sectarianism must be regarded as politically foolish, and only lack of courage causes people who believe so to remain silent.

These realities have been clear for some time. They were paramount in the plans for the Vietnam Moratorium, drawn up in the spring of 1969, when the politics of Vietnam were considerably less carnal than they are now. Nixon and Agnew had not wrapped their policy in the flag, nor had polarization proceeded to the point at which many hawks would cheer the killings at Kent State. But it was clear, at least to our ideological minds, that the President was not going to withdraw from Vietnam quickly and blame the consequences on the Democrats. This option, which so many commentators thought likely because of its "peacemaker" attractiveness and the fact that it would direct any McCarthyite backlash at the Democratic Party, was rejected in favor of a Presidential desire for an outcome with victory written on it somewhere. It seemed that he was going to get out of Vietnam as slowly as possible, while selling the idea that he was getting out as fast as possible.

By spring, many doves had recovered enough from the doldrums of the 1968 campaign to consider new peace initiatives. Jerry Grossman, a Massachusetts businessman, first suggested the outlines of what became the Moratorium. Beginning with a student base, because that was all we could count on, we wanted to develop a single-issue citizen organization with sufficiently eclectic appeal to create a majority for withdrawal from Vietnam.

When we announced the Vietnam Moratorium in June of 1969, the four coordinators felt that it would indeed take a great deal of political self-discipline to succeed with our strategy: to gradually attract new peace constituencies on the right without either making unacceptable compromises or cutting off the left. We had to avoid following the ADA path (drifting to the right ideologically without gaining new support) and alienating the left at the same time.

The Moratorium plan for October 15 was to start on the campuses and organize outward into the community, seeking to slowly build peace constituencies. The public message was immediate withdrawal, which was then a radical position relative to the entire American political spectrum. We hoped to start in October with one day's cessation of "business as usual" and increase the moratorium period cumulatively by one day each month until the war ended. The initial call and the founding statement were very centrist documents. We tried to set a moderate tone in everything—from the choice of the word "moratorium" rather than "strike" to our constant encouragement of activities that would appeal to people just to the right of our student base—such as vigils, church services, candlelight ceremonies, and community canvassings. If we had started with more money, more visibility, or more Congressional support, we would have deemphasized our campus base even more; but, lacking all three, we had to organize from the campuses outward. Our specific targets for October were the social groups which had displayed sympathy for the peace movement—the clergy, women, senior citizens, doctors, lawyers, and educators—and we also attempted to reach labor unions and minority groups.

Across the summer of 1969, we received little press coverage and less support from Congressmen and Senators. David Mixner did most of the browbeating on the Hill and got nothing but smiles and encouragement from everyone but the handful of consistent doves,

such as Congressmen McCloskey, Adams, Brown, Reid, Edwards, Koch, Ryan, Fraser, Riegle, and Ottinger and Senators McGovern, Hughes, McCarthy, Hatfield, and Goodell. There was a perceptible lack of raw courage on the part of most elected officials. Part of it was rationalized by the "extended honeymoon" argument that President Nixon would extricate us from the war if he had time enough. There was also a strong reluctance to criticize the President, growing out of a contagious inability to distinguish between the office and the man in it.

Two things happened in the fall of 1969 to make a summer's worth of low-profile organizing pay off in October. One was the Labor Day recess, when most Congressmen went home and discovered a great deal of disgruntlement with the war. They often found anti-war activities being supported by surprisingly "straight" people. Congressmen react very quickly to broad-based constituent pressure, and endorsements came in rapidly during September.

Also, Congressmen react to an informal perception of national mood, which they get from the media. Washington is a funny town, and things often occur largely because the right people say they will. Averell Harriman began saying that he thought the Moratorium was a good thing, and so did Ramsey Clark. Bernard Nossiter wrote an article in *The Washington Post* in which he struck a favorable tone and anticipated widespread activity on the 15th. A few columnists responded, and soon the mood became right in Washington. With the luck of this favorable mood, we convinced enough media people that a lot of things really were going to happen on October 15. Once the media began doing Moratorium previews, Congressmen with sensitive noses for publicity began to nibble at the Moratorium in the interest of a good headline. Most people on the Hill want to be helpful on the day they can get big press coverage but not otherwise, or the next day.

October 15 was far more successful than we had even hoped, as Moratorium activities took place in more than 500 towns across the country and on most of the nation's campuses. The events were well covered, the tone was good, and many new groups were brought in. There were a lot of professionals: 700 attorneys in Boston, 25,000 people at a Wall Street rally, businessmen in Chicago, government and social workers, advertising and publishing people. Walter Reuther and Roy Wilkins participated, and the Moratorium was endorsed by many of the establishment Democrats who had been so reluctant to break with Lyndon Johnson over the war. There was a great deal of euphoria within the ranks of local Moratorium groups, and we at the national office found that success spawned an atmosphere of hope that new constituencies could be won over and that the movement would snowball. Although October was far bigger than we anticipated in terms of national impact and therefore did not fit in well with our plan of escalating peace actions, the four coordinators were quite optimistic.

Within a month the bubble had burst. The President's speech of November 3 and the reputation of the Mobe (New Mobilization Committee to End the War in Vietnam) neutralized many of the new peace activists in the Congress. Many of them felt that they had done their bit for peace in October and that it was prudent to coast for a while. The New Mobe leaders—Ron Young, Stewart Meachem, Cora Weiss, Fred Halstead, Richard Fernandez, and others—did their best to establish a non-violent commitment through the press, short of excluding hard left groups from the platform; but many people in Congress and the press still chose to see them

as simply a bunch of Trotskyites, socialists, draftdodgers, and militants. They conjured up visions of the leaders of the Pentagon march of 1967 and the Chicago demonstrations of 1968 descending on Washington for November 15, 1969.

The mood in Washington before November 15 was very tense. The press dwelled on the threat of violence, the Administration stalled negotiations on demonstration permits, and the citizens of Washington were afraid to open their doors to peace marchers. Meanwhile, we tried unsuccessfully at the Moratorium to keep our activities on November 13 and 14 separate from the Mobe's large demonstration in Washington. But the Moratorium became a generic term for all anti-war activity, including the big march. We decided to support the Mobe activities, partly because we thought they clearly intended to have a non-violent demonstration, and partly because the events were going to happen anyway and would reflect on the whole peace movement. We doubted the wisdom of centralized marches and demonstrations at that time, but we found it impossible on balance to publicly criticize or abandon the demonstration of November 15, thereby splitting the peace movement and isolating the demonstration's sponsorship farther to the left.

The weekend of November 15 came off well, even with the Weathermen in town. On Thursday their leaders came to the Moratorium requesting an "expression of fraternal solidarity" in the form of \$20,000. In return, they offered to give us an expression of fraternal solidarity by making the case for non-violence at the Weathermen strategy sessions. We refused. The next night there was a great deal of window-breaking around Dupont Circle and an assault on the South Vietnamese embassy (reportedly led by a police agent known as Tommy the Traveler). The police responded with tear gas and billy clubs. The Saturday crowd of some 300,000 was peaceful—governed, by its own mood of flower-calm protest. There were no confrontations with the police (in fact, there was scattered fraternization) until the demonstration at the Justice Department against the Chicago conspiracy trial. Before 4:00 p.m. on Saturday there were no arrests—very unusual for a crowd that large.

But the tone was still wrong. The press focused on Saturday because it was going to be big and virtually ignored the impressive two-day March Against Death. Almost 50,000 people walked from Arlington Cemetery past the White House to the Capitol steps in a continuous, single-file procession. Each person carried a candle and a placard bearing the name of an American GI killed in Vietnam or of a dead Vietnamese or a destroyed village. The placards were dropped in coffins at the steps of the Capitol as the candles were blown out. But the press concentrated on the big demonstration, previewing it with speculation about the extent of violence and reviewing the day with crowd estimates and the usual line about the day's being generally peaceful with a few spicy violent actions by radicals.

The Saturday crowd was overwhelmingly young, partly because many young people had been angered by the President's first super-patriotic defense of the war in his November 3 speech. The Vice President made his barroom debut on November 13 with his first roundhouse at the media. The wedge was driven between the young moralists and the temperate pragmatists. The latter were partly neutralized by the November polemics from the White House, so they stayed away in even greater numbers than non-students usually stay away from demonstrations.

After November 15, Middle America saw the peace movement more than ever as a

youth-based effort, with a sizable element of what seemed to them to be kooks, freaks, and lazy hippies. They saw it that way, even though it was largely untrue, and what they saw became operative for skittish Congressmen. Between then and the Cambodian invasion, virtually no one on the Hill did any peace work. Even committed doves were asking to be let off from speaking engagements on April 15. That is not only a bitter commentary on the state of the peace movement but also an indictment of the responsibility of traditional leaders on vital questions of peace and war. They were coming to us to be let off, and we were going to them pleading for support. We couldn't agree on a strategy, but it was generally assumed that we would provide the initiative and they the support. The world was upside down.

This is a third kind of vicious cycle within the peace movement: if you can't get straight, Middle American, Congressional support, the peace movement is seen largely as a youth cabal, which makes it impossible to attract Congressional support. Only a fortuitous national mood with the proper temperate tone or strong Congressional leadership can overcome that problem.

If polarization and the peace movement's youth identity had removed Congressional support after November, the Moratorium was also afflicted with fatigue. November 15 was a hard act to follow. There was a kind of huge peace orgasm in Washington that Saturday, and everyone went home to sleep it off, convinced that the war would never end if that demonstration had no effect. For the previous several months, families had been strained and studies neglected to generate the enthusiasm and organization for two months' demonstrations. The people were simply tired and resigned to the nation's acceptance of Nixon and his Vietnamization program.

There was also a fairly strong backlash against October 15, which took place in many little towns and went largely unreported. There were many places where October rallies had been put together in rather bizarre fashion by people regarded locally as the oddball biology teacher, the left-wing minister, and the kooky lady. After November, patriotic solidarity rose to attack such people by firing teachers who wore black armbands, harassing participating students, and passing anti-demonstration ordinances. We spent a great deal of time trying to help the victims of this backlash.

We had trouble generating any enthusiasm out of the national office, and we really didn't have much to give. We discovered that our plan for a continuously building peace movement had succumbed to the cyclical rhythm of campus protest, the political season being fall and spring. December Moratorium activities were small in most places, and we abandoned the idea of escalating the Moratorium period each month. We fell back, regrouped, and made plans for a series of spring actions at income tax time focusing on the cost of the war.

During the period between November and April, the other coordinators and I found ourselves trying to cope with some of the Moratorium's failures, and recognizing new ones. For one thing, I became convinced that there was a serious lack of long-term commitment among many students. Time after time, students came to the national office arguing that the system had failed to respond to their efforts, but it almost always turned out that the students' efforts had consisted of little more than canvassing for a weekend in a 1968 primary, attending an October rally, and participating in some marches. They had not yet accepted the fact that ending the war would take a long time and a great deal of dirty work.

The Moratorium also had severe bureaucratic problems. The organizational structure followed from a kind of three-pronged anti-authoritarianism within the peace movement. There was a good deal of genuine intellectual anti-authoritarianism among those who had been active long enough to see an Administration composed of all the great humanitarian liberals in the country start a war, who had personally witnessed the Mississippi Freedom Democrats' challenge being sold out (by Hubert Humphrey) at the 1964 Convention or who had found the CIA in control of the National Student Association in 1967. Who wouldn't develop an anti-leadership bias? This source of anti-authoritarianism inspired a great deal of the enthusiasm for McCarthy in 1968.

There was a purist branch of anti-authoritarianism, which taught that organizational discipline was in fact essential to the cause—but only after one made absolutely sure that the leadership was selflessly concerned with the pure gospel and not playing petty reform politics. The problem was that the Moratorium was playing reform politics in the sense that we were seeking political alliances with anyone against the war. We didn't feel we were operating in the wheeler-dealer school of political self-advancement, but some of the activities of the Moratorium clearly resembled traditional political bargaining. I considered that part of being serious about ending the war.

Finally, there was the normal amount of scrambling for leadership posts in all the Moratorium offices. People always debunked and frequently deposed the leadership if they felt they could do a better job.

The leadership problem was inherent in any organization of people who were peers in age, especially since there was no one of stature to offer himself as a full-time organizer for peace. Unlike 1968, there was no candidate to rally around. At the Washington office, we felt that young people always respond better and work harder if they have a part in formulating their objectives. At the same time, we felt that organizational efficiency is wiped out unless you reach a kind of consensus that discipline is necessary for operation. Otherwise, it's really impossible to organize a worth-while canvassing campaign, for example, where discipline is critical for getting people where they are supposed to be, at the right time, with the right opening lines, and with the information processed so that it will be useful.

The leadership question was most important in dealing with the left. I found it absolutely imperative that the Moratorium define itself away from the hard left in order to regain the constituencies we had reached briefly in October.

But White House polemics had made it futile for us to try to organize these groups because we were tied to what Middle America regarded as militants. Strategy aside, the labels pinned on the peace movement made it impossible to establish a credible commitment to non-violence, which was important to all four of us at the national office. It was incredible to me that President Nixon had managed to label us as the source of violence in the United States. Every month, he in effect takes \$30 from every American taxpayer to ship across the Pacific Ocean along with 20,000 draftees. This is the installment payment on the 400 or so caskets and several thousand amputees and cripples that come back across the ocean each month. Every month tons of bombs are dropped on Vietnamese villages at the President's order, and yet he can find 10 sticks of dynamite on West 12th Street in New York and speak as though the apocalypse were upon us because the peaceniks are at it again.

One of the reasons the President can get away with such nonsense is that many of us in the peace movement failed to dissociate ourselves strongly enough from violence on the left. While I thought it morally necessary to separate ourselves from those who advocate violence, I found it very difficult to do. After the Dupont Circle violence of last November 14, I said for publication that I thought those people should be arrested and processed for criminal charges. I also said that it is outrageous to gas, beat, and press inflated multiple charges against window-breakers and petty vandals, but that part never got reported. The press stories came out to the effect that I thought the people had gotten what they deserved. Similarly, I've said on numerous occasions that the country will fall apart of internal hemorrhage if the war is not ended, and it always comes out: "If the President doesn't end the war, we're going to tear the country apart."

Splitting from the left was one of those tough, grisly decisions forced upon the peace movement by the politics of war. Although I couldn't buy the purist argument that only the hard left deserved credit for peace activities (an argument used to exclude people like Senators Harris and Mondale), it was personally difficult to break with friends in the Mobe and politically dangerous to split the peace movement when the chances of attracting real Congressional leadership seemed so low. And it also involved clear responsibilities for what happened afterwards, because I believe that if the hard left is really isolated, it will be repressed. If the moderate peace leadership stands up and says, "We intend to create a peace organization with a strong commitment to non-violence," the political impact of that will be to say "and that makes us a lot different from those kooks." No matter how hard you emphasize to the press that you will fight for the civil liberties of the people on your left, they will divide the groups into good guys and bad guys, leaving the latter fair game for Mitchell and Kleindienst.

It almost takes the press clout of the President to draw fine distinctions in the media. At the Moratorium, we could draw the coverage, but we could never really control how it came out. This made it impossible to move to the right without baiting the left with Agnew rhetoric, which we refused to do.

The responsibility question weighed heavily in our strategy sessions this past winter, even though we may have vastly overestimated the Moratorium's effectiveness as a buffer between the government and the Mobe. We have argued for some time that we on the left have to take responsibility for the consequences of what we say. When William Kunstler says we've got to overthrow the government by force, but not by violence, to a 15-year-old kid that means break windows and throw bricks. You can't retreat into academic distinctions between moral force and physical violence after speaking on a political platform.

All these problems—Nixonian polemics, Vietnamization, fatigue, the question of the left, bureaucracy—plagued the Moratorium during the peace movement's "low profile" period from November until Cambodia. At the Washington office, we tried to resist the opening to the left which tempts all groups on the left that don't hold power. In order not to become another SNCC or SDS, the national coordinators had to repeatedly say no to the left options within the Moratorium. David Mixer was the toughest on this question, and I was second house rightist. Local Moratorium offices commonly fought the same battles that were going on in the Washington office.

Two conclusions became obvious in April.

First, the national Moratorium office was more of a burden on the local groups than a help. We were in danger of becoming peace bureaucrats, full of jurisdictional squabbles and petty fights, with no sense of joy or purpose in what we were doing. So we decided to do what all stale organizations should do—disband, and let the good local groups survive on their own and the bad ones fade away.

The second conclusion was more fundamental: that our strategy was right but that our base was wrong. I am convinced that it is not possible to build a successful peace movement simply on a student base. Not enough students have the stature, capacity, or inclination to run a tightly-disciplined peace movement, which would be required to make them effective and keep them moving toward Middle America. Even if such an organization were possible, students alone would be unable to attract a majority of the American people to any politically effective peace position. Students can have an impact since most Americans still don't want to hate their own children. But you must have strong leadership off the campuses to set the tone and direction of the anti-war effort and to give it hope.

This second conclusion made it easier to go to Capitol Hill in April and tell the hesitant doves that if they cared about peace in Vietnam they could provide the leadership. Through the entire history of peace politics, Congressional doves had very seldom spent a full day's effort on the war. They gave speeches on occasion. But within the Senate there was no organization, no regular meetings, no commitment to get together and sublimate their egos to produce a piece of legislation, no serious intention to debate the war on the floor of the Congress, no effort to raise the money to use television in response to the President, none of that. This was particularly galling right after the Carswell vote in April when these same Senators had come from nowhere to beat him with hard work and internal organization. They had also undercut the moderate peace leadership and the new constituencies of October. In October, we had one resource to use in dealing with the left—we could deny them speakers and publicity if they didn't move toward the center. But in April we had no cards: a rally of 80,000 people was held in Boston with no control over hard-left factions because our support on the Hill had evaporated.

Our message had paltry effect compared with the invasion of Cambodia, of course. But even Cambodia failed to provoke the kind of leadership necessary to move the Congress and take the war to the country. The initial spurt of enthusiasm in the Congress, especially in the Senate, has largely ebbed. Regular meetings of anti-war Senators have ceased, and there is little evidence of the cooperation or initiative necessary to effect a strategy to end the war.

The outline of a successful anti-war strategy, it seems to me, is clear: the appeal must be made in such a way that Middle Americans will not ignore the substance of the argument because of an offensive style. Support for such an appeal exists. After all, immediate withdrawal is not a radical proposal in this country today, and careful analysis of the polls shows that all political stances on the war must be couched in terms of reaching the quickest possible termination. This indicates that a quick political settlement or immediate withdrawal can become a majority position if the message is presented in a strong but palatable fashion.

While peace activists should not underestimate potential support for an anti-war position, we should also avoid underestimating President Nixon's commitment to some

sort of victory in Southeast Asia. I believe that the President's "new" image as a cool, neutral majority-maker, a consummate politician who responds and shapes rather than leads, considerably understates his ego commitment to the war. We are dealing with a man who has a full-time awareness of himself as history—the first President ever to name his own doctrine, the Nixon Doctrine, which I suspect was motivated as much by the simple desire to place his name on the books as to enunciate whatever its meaning is. We are dealing with a man who felt called upon by the world to issue a "State of the World" message, to dwell upon its historic primacy, and to quote himself 27 times in the document while citing all other human beings in history only three times (all three of these quotations were of Secretary of State Rogers agreeing with the President). The President has read the history books and knows that the great Presidents of the United States won wars. He even knows what room of the White House was used to announce the great wartime decisions.

These ego commitments are very harsh terms in which to describe a crucial motive for the Administration's continuation of the war, but I find no others which make as much sense. There is no more plausible way to explain why the President did not end the war right after he came into office, with little or no political risk. Nor can I otherwise explain his total aversion to Congressional moves toward sharing the political responsibility for ending the war.

The President's personal commitment to the war helps explain why he goes for the political groin to justify his actions. He uses patriotism and the flag, which are deep-seated loyalties for most Americans, to stimulate support for a war which clearly calls for no such loyalties. He uses the media presence of the Presidency to characterize the opposition as near traitors. I think the President has won a large part of the Vietnam debate in the past merely by naming the teams. When it's the Silent Majority versus the Loud-Mouthed Militants, the Silent Majority wins every time. He and the Vice President have also managed to sell the incredible notion that the press of the United States is leftwing. People who believe that have obviously never attended a convention of the American Society of Newspaper Editors, where the sentiment is overwhelmingly conservative, verging on outright jingoism.

Since the country drifts toward impatience for withdrawal as the war drags on, the President will have to continue seeking the jugular if he clings to the victory wish. This is one of the greatest dangers to the peace movement: for when the dialogue over the war is degraded past a certain point, it ends. (Liberals should remember the converse: that when the dialogue is elevated to certain level of generality, involving, for example, petty squabbles over doctrinal minutiae, then the talk goes on forever without action.) People can no longer talk to each other, and confrontations based on tribal sign language become the norm. In all political likelihood, most of Middle America would line up with the President in any such jungle warfare.

The atmosphere of debate over Vietnam is already so debased that it will be very difficult to take the high road to offer the American people the kind of positive tone and hope which would stand out by contrast with the President's increasingly defensive and visceral statements. It will be impossible to do so without very strong leadership. I suppose that is the heart of my feelings about the peace movement—that the strategy can be devised, that the constituency is there, but that these assets are useless without strong, non-student leadership. The

money will follow evidence of leadership. If my analysis of President Nixon's objective in Vietnam is on the right track, the task will be very difficult, but all the more imperative.

The leadership must have the media presence to counter the President's enormous TV influence. Someone must respond to his smears on the patriotism of doves. A figure like Harold Hughes would have great impact if he said in effect: "Look here, Mr. President, we're not talking about campus bums. We're talking about whether Vietnam is worth continued killings and maimings. I fought through Europe in World War II and consider myself as American as anyone, but that was 25 years ago. And the fact is that Vietnam stands between us and everything America hopes to become." The leadership must be willing to talk about Vietnam in terms that will appeal to Middle America—to rename the teams so that we start on ground zero with the hawks, rather than at an emotional disadvantage.

Part of the new message must be the destruction of the silent majority myth. The only clear lesson of the polls is that most Americans want an end to the war. If the President were to use television to justify withdrawal on the grounds that we had done all we could or that the South Vietnamese government was corrupt and unworthy of support, I believe he would receive 70 per cent support. The silent majority is largely produced by the American propensity to defer to the President. In March of 1968, for example, the Gallup poll showed 40 per cent for and 51 percent against stopping the bombing of North Vietnam. After President Johnson stopped the bombing, the polls showed 64 per cent for and 26 per cent against his decision. The silent majority appears quite malleable.

Not only must the silent majority argument be exposed as a sham, but the popular characterization of doves as militant, long-haired kids and the silent majority as middle-aged and middle-class must be dispelled. Young people as a group are not more dovish than old people, nor do overeducated eggheads tend to be more dovish than "the folks." In fact, the polls show that college-educated people in their twenties are consistently more hawkish than older non-college graduates, by a significant margin of about 20 per cent.

In addition to establishing a tone acceptable to Middle America, renaming the teams, and destroying Presidential myths, the peace leadership should use the media to make becoming a dove more psychologically attractive to Middle Americans. Prior emphasis on the moral aspects of the war has meant that the first psychological step toward an anti-war position has of necessity been the admission that the United States is somehow evil. Since many people are unable to make that jump, an admission of American guilt should not be asked of all potential supporters. To the extent that we in the peace movement have played down the pragmatic arguments for peace, we have weakened our case—and lessened our chances of ending the war. It is in no way inconsistent with our moral opposition to the war to lay much greater stress than most of us have as yet on the great practical benefits of peace.

This new peace leadership should be composed of Senators, Congressmen, governors, mayors, businessmen—all the straight people who are willing to make a firm and unequivocal commitment against the war. The spokesmen should be those most visible and most attractive to Middle America, those who can speak intelligently about the war with strength rather than condescension or aloofness.

The five co-sponsors of the Amendment to End the War already have a list of some 75,000 people who responded to the Senator's television special after Cambodia, which

could be the beginning of a peace constituency. What is needed is commitment from a large number of people willing to cast a "bullet" vote for peace. This commitment may be less organized than a party or formal corporate structure.

The new peace leadership must make it clear that it is in for the duration—until the end of American involvement in Indochina. The cyclical activity of the anti-war movement has had a double disadvantage in the past: during periods of upswing, the peace movement has overestimated its effect and thus paved the way for subsequent acute frustration and resignation; during the downswing, the government has underestimated latent anti-war sentiment, and this has possibly contributed to adventurism.

If the focus of the peace movement could be shifted to the new and long-awaited leadership, young people would be far more effective politically. I don't think we have to hide who we are, or even what we say. We should merely recognize the fact that the political balance on the war is held by people with different life styles. Students could be a left, moral pressure on the coat-and-tie leadership. Students could make it clear to Richard Nixon that they will write his history and that all wars are not heroic. They could make it clear that there are costs held against those who wage this war. Those who wage the war should be constantly reminded that they are responsible for a moral horror—like the British Viceroy in colonial India. Every time the Viceroy showed his face in public, he saw a silent Indian holding a sign which read "Assassin." Lyndon Johnson and Richard Nixon should be subject to the same treatment. We should make them aware that there are large numbers of people in this country who hold them responsible for criminal activities and who believe that those who wage the war cannot cast off the responsibility merely by leaving office.

There is no assurance at present that a new peace leadership is forthcoming, although recently several prospective leaders have been leaning toward conscience and away from conservative careerism. If these people were to emerge, I believe that it is quite possible to build a peace constituency and create a national atmosphere in which it would not be possible to wage the war. This would be partly a matter of national mood, which is highly volatile and heavily influenced by unexpected events.

A renewed peace movement would also exercise political clout, apart from its impact on the nation's war temperature. The National Rifle Association is an unpleasant model; but if a tiny fraction of the population can stop gun control with organization and the bullet vote, then the peace movement can stop the war. The new constituency would have obvious potential in 1972.

All these ruminations have been predicated on certain traditional assumptions: that people's political opinions should count, that democracy can be made to work, that there is enough good will left in the country to make it work, and that given a choice between rational alternatives, Americans will choose the most humane course. At the same time, the American people have shown that they will not respond favorably to violence committed in the name of ending the war, or to a version of democracy that romanticizes about participation of the poor and the black but ignores the middle, or to peace advocates who think demonstrations are a substitute for the sustained work of peaceful persuasion.

But the "system" should not be applauded even if the war were to end tomorrow. For five years, it has provided no real way for people to express their views on a war which was presented to them as a test of manhood. The system provided no public debate over whether we should enter the war, but instead

permitted our leaders to involve us by stealth. This critical failure gave inertia to the propagation of the Vietnam war and sneaked the flag onto the battlefield—leaving the peace movement at an enormous political disadvantage. The system has provided poor information to voters and little active leadership for a position of obvious principle.

If the war is now ended by political action, as I believe it can be, some will undoubtedly argue that the system has vindicated itself. That argument, however, is self-deceiving; for in many crucial respects our system has already failed and requires radical reconstruction.

But that is premature retrospection. If the war can be ended only with such self-delusion, we should end the war now and fight the delusions later.

APPROVAL RATING OF THE PRESIDENT RISES

Mr. STEVENS, Mr. President, to the Ancient Order of Nixon Haters in the Nation's Capital, the news out of Princeton, N.J., last week merits an emergency session of the security council. According to Dr. Gallup, the most reliable and respected of pollsters, the President's approval rating has risen 6 points in 4 weeks. This percentage roughly translates into 7 million potential voters who have, over 4 weeks' time, changed their opinion of President Nixon from unfavorable to favorable; and 5 million actual voters who have changed their minds and concluded that—18 months after his inauguration—Richard Nixon is doing a good job as President of the United States.

There was no moon landing last month, no summit conference, no smashing domestic victory over Congress, no dramatic upsurge in the economy that can explain away this startling increase in the President's approval rating. There was nothing; nothing at all—except Cambodia.

If Gallup is on the mark, then the great majority of Americans listened patiently to the unanimous conclusive opinion of the national networks, Time Magazine, Newsweek, the New York Times, the Washington Post, Life, and Look that Cambodia was a political disaster and an international blunder and concluded that the national media were feeding them hogwash.

In 18 months there has been no sharper divergence of view on a greater issue than that between the President of the United States, almost alone on one hand, and all the "respected national opinion" on the other on the matter of Cambodia. The issue was clearly drawn. Mr. Nixon contended repeatedly that the most controversial decision of his Presidency was morally right, strategically necessary and militarily successful. The national media, the academic community, many articulate voices in the U.S. Senate, in chorus, argued that Cambodia was a blunder for Nixon and a disaster for the United States.

Now the final returns are in. The President has carried the country in a landslide.

After two martinis in Georgetown, they must be asking one another, "What

is going on here?" One wonders if the national media are getting the message.

From these returns it seems that President Nixon knows the people of this country better than do the editors of the national magazines, or the national press, or the national networks. If there is a credibility gap worth noting it is the gap between what the national media are telling America and what America believes. That gap appears large enough to drive the 1st Air Cavalry through—straight into Cambodia.

If the trend continues, for every clever wordsmith "wowing 'em" with his SPIRO AGNEW watch at Lennie Bernstein's, 10 middle Americans are going to be walking around sporting Frank Stanton timepieces.

Who would have predicted it? Eighteen months after taking office, a year after the traditional presidential "honeymoon" is over, Richard Nixon, the "minority President" who could win only 43 percent of the vote, the first President since Zachary Taylor to assume office and find both Houses of Congress in the hands of aggressive hostile majorities, the man who gave America SPIRO AGNEW, the man who nominated Haynsworth and Carswell to the Supreme Court, the creator of "Nixonomics" which the eggheads claim has slowed the economy while increasing unemployment, the politician who is supposed to be "writing off" the Northeast, the "black, the poor and the young"; this selfsame fellow, with a bureaucracy of 2.5 million waging guerrilla war against his programs, with the national media "pushing" his vocal opposition, with the Senate and House of Representatives blocking him at every turn, with the academic community seething with indignation and hostility toward him, with the "best of our young people" rioting against him—this President Nixon is on the rise in the national polls to a point where six of every 10 Americans think he is doing a fine job as President. With this opposition, the wonder is that he even survives.

This development is among the great ironies of politics. Fifteen years after Mr. Nixon was tarred with the label "Tricky Dick," his word is believed by the American people on critical matters and the national media that tarred him are not believed. Ten years after the JFK debates that made the association of Richard Nixon and television something of a national joke, the President's occasional use of television time to go directly to the people on major issues is considered an "unfair" advantage over his Democratic opponents.

So, today, the craftier minds in the national media are asserting that a President should not be given prime time when he requests it. CBS is busy trying to establish a new "right" for the Democrats to attack and criticize, in free grants of prime time, any appearance of the President on television. Mr. Nixon should take this rather cynical enterprise as a compliment. For, in trying to block the President's access to the people, the national media are advertising not only his mastery of the media, but its

own lost credibility, its own diminished standing in the eyes of the public—a standing richly deserved.

AID TO AMERICAN EDUCATION

Mr. MATHIAS. Mr. President, last week, during the debate on the education appropriation bill for 1971, I expressed concern that the funds for student aid might be insufficient. As the costs of higher education continue to soar, it is vital for us to increase all forms of student assistance to keep college doors open to all who seek a higher education.

Our current economic situation makes an increase in student assistance funds even more important than under normal circumstances. Inflation, unemployment, a tight money market, and budget restrictions have compounded an already serious situation for the student that depends on outside aid in order to attain school.

I am pleased to share with Senators one case in which Government funds from the higher education act allowed a young man to continue his training. I hope we shall continue to provide adequate funds to meet the obviously increasing demands.

I ask unanimous consent that the letter of Mr. Roy R. Thomas of Lanham, Md., be printed in the RECORD.

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

LANHAM, MD.,
June 26, 1970.

HON. CHARLES MCC. MATHIAS, JR.
U.S. Senate, The Capitol,
Washington, D.C.

DEAR SENATOR MATHIAS: Rev. James J. Kortendick, S.S., Chairman of the Department of Library Science, has advised that I have been awarded a fellowship at The Catholic University for the academic year 1970-71. Without this financial aid under Title II-B of the Higher Education Act, I would not be able to afford this valuable training. I wish to express through you my appreciation to the American people for this educational opportunity and urge that it be made available to others in the years to come. I am sure that the other Fellows, Miss Maris Mangano (Merrick, N.Y.), Miss Marguerite Sheehan (Princeton Junction, N.J.), Miss Carol Tome (Plains, Pa.), and Mrs. Martha Sullivan Young (Rochester, N.Y.), concur.

Very truly yours,
ROY R. THOMAS.

GUIDELINES ON DRUG ABUSE

Mr. WILLIAMS of New Jersey. Mr. President, Dr. Sylvia Herz and Mr. Simeon F. Moss, of the Essex County School System in New Jersey, have forwarded to me a copy of a pilot drug abuse education program which they have developed for their local system.

I am impressed with the realistic and understanding tone of the guidelines and the awareness demonstrated of the psychology of the youth the program is designed to reach.

These guidelines are simple, to the point, and flexible. Included at the end of the guidelines is a bibliography of real value and a list of locations to contact

should an individual, whether adult or student, desire information or help on a drug-related problem.

Mr. President, I ask unanimous consent that the guidelines and other attached information be printed in the RECORD.

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

PILOT PROJECT ON DRUG ABUSE PREVENTION IN THE ESSEX COUNTY SCHOOL SYSTEMS JUNE 23, 1970.

To: Superintendents, Principals (elementary, junior high schools, senior high schools), Chairman, Secondary School Principals' Roundtable; President, Guidance Directors' Roundtable; Supervisors of Health, Physical Education and Safety; President, Essex County Council of PTA Associations.

PREAMBLE

The following Guidelines were developed prior to passage of Assembly Bill 1056 which provides for a three-phase drug education program for New Jersey secondary school teachers and students—the first phase of which will begin in July. Under the program established and backed by an act of the State Legislature—drug education will become part of health education curriculums early next year.

Since many school-parent-community drug abuse programs have already been initiated and others are currently in the process of organization, these Guidelines have been designed to aid both those programs already developed and those now being planned.

We also suggest that the rationale of these Guidelines be utilized as a supplementary tool for school personnel in their consideration of the many approaches to the multifaceted problems of drug abuse.

GUIDELINES ON DRUG ABUSE: PREVENTIVE TECHNIQUES

The Multi-University Interdisciplinary Council on Drug Abuse of Essex County which is coordinated through the County Superintendent's office has developed a five-pronged program, experimental in nature, which is currently awaiting funding. In the meantime, the following suggested Guidelines and Preventive Techniques are proposed to you for use in the development of more specific drug prevention programs for your local school district.

The committee is fully aware that the drug problem is one that cannot be totally resolved within the educational community and that it is a problem which merits the full consideration of all segments of our society.

It is generally acknowledged, nationally, that the ease of availability of drugs is not limited to the high school nor to the junior high school, but has penetrated to the elementary school level as well. An expressed awareness of the drug problem by school administrators and their active efforts to share with both parents and community a responsibility for a positive approach to its solution, should be our first step in grappling with this social epidemic.

What we have attempted to do here is to outline to you the present thinking in the area of drug education in the hope that all may profit by the positive lessons that have been learned. We have also touched upon those negative aspects of drug education which, in our opinion, might detract from the presentation of a meaningful drug abuse program in your community. We are also hopeful that constructive feedback will result through our mutual exchange of information on this subject.

In this section we will comment briefly on the types of speakers, films and literature on

drug abuse which, in our opinion, have the most positive appeal to students.

1. There are many self-styled authorities on drug abuse. We recommend great caution in the selection of speakers regardless of whether or not they are paid for their services.

2. Caution must be observed in speaker selection. No matter how well intentioned or informed they may be, many speakers by their approach tend to "turn students on to drugs" rather than "turning them off." Speakers of this type should be avoided.

3. A speaker who is highly authoritarian or rigid in his presentation should be avoided. Students usually do not respond to this type of speaker and profit very little from, what in many other respects, might be a good presentation.

4. Appeals by speakers to students based on fear, the illegality of drugs, or the harmful effects of drugs on the body have usually proved to be ineffectual. Punishment by incarceration alone is not a solution to the drug problem as evidenced by the high rate of recidivism among drug offenders (70%-90%).

5. A person with a basic knowledge of the drug scene with its attendant socio-cultural causative implications, who can gain rapport with students by effective presentation of material which has student appeal, and develops confidence and mutual rapport, is the type of speaker to be sought.

6. There is little evidence to support the thesis that drug education alone will stop its abuse. Moreover, most studies have indicated that students are generally well informed on drugs, their properties and the effects upon abuse.

7. It is recommended that before exposing a large segment of the school's pupil population to a speaker, film, posters or literature on drug abuse, that a pilot study be conducted with a small group of students. A reaction and evaluated student reaction from this smaller group can be secured by asking the following questions:

a. What did you think of the speaker, film (etc.)?

b. Did you learn anything that you did not know before? What?

c. Do you agree with the message that the speaker, film, etc. conveyed? Explain.

d. Do you feel differently about drugs as a result of your exposure to the speaker, film, etc.? If yes, what is the difference?

e. How do you think the rest of the group reacted?

8. After its value has been properly assessed, all aforementioned media—speakers, films, literature, etc., should be subjected to immediate follow up. Follow up can best take the form of small group discussions with as little formal leadership (either by staff members or students) as possible. The purpose of the small group discussions should be to stimulate as much interchange between students as possible after the formal presentation has been made.

9. From such discussions there may evolve student groups that will take a strong stand against drugs. There is already such a junior high school student group being formed in Essex County called "Not Me" which originated in West Orange. This is an excellent development, since it lessens the peer group pressures to conform to drug usage and makes available a positive sub-group to which a student can develop a sense of belonging.

10. "Rap Sessions" among secondary and junior high school students where they ventilate a multiplicity of problems—family, educational, social, sexual—should be encouraged in a nonauthoritarian-free discussion type of setting. These sessions should take place during free periods or at other appropriate times during the school day.

The "Rap Session" technique currently appears to be the most effective in appeal to

young people, since it provides a forum for the ventilation of the multiple frustrations of youth through open and free expression. Further, it helps students realize that their "problems" are not unique. Often they get a clearer insight into their own grievances as they objectively listen and assist their peers in solving their problems. Personal growth is fostered through this process of group dynamics.

The type of person selected to lead this type of discussion should be chosen carefully and should be apprised of the goals to be achieved and of his nonauthoritarian supportive role as a group leader. It is suggested that, perhaps, the students themselves could select a rapport-creating faculty member (teacher, guidance counselor, nurse, etc.) to sit in on their discussions. With proper training senior high school students might be used as leaders of junior high groups, and junior high students could lead an elementary group. Such group interactions would offer the advantage of age proximity in peer relationships. It is suggested that in time an open ended course which will provide the essential human relations elements for coping with youth's perplexities (growing up, overcoming the difficulties of "making it" in today's world) might become part of the required curriculum of the public schools. A course of this type would be unstructured except for certain obvious stated goals. To be fully effective, parents must be involved in separate and later in coordinated parent-student-teacher workshops, not only to open channels of communication among all groups but also to better enable each group to assist the other in life-style functioning and in their varied interrelationships.

We all recognize that students must be heard. We must offer to them a means for direct communication with us. Barriers that have been raised which have created impersonal relations among the child, his parents, and the community, and with it hopelessness and alienation, must be struck down. We must recognize that drugs are a "symptom" of our times in an already pill-drug-oriented culture. It offers to our youth an escape from reality in our highly competitive multi-problem-faceted and nuclear space-orientated society.

In general, an awareness, flexibility and recognition of the need for social change on the part of established institutions is the greatest single factor that can help bridge the generation gap and, in turn, alleviate the frustrations and hopelessness of alienated, drug-oriented youth. In seeking the cooperation and innovations of youth in implementing change on all levels within the existing framework—educational, political, economic, social, religious—the relevant alternatives to drugs for young people are offered in significant and challenging aspects of living by personal contribution to society in a meaningful way.

11. As a general rule of thumb, it is recommended that immediate lines of communication be opened among parent, child and school and that proper referrals be made when it is apparent that a child is using drugs.

a. In cases where the teacher first becomes aware of the student's involvement with drugs, the parents should be informed.

b. In cases where a parent seeks the teacher or school's assistance when she is first to discover that her child is a drug user, appropriate counseling should be given to the parent by the school.

Differences: Experimentation versus addiction

When faced with a problem of drug abuse, school personnel should recognize that there is a difference between drug experimentation and the serious hazards of drug addiction. There should also be some awareness on the part of educators that there is also a differ-

ence in the treatment accorded. There has been wide dissemination in the literature and by the communications media on the various types of drugs. No attempts will be made here to categorize the "soft drugs" (marijuana, amphetamines, barbiturates, LSD, etc.) or the "hard core narcotics" (heroin, opium, cocaine, opiates, etc.) with their respective properties and effects upon abuse. This information is easily attainable.

Accurate and informative literature on drug abuse can be obtained from many agencies. Recommended selected readings on Drugs and Drug Abuse are appended to these Guidelines.

Informational exchange and clearing house

Direct contact with the Coordinator through the Essex County Superintendent's office can best serve as a clearing house for the drug education programs in this County. We can offer you feedback through our monitoring and evaluating the programs now being carried on by many school districts both within and without Essex County. We also hope that if you have adopted approaches or programs that have been successful in coping with the drug problem in your area, you will let us know about them. Conversely, if you have projected a program that did not work out, we'd like to have others profit from these experiences as well. We hope that our lines of communication will be continuous and in both directions.

SYLVIA HERZ, Ph. D.

Coordinator, Pilot Project on Drug Abuse Prevention for Essex County School Districts.

SIMEON F. MOSS,

Essex County Superintendent of Schools.

NOTE: These Guidelines may be reproduced for wide use both within your schools and the community.

SOURCES OF INFORMATION

The following pamphlets may be received from the Government Printing Office, Washington, D.C. 20402:

Drugs of Abuse—Reprint from July-August issue of FDA papers. 20c each.

LSD: The False Illusion—Reprint from July-August issue of FDA papers. 15c each.

Drugs and Your Body—FDA Pub. 52. \$1.00 each.

Handbook of Federal Narcotic and Dangerous Drug Laws—Bureau of Narcotics and Dangerous Drugs publication. 50c each.

Drug Abuse: Game Without Winners—Department of Defense. 50c each.

Community-Based Treatment Programs for Narcotic Addiction—Public Health Service publication. 5c each.

The Up and Down Drugs—Public Health Service, Publ. 1830. 5c each.

Marijuana: Some Questions and Answers—Public Health Service Pub. 1829. 5c each.

LSD: Some Questions and Answers—Public Health Service Pub. 1828. 5c each.

Narcotics: Some Questions and Answers—Public Health Service Pub. 1827. 5c each.

Traffic in Opium and Other Dangerous Drugs—Annual report of Narcotics and Dangerous Drugs. 40c each.

Narcotics and Drugs—A list of 58 publications concerning drugs from various government agencies that are sale items from the GPO. Single copy free.

Drug Dependence: Its Significance and Characteristics—Single copy free from Bureau of Narcotics and Dangerous Drugs, 1405 I Street, NW, Washington, D.C. 20537.

What You Should Know About Drugs and Narcotics—Associated Press, 50 Rockefeller Plaza, New York, N.Y. 10020. \$1.00 single copy.

Drug Abuse Education: A Guide for the Professions—American Pharmaceutical Association, 2215 Constitution Ave., NW, Washington, D.C. 20037. \$1.00 single copy.

The Courier—The UNESCO Magazine. May

1968 issues. UNESCO Publications Center, U.S.A. 317 E. 34 Street, New York, N.Y. 10016. Single copy 50c.

Drugs on the College Campus—National Association Student Personnel Administrators, International Inn, Suite 405, 5440 Cass Ave., Detroit, Michigan 48202.

What We Can Do About Drug Abuse—Public Affairs Pamphlet #390, Public Affairs Pamphlets, 381 Park Avenue South, New York, N.Y. 10016. Single copy 25c.

Drug Abuse: The Empty Life—Smith, Kline & French Laboratories, Bureau of Narcotics and Dangerous Drugs, 1405 I St., NW, Washington, D.C. 20537. Single copy free.

Behavioral Patterns in Sex and Drug Use on the College Campus—Sylvia Herz, Ph.D., in *The Journal of the Medical Society of New Jersey*, January 1970.

"Drug Menace: How Serious"—*U.S. News and World Report*, May 25, 1970; pp. 38-42.

Drug Facts—Booklet produced by AT & T, April 1970. Copies available through Public Relations Dept. Western Electric Company, Newark, New Jersey.

CENTERS AND REFERRAL AGENCIES

Odyssey House, 642-6550, 61 Lincoln Park, Newark, New Jersey. Eighteen-month psychiatrically oriented therapeutic community for the treatment and prevention of drug addiction; staff is a combination of professionals and ex-addicts working cooperatively.

Mt. Carmel Guild Program, 623-5313, 9 South Street, Newark, New Jersey. Has 2 programs: one for the older addict and one for the teen-age addict.

N.J. Rehabilitation Commission Project for Drug Addicts, 648-2765, 19 No. Harrison Street, East Orange, New Jersey. Under the State Department of Labor and Industry.

DARE (Drug Addict Rehabilitation Enterprise), 642-7411, 211 Littleton Avenue, Newark, New Jersey. Self-help enterprise: program provides follow-up on the addicts for 5 years after they leave. Speakers are available.

The New Well, 242-0715, 173 Belmont Avenue, Newark, New Jersey. Reentry program for ex-addicts. Speakers are available.

Integrity, Inc., 642-9287, 45 Lincoln Park, Newark, New Jersey. Re-entry house for ex-addicts. Private program.

Liberty House, 624-8421, 2, 481-3220, 154 Broadway, Newark, New Jersey. Essex County Outreach Centers of the N.J. Regional Drug Abuse Agency. Speakers are available.

N.J. College of Medicine and Dentistry, Drug Abuse Clinic-Martland Hospital, 643-880, Ext. 713, 714, 65 Bergen Street, Newark, New Jersey. Will provide speakers and classes for teachers, parents and students with a pre-arranged fee.

Family Service and Child Guidance Center, 675-3817, 115 So. Munn Avenue, East Orange, New Jersey. Agency serves the Oranges, Maplewood and Millburn. Several aspects of the center's operations are in the area of drug abuse; counseling provided.

Church of the Holy Communion, 763-2355, So. Orange Avenue and So. Ridgewood Road, South Orange, N.J. A new service. The Church is sponsoring an office of the Pastoral Counseling Service of Northern New Jersey; a non-sectarian, non-profit corporation passed on by the N.J. Department of Institutions and Agencies. Service provides resources for counseling, referrals, education and training under the supervision of pastoral counselors. There are no geographical, creedal, ethnic or racial restrictions. Fees are determined on consideration of income and number of dependents.

Day Care, 675-1554, 49 So. Munn Avenue, East Orange, New Jersey. A private community day treatment mental health center for people emotionally ill as an alternative to hospitalization. There is provision for drug-oriented individuals.

Prospect House, 674-8067, 214 Prospect Street, East Orange, New Jersey. A commu-

nity service agency. For young people who have been hospitalized and after care service—includes those of the drug subculture.

DICKEY-LINCOLN SCHOOL POWER PROJECT NEEDED

Mr. MUSKIE. Mr. President, we in Maine repeatedly see our efforts to establish a public power project in New England rebuffed by private power interests. The current crisis in New York should underscore the error in the private companies' contention that they can produce enough power. The Lewiston Evening Journal spelled out the need for the Dickey-Lincoln School project explicitly in an editorial published on July 30. I ask unanimous consent that the editorial be printed in the RECORD.

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

HOT WEATHER AND DICKEY

This hot weather certainly is emphasizing the problems some of the heavily populated areas along the eastern seaboard are having with respect to procuring sufficient electrical power. Right along the private power companies in this region and some of their congressional stooges have insisted that private power alone can meet the demand for power. This has been the gist of their basic argument against the Dickey-Lincoln School federal power proposal.

We wonder if these unyielding opponents of Dickey feel rather uncomfortable when reports of power problems come in as they have during the current heat wave.

If there is no need for a project like Dickey, how is it that New York's mighty Consolidated Edison Co. had to request Tuesday that major buildings users cut back on the use of air conditioners to reduce voltage and to purchase more than a million kilowatts from sources outside the city?

If Dickey is a lot of foolishness and uneconomical, as opponents claim, why is it that the New England Power Exchange, made up of the region's private utilities, had to reduce voltage by 5 per cent Tuesday, and in some instances on Monday as well? Wouldn't some power from a hydroelectric source such as Dickey have been a valuable resource these past few days?

We suggest New England and Middle Atlantic state citizens might give some thought to these questions. If they do so they may conclude their congressmen should be voting for rather than against Dickey.

CARLESS TOKYO

Mr. MATHIAS. Mr. President, with the air pollution in our own cities at such a high level in the last week, we may have lost sight of the international scope of the problem. President Nixon spoke of this in his news conference of July 30, 1970.

The people of Tokyo were among the worst sufferers from the thermal inversion. Last Sunday, as a result of their experience with the smog, the idea of making parts of Tokyo temporarily carless gained wide acceptance.

I ask unanimous consent that articles published in the Baltimore Sun and the Washington Post on August 3 describing that event be printed in the RECORD.

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

CARLESS GINZA DISTRICT IS A HIT IN TOKYO

(By Thomas Pepper)

TOKYO, August 2.—At 1 P.M. cars were banned from the main street of the Ginza shopping district here, and by 1:05 workmen had set up potted plants, beach umbrellas, makeshift sidewalk cafes and ice cream stands. Then hordes of people began to swarm onto the street.

The occasion was this city's first attempt at removing all cars from certain shopping districts on Sundays and holidays, and, except for a few grumblers who complained that Tokyo was simply copying New York, the idea was taken up with a vengeance.

FIRST ATTEMPT

At the Ginza, Tokyo's most fashionable shopping area, bikini-clad girls handed out cool washcloths, television cameramen interviewed passers-by, mothers wheeled their babies down the street in strollers, bands played and someone arranged for a traditional-style folk-dance. Banners overhead proclaimed the day a "Holiday Purominado", or "Holiday Promenade."

Although virtually every Japanese city has its own covered shopping arcade, where cars and motorcycles have always been forbidden, today's festivities marked the first attempt to ban cars from a major thoroughfare in Tokyo.

Four separate shopping areas were affected. Besides Ginza, they were Shinjuku, a satellite railroad junction famous for department stores, bars, and hippies; Ikebukuro, another railroad junction with slightly less fashionable stores and bars, and Asakusa, once the most successful night-life area in Tokyo, but now a bargain-basement style market for blue-collar workers and farmers.

Ryokichi Minobe, Tokyo's governor, first proposed the auto ban last spring, but could not get merchants and department stores executives to go along with it; they feared a drop in sales.

POLLUTION HELPED

The idea suddenly caught on a few weeks ago, when muggy summer weather accentuated the air pollution and when New York city's "Carless Sundays" received wide publicity on Japanese television. A congratulatory message from Mayor John V. Lindsay was published in this morning's *Asahi Shimbun*, Japan's largest newspaper.

Like other fads that are picked up in Japan, the idea of an auto ban has been described and pored over in endless detail.

Newspapers published maps showing not only the streets to be blocked off, but also the exact numbers of square meters of pavement affected and air pollution meters, calculated to register the amount of carbon monoxide on the carless streets, were set up in the full view of pedestrians. Accompanying charts gave an hour-by-hour reading, complete with comparisons of earlier readings taken when cars were permitted.

Police said that as many as 20 times the normal number of Sunday shoppers roamed the four carless areas today, and pollution officials said that the carbon monoxide level was less than half the normal amount.

TOKYO CURBS THE CAR, BEATS THE SMOG

TOKYO, August 2.—Tokyo closed 122 of its busiest streets to cars today, and for a short while part of the world's most populous city was free of the exhaust fumes that have plagued it recently.

Tokyo's anti-pollution campaign took on a carnival air as thoroughfares in four important shopping districts were cleared of traffic and turned over to throngs of pedestrians for a few hours.

It was part of Tokyo Gov. Ryokichi Minobe's campaign to show the 11.5 million residents what life could be like without the

noise and stench of the internal combustion engine.

The experiment will be repeated every Sunday and public holiday for an indefinite period. Sunday is normally a busy shopping day here.

The improvement in the air was dramatic. Meters recording carbon monoxide levels nosedived, and for a few minutes in the West Tokyo area of Shinjuku the needle rested on zero.

In the world-famous Ginza shopping and entertainment district of downtown Tokyo, the pollution level dropped to two parts per million—about half the normal 4 p.m. Sunday reading.

Although no recordings were made in two other heavily traveled areas of the city, Ikebukuro and Asakusa, the air was reported to be less smelly than usual.

Their eyes, throats and noses punished by weeks of stinging smog, Tokyo residents responded enthusiastically to today's experiment.

About 750,000 people were reported by police to have thronged the traffic-free streets.

In Ginza, they sat in temporary sidewalk cafes, were offered cold wet towels and free ice cream by bikini-clad girls and watched a folk dancing troupe from southern Japan. Police said crowds at some places were 20 times greater than usual.

The Mitsukoshi department store said it had 200,000 shoppers, compared with a usual Sunday figure of 130,000. Sales ran 50 percent ahead of the usual figure, store officials said. Officials at the Matsuya department store said that "sales are just about like Christmas."

The store estimated that it had 160,000 visitors. Ginza's third big department store, Matsuzakaya, said sales were 35 per cent ahead of normal for Sunday.

In Shinjuku, the promenaders became entangled in a march by two rival left-wing student factions who converged on the same spot for a fund-raising drive. Police watched from the sidewalk, but there was no trouble.

Signs proclaiming "Shinjuku Beautiful Day" sprouted on stores along the street, where business was reported better than ever. Ginza merchants vetoed a similar street closure last year because they feared it would damage business.

Minobe told newsmen tonight he hoped the next step would be to extend the street closure to Saturdays and then perhaps for limited periods during the week.

Meanwhile, Tokyo's antipollution police squads will be back in action Monday stopping vehicles throughout the city for spot checks on exhaust emission.

New regulations in force since yesterday allow a carbon monoxide density of up to 4.5 per cent in vehicles less than a year old and 5.5 per cent in those older.

Two hundred drivers have already been instructed to repair their vehicles or face a fine of up to 30,000 yen (\$85).

MILITARY SPENDING

Mr. GOLDWATER. Mr. President, on Friday, July 31, my friend the distinguished Senator from Oregon (Mr. HARTFIELD) placed in the RECORD some 25 pages of summary from a 150-page report on military spending. It was explained that the report was a product of an organization called Members of Congress for Peace Through Law and was prepared by more than 25 Senators and Representatives.

Mr. President, I believe we are all acquainted with this organization and its long and exhaustive list of criticisms of the Defense Establishment which it reported in the last session of Congress.

This year, as last year, I am impressed with the enormous amount of research and effort that went into its preparation. I also surmise that the 150-page report must have been a highly expensive project.

Be that as it may, I find in this truly outstanding piece of work many misstatements of the fact and numerous dangerous and faulty conclusions about our Military Establishment and various weapons systems maintained by it. In the days ahead I plan to direct my attention to various portions of this report to highlight for Congress and the public some of its major deficiencies. Today, I merely wish to announce my complete and thorough disagreement with the report's conclusion that some \$8 to \$13 billion can be cut from administration defense requests for the current fiscal year. Today, also, I would like to devote some attention to a portion of the summary entitled "Economics and Defense Spending."

Mr. President, quite predictably this critical report places almost every economic ill in this Nation at the door of defense spending. It insists that military spending is not only the major cause of inflation but is itself a major victim in terms of increasing the cost of its own operations. This is a popular theory which almost completely ignores the fact that nondefense spending played an even greater role in the development of inflation. I should like to point out, Mr. President, that immediately after World War II, the Military Establishment was largely dismantled and outlays fell precipitously from \$80 billion in 1945 to between \$12 and \$13 billion annually from 1948-50. This unilateral disarmament was one of the causes of the Korean action which shot defense costs up to \$50 billion in 1953. Since that time—that is between 1953 and fiscal year 1971 as proposed by the President—defense expenditures increased 49 percent—approximately equal to the simultaneous rate of price rise. Spending for health, education, welfare, and labor increased 944 percent, for all other functions 182 percent.

More than half of the \$129 billion increase in Federal expenditures between 1953 and 1971 was applied to social purposes, less than one-fifth to defense. Defense meanwhile shrank from 64 percent of the Federal budget to 36 percent, from 13.6 percent of gross national product to about 7.2 percent.

In other words, the share of Federal revenues and of the gross national product allocated to national defense has been cut almost in half since 1953. Most of the huge savings were applied to social purposes, and of these education was one of the main gainers.

From this it is easy to see that the cause of price inflation today is not something that can be blamed exclusively on military expenditures.

Mr. President, I ask unanimous consent to have printed in the RECORD a study of my own which I had conducted into the subject of "Defense Expenditures, Inflation, and the 'Peace Dividend.'" I ask unanimous consent to have printed in the RECORD a table showing

national defense outlays as expressed as a percentage of total budget outlay and as a percentage of the gross national product.

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

DEFENSE EXPENDITURES, INFLATION, AND THE "PEACE DIVIDEND"

The Vietnam war and miscalculations in estimating its costliness and adjusting federal tax and expenditure policies accordingly contributed, along with other expanding government programs, to increasing deficits in the federal budget, starting in 1966. President Johnson, in his Budget Message of January 1967, proposed a temporary 6 percent surcharge on individual and corporate income taxes, to take effect on July 1, 1967. As the pace of economic expansion accelerated, the President renewed the request for a temporary 10 percent surcharge in January 1968. The Congress finally approved a temporary surcharge in June 1968. By that time the government faced a fiscal 1968 deficit of over \$25 billion.

It would be entirely wrong, however, to attribute the total increase in federal spending, the deficits in the budget, and the accelerating inflation after 1965 solely to the increase in military spending. Actually federal spending in non-military areas was increasing rapidly, as was private civilian demand, particularly business expenditures for plant and equipment. It was the increases in total demand, both government (civilian and military) and private demand, placed upon an economy operating at full employment that caused accelerating inflation. As the present Assistant Secretary of the Treasury for Economic Policy, Dr. Murray L. Weidenbaum, stated before the Joint Economic Committee in 1967: "The basic explanation [for the accelerated price rises] would appear to be . . . that the increases in government civilian and military demand, coupled with the continued expansion in business expenditures for new plant and equipment, exceeded the capacity of the economy to supply goods and services in 1966 at then current prices."

Former Chairman of the Council of Economic Advisers Arthur M. Okun stated in April 1968, in a speech at the National Press Club in Washington: "The upswing in demand since 1967 has produced our present disturbing 4 percent rate in price increases."

Another former Chairman of the Council, Dr. Gardner Ackley, who preceded Dr. Okun, pointed out in a speech to the 74th Congress of American Industry, sponsored by the National Association of Manufacturers, in New York, December 5, 1969: "To be sure, most inflations are touched off by an increase in aggregate demand that puts too much pressure on productive resources."

Dr. Arthur F. Burns, Chairman of the Federal Reserve Board, commented on inflation before the American Bankers Association in May 1970. He pointed out:

What are the sources of the inflationary bias that is presently troubling us? On a first view, the root of the difficulty seems to be the broadening of the social aspirations that have been shaping our national economic policies, and especially the commitment to maintain high levels of employment and rapid economic growth. . . .

Another source of inflationary pressure in recent years has been the rise of governmental expenditures for social welfare. The consequences for the Federal Budget in the United States have been dramatic. Since fiscal year 1965, Federal expenditures for health, income security, veterans' benefits, education and manpower, and community development and housing have more than doubled. . . .

The present world-wide inflationary trend may thus be ascribed to the humanitarian impulses that have reached such full expression in our times.

TRENDS IN FEDERAL EXPENDITURES

It is significant to note that, since fiscal year 1965, social welfare expenditures in the federal budget have more than doubled.

The data in the following table and the two charts illustrate what has been happening with respect to federal expenditures, both military and otherwise, and the growth of the economy. As the table shows, total expenditures of the federal government have risen as a percentage of total economic out-

put (GNP) from 17.3 percent in 1965 to an estimated 21 percent in 1970. Both defense and non-defense expenditures have been rising, but non-defense expenditures have risen at a more rapid rate than defense expenditures. In 1965, defense expenditures accounted for 7.1 percent of GNP. After a rapid acceleration up to 8.3 percent in 1968, it is estimated they will decline slightly and account for about 8.3 percent of GNP in 1970. Non-defense federal expenditures rose rather steadily from 10.2 percent of the GNP in 1965 to 12.7 percent in 1970. Non-defense expenditures thus took an additional 2.5 percentage points of GNP during this period

while defense expenditures accounted for only an additional 1.2 percentage points. Thus, of the increased amount of GNP represented by federal expenditures, those for non-defense purposes took twice as much as those for defense.

Also it is worth noting that military expenditures as a percent of total federal expenditures have declined from approximately half of total expenditures in 1960 to under 40 percent of total expenditures estimated for 1970. The exact reverse is true for non-military expenditures, which rose from 50 percent to 60 percent of total expenditures in the decade.

GROSS NATIONAL PRODUCT AND FEDERAL EXPENDITURES (CALENDAR YEARS 1960-70)

[Dollars in billions]

Calendar years	Gross national product	Total Federal expenditures (NIA basis) ¹	Total expenditures as percent of GNP	Defense			Nondefense		
				Expenditures (NIA basis) ¹	Expenditures as percent of GNP (NIA basis) ¹	Expenditures as percent of total Federal expenditures	Expenditures (NIA basis) ¹	Expenditures as percent of GNP (NIA basis) ¹	Expenditures as percent of total Federal expenditures
1960.....	\$503.7	\$91.3	18.1	\$45.0	8.9	49.3	\$46.3	9.2	50.7
1961.....	520.1	98.0	18.8	46.7	9.0	47.7	51.3	9.8	52.3
1962.....	560.3	106.4	19.0	50.5	9.0	47.5	55.9	10.0	52.5
1963.....	590.5	111.4	18.8	50.4	8.5	45.2	61.0	10.3	54.8
1964.....	632.4	116.9	18.5	50.9	8.1	43.5	66.0	10.4	56.5
1965.....	684.9	118.5	17.3	48.9	7.1	41.3	69.6	10.2	58.7
1966.....	749.9	131.9	17.6	54.4	7.3	41.2	77.5	10.3	58.8
1967.....	793.5	154.6	19.5	67.7	8.5	43.8	86.9	11.0	56.2
1968.....	865.7	172.4	19.9	75.8	8.8	44.0	96.6	11.1	56.0
1969.....	932.3	186.7	20.0	78.9	8.5	42.3	107.8	11.5	57.7
1970 (estimate).....	944.0	198.1	21.0	77.9	8.3	39.3	120.2	12.7	60.7

¹ National Income Accounts basis.

Source: Economic Report of the President, 1970, pp. 79, 177. Special Analyses, Budget of the United States, fiscal year 1971, p. 18.

The change in the composition of federal expenditures is even more dramatic. National defense and international affairs expenditures reached about 68 percent of total federal outlays back in fiscal 1953. They have been declining steadily ever since and are currently estimated at about 38 percent for fiscal year 1971. The Vietnam war expenditures only momentarily slowed the decline in this curve. However, social welfare expenditures have risen steadily as a percent of total outlays throughout the entire period since fiscal 1953. Even with the increased military expenditures for the Vietnam war taking place, social welfare outlays continued to rise year by year—though at a reduced rate from fiscal year 1966 until 1969, and then more rapidly.

There has been a changing position of federal expenditures for national defense and international affairs on the one hand and all domestic programs on the other. National defense and international affairs have declined rather steadily with only a slight interruption from 1965 through 1968, whereas domestic programs have continued to rise. By 1963, expenditures were divided about 50-50 between these two categories. In the fiscal year 1971, domestic programs will consume about 62 percent of total outlays and national defense and international affairs only about 38 percent.

MONEY SUPPLY TRENDS

The increase in government and private demand since 1965 was accompanied by

highly expansionary monetary policy, particularly in 1967 and 1968, that made the acceleration in prices possible by validating the demands of business, consumers, and government.

The Joint Economic Committee of the Congress, in its report, *The Federal Budget, Inflation, and Full Employment* in November 1969, stated: "When total money demands are rising sharply, a monetary policy that accommodates them in the face of limited supplies [of goods and services] means that prices will rise."

The situation was even more cogently summed up by Professor David Meiselman of Macalester College, in testimony before the Joint Economic Committee in October 1969:

"The current inflation is the result of excessive total spending for goods and services by both government and the private sector. Whatever may have been the merits of a cost-push explanation of other periods of inflation, there is now essentially unanimous support for the position that recent inflation has been the result of too much total demand.

"For most of the period between 1965 and 1968, the very time government expenditures were rising rapidly for both military and non-military purposes, the Federal Reserve followed a highly expansionary monetary policy as evidenced by the high rate of growth of the money supply, which, in turn,

led to a sharp increase in private expenditures as well. In fact, on the basis of historic norms, Federal Reserve actions alone (for example, the 7% to 8% sustained increase in the money supply, currency and demand deposits, in 1967 and 1968) would have caused inflation even if government spending had not increased so sharply or if the government spending had been matched by enough of an increase in tax rates between 1966 and 1968 to have maintained balance in the high-employment budget, instead of the 15 billion dollar deficit that evolved by mid-1968 from rough balance in the high-employment budget two years earlier." [Emphasis added.]

The accompanying table illustrates the close correlation between changes in the money supply (currency in hands of non-banking public, plus demand deposits) and changes in prices. The rapid growth in money supply in 1967 and 1968 resulted in rapidly rising prices by 1968. The relationship is even clearer when groups of annual data are compared. For example, in the period 1955-65, money supply grew at an average annual rate of 2.1 percent and prices rose at an annual rate of 1.6 percent. In the decade 1960-69, money supply increased at average annual rates of 3.9 percent, prices at annual rates of 2.4 percent. In the final half of the decade of the 1960s, money supply grew at a 4.6 percent annual rate and prices at a 3.8 percent rate.

MONEY SUPPLY AND PRICES

	Money supply ¹	Annual rate of change	Consumer price index	Annual rate of change		Money supply ¹	Annual rate of change	Consumer price index	Annual rate of change
1955.....	135.2		93.3		1964.....	159.3	4.0	108.1	1.3
1956.....	136.9	1.3	94.7	1.5	1965.....	166.7	4.6	109.9	1.7
1957.....	135.9	-.7	98.0	3.5	1966.....	170.4	2.2	113.1	2.9
1958.....	141.2	3.9	100.7	2.8	1967.....	181.7	6.6	116.3	2.8
1959.....	142.0	.6	101.5	.8	1968.....	194.8	7.2	121.2	4.2
1960.....	141.1	.6	103.1	1.6	1969.....	199.6	2.5	127.7	5.4
1961.....	145.5	3.1	104.2	1.1	1955-65.....		2.1		1.6
1962.....	147.5	1.4	105.4	1.2	1960-69.....		3.9		2.4
1963.....	153.1	3.8	106.7	1.2	1965-69.....		4.6		3.8

¹ Currency in hands of nonbanking public plus demand deposits adjusted.

Source: Economic Indicators, prepared for the Joint Economic Committee by the Council of Economic Advisers.

In December 1968, the Federal Reserve began slowing the money supply growth from an annual rate of over 7 percent that prevailed in the last half of 1968. Money supply grew at an annual rate of only 4.4 percent in the first half of 1969 and then, from June 1969 through the end of the year, there was almost no increase (0.6 percent at annual rates). In the first half of 1970, the money supply has been allowed to grow at a little over a 4 percent rate.

Coupled with this sharp reduction in money supply growth since the end of 1968, the budget has been brought into approximate balance. From a deficit of \$25.2 billion in fiscal year 1968, the budget had a surplus of \$3.2 billion in fiscal 1969. The results of this change of monetary and fiscal policy have removed excess demand and begun to slow the rate of inflation. But it will take some time to get back to the moderate rates of increase in consumer prices we experienced in the early 1960s.

To refer again to Dr. Gardner Ackley in his December 1969 speech to the Congress of American Industry, he stated:

"An inflation develops a momentum which

makes it extremely difficult to stop. I fear that the present inflation has such a momentum and that the slowing down of price increases will be more gradual than we wish and more gradual than many seem to think.

"In my view, we will be lucky to get the rate of increase in the GNP deflator much below 4 per cent by the end of 1970; but it should continue to decline thereafter even with a new pickup in the pace of economic activity."

He went on to add: "... Let's be sure we learn our lesson from this time. Let's be sure not to permit an inflationary spiral to get started again, through mistakes of fiscal or monetary policy. We must learn to use fiscal policy more flexibly than we have used it in recent years."

THE "PEACE DIVIDEND" OR USES OF NATIONAL OUTPUT

Much has been said about a so-called "peace dividend" that will provide resources for various domestic programs, assuming reduced Vietnam hostilities permit substantial further cuts in defense expenditures. Obviously substantial cuts in military ex-

penditures might, in the short run, free up some funds to be used elsewhere. However, given the growth of other existing federal programs and the probable size of further defense cuts, such funds could well be insignificant amounts.

The Council of Economic Advisers, in the Economic Report of the President, 1970, projected potential full employment output for the economy through 1975 and balanced this with claims on this output by the federal government, state and local governments, and the private sector of the economy. With respect to federal expenditures, the Council assumed only the costs of existing federal programs and new programs already proposed by the administration. The private economy was estimated on the basis of incomes available to individuals under a full employment economy, assuming the present tax laws and a savings rate of about 6.5 percent of personal disposable income. State and local spending was estimated on the basis of expected population growth to 1975 and growth in GNP. The following table, stated in 1969 prices, illustrates the tightness of the situation over the next five years.

GROSS NATIONAL PRODUCT, 1969, AND PROJECTIONS FOR 1970-75

[Billions of dollars, 1969 prices; calendar years]

Claim	1969, actual	Projections					
		1970	1971	1972	1973	1974	1975
Gross national product available.....	932.3	944	980	1,042	1,103	1,150	1,200
Claims on available GNP.....	932.3	944	980	1,042	1,100	1,144	1,188
Federal Government purchases.....	102.0	93	89	88	87	87	86
State and local government.....	112.7	116	120	125	131	137	142
Personal consumption expenditures.....	576.0	594	620	654	704	735	769
Gross private investment.....	141.7	141	152	166	178	186	192
Business fixed investment.....	99.3	103	106	111	116	120	125
Residential structures.....	32.2	29	34	40	46	49	49
Other investment.....	10.1	10	14	15	16	17	18
Excess of claims.....	0	0	0	0	-3	-6	-12

Note: Projections are based on projected Federal expenditures (see table 14) and their influence on various components of GNP. Detail will not necessarily add to totals because of rounding.

Source: Council of Economic Advisers, Economic Report of the President, 1970, p. 79.

As explained in the Economic Report of the President, 1970, the data are "... sufficient here to show that the existing, visible, and strongly supported claims already exhaust the national output for some years ahead. This is not to say that no other claims will be satisfied, or that claims included in these calculations should have preference over claims not recognized here. The basic point is that if other claims are to be satisfied some of those recognized here will have to be sacrificed."

Developing this same point related specifically to the Federal budget, Assistant Director of the Budget Maurice Mann, in a paper delivered to the American Statistical Association in New York on May 1, 1970, pointed out that:

The projections in the fiscal 1971 budget indicate that Federal revenues will increase by \$64 billion during fiscal years 1971-1975—from \$202 billion to 266 billion—and that outlays will increase by roughly \$44 billion—from \$200 billion to \$244 billion. The outlay projections take into account the 1975 cost

of current programs and the initiatives proposed by the President in the 1971 budget, as well as planned program savings.

A quick calculation shows that \$22 billion is the residual amount in fiscal 1975 between projected outlays and revenues. In other words, \$22 billion would be the amount available in the budget in 1975 if there are no new initiatives in the 1972, 1973, or 1974 budgets—no major program cancellations or reductions, no other new programs, no changes in the tax laws, and no surpluses to help reduce strains on financial markets. This is highly unlikely. Moreover, it is also unlikely that all the assumptions on which the projections are based will turn out to be accurate. There is no question but that \$22 billion is only a nominal amount of funds to accommodate the demands being placed on the Federal Government. Moreover, no excess funds will be available in fiscal 1972, largely reflecting the fact that the second-year costs of 1971 initiatives are relatively great and that revenue growth will be somewhat less than normal."

Chairman Paul W. McCracken of the Council of Economic Advisers, testifying last month before the Joint Economic Committee, brought home the same point.

"The recovery of the economy added to its normal growth will greatly increase the revenue-yielding base. But what is truly amazing is the extent to which this increase is already committed, by tax reductions scheduled under the 1969 Act and by a seemingly irresistible flood of expenditure increases built into existing legislation. The dominant, persistent budgetary problem of our time will be to hold expenditures in line with what the people are willing to pay for. We cannot afford to be diverted from that task."

In the light of these projections and statements and in the light of the cuts already made in the defense budget, it does not appear that there is much room for substantial new federal commitments for domestic programs to be realized from further reductions in military expenditures and without tax increases.

GROSS NATIONAL PRODUCT (GNP), AND U.S. GOVERNMENT TOTAL BUDGET OUTLAYS AND OUTLAYS FOR NATIONAL DEFENSE FUNCTION FOR FISCAL YEARS 1939 TO 1971

NATIONAL DEFENSE OUTLAYS ARE ALSO EXPRESSED AS A PERCENT OF TOTAL BUDGET OUTLAYS AND AS A PERCENT OF GROSS NATIONAL PRODUCT

[Dollars in billions]

Fiscal year	GNP	U.S. Government total outlays ¹	Outlays for National Defense Budget			Fiscal year	GNP	U.S. Government total outlays ¹	Outlays for National Defense Budget		
			Total	As percent of total budget	As percent of GNP				Total	As percent of total budget	As percent of GNP
1939	\$87.6	\$8.84	\$1.07	12.1	1.2	1945	\$216.8	\$98.3	\$81.3	82.7	37.5
1940	95.0	9.05	1.50	16.6	1.6	1946	201.6	60.3	43.2	71.6	21.4
1941	109.4	13.25	6.05	45.7	5.5	1947	219.8	38.9	14.4	37.0	6.5
1942	139.2	34.0	24.0	70.6	17.3	1948	243.5	33.0	11.8	35.8	4.8
1943	177.5	79.4	63.2	79.6	35.6	1949	260.0	39.5	12.9	32.7	5.0
1944	201.9	95.0	76.8	80.8	38.0	1950	263.3	39.5	13.0	32.9	4.9

Footnotes at end of table.

Outlays for National Defense Budget						Outlays for National Defense Budget					
Fiscal year	GNP	U.S. Government total outlays ¹	Total	As percent of total budget	As percent of GNP	Fiscal year	GNP	U.S. Government total outlays ¹	Total	As percent of total budget	As percent of GNP
1951	\$310.5	\$14.0	\$22.5	51.1	7.2	1962	\$542.1	\$86.6	\$51.1	59.0	9.4
1952	337.2	65.3	44.0	67.4	13.1	1963	573.4	90.1	52.3	68.0	9.1
1953	358.9	74.1	50.4	68.0	14.0	1964	612.2	95.8	53.6	55.9	8.8
1954	362.1	67.5	47.0	69.6	13.0	1965	654.2	94.8	49.6	52.3	7.6
1955	378.6	64.4	40.7	63.2	10.7	1966	718.5	106.5	56.8	53.3	7.9
1956	409.4	66.2	40.7	61.5	10.0	1967	771.0	126.8	70.1	55.3	9.1
1957	431.3	69.0	43.4	62.9	10.1	1968	827.6	143.1	80.5	56.3	9.7
1958	440.3	71.4	44.2	61.9	10.0	1969	900.6	148.8	81.2	54.6	9.0
1959	469.1	77.1	46.6	60.4	9.9	1970 ²	960.0	156.7	79.4	50.7	8.3
1960	495.2	74.9	45.9	61.3	9.3	1971 ²	* 1,010-1,015	154.9	* 73.6	47.5	7.3
1961	506.5	79.3	47.4	59.8	9.4						

¹ Total U.S. Government outlays for fiscal years 1939 through 1958 are based on the administrative budget basis. For fiscal years 1959 through 1971 total U.S. Government outlays are based on Federal funds included in the unified budget. The unified budget includes Federal funds and trust funds, whereas in the administrative budget trust funds were not included. Federal funds outlays in the unified budget and expenditures in the administrative budget concept, though not identical, are generally comparable. For more detailed data, see special analysis B of the special analyses, Budget of the United States, fiscal year 1971.

² Estimated amounts.

³ Estimate of gross national product for fiscal year 1971 is based on an assumed increased combined price increase and actual economic growth of approximately 5½ percent over the prior year.

⁴ While the estimated budget outlays for the national defense function are stated as \$73,600,000,

000, the Federal budget contains an estimated expenditure of \$1,400,000,000 for military and civilian pay increases, not included in the defense function referred to above. Military personnel and civilian employees of the Department of Defense represent approximately 75 percent of the total of military and civilian employees of the Federal Government. On this basis it might be assumed that approximately \$1,000,000,000 of the pay increase allowance of \$1,400,000,000 eventually will be accounted as national defense function outlays. If national defense outlays were \$76,600,000,000, they would represent 48.2 percent of total Federal funds and 7.4 percent of the estimated gross national product.

Sources: U.S. Bureau of the Budget, U.S. Department of Commerce.

DEDICATION OF ANNAPOLIS COAST GUARD STATION

Mr. MATHIAS. Mr. President, on Friday, the 26th of June, I was pleased to deliver the dedication address at the ceremonies opening the U.S. Coast Guard, Annapolis Station, in Anne Arundel County, Md.

In serving my country during World War II, the Coast Guard was my first home. It has been satisfying to note its progress over the years. The Annapolis Station, serving the Chesapeake Bay area, exemplifies this growth and the commitment of the Coast Guard to effectively serve those who go to sea.

In the years ahead the Coast Guard will be given additional responsibilities in the field of pollution control. I am confident that they will discharge these duties in the same competent manner that they have other duties in the past.

Joining me in dedicating the new facilities were Representative ROGERS C. B. MORTON, Adm. Merlin O'Neill, Adm. J. D. McCubbin, Rear Adm. E. C. Allen, State Senator John W. Steffey, Capt. L. A. Levine, the Reverend Joseph T. Hemighaus, and the Reverend Leslie L. Fairfield. These and so many others are to be congratulated for their support for this project over the years. The fine facilities reflect credit on their efforts.

I ask unanimous consent that the article by Ed Metcalfe, describing the events of that day, published in the Annapolis Evening Capital, be printed in the RECORD.

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

COAST GUARD DEDICATES ANNAPOLIS STATION (By Ed Metcalfe)

With small craft warnings in a lowering sky above and Sen. Charles Mc. Mathias offering praise below, the Coast Guard dedicated its new Annapolis Station yesterday.

The facility replaces the houseboat which served the Annapolis area, working from Vosbury Marina.

Capt. L. A. Levine, commander of Coast Guard Group Baltimore, presided at the dedication which opened with an invocation by the Rev. Joseph T. Hemighaus, assistant rector of St. Mary's Roman Catholic Church, Annapolis. Rear Admiral E. C. Allen, Jr.,

commander of the Fifth Coast Guard District, welcomed guests.

Some 300 guests, among them Rep. Rogers C. B. Morton, Sen. John W. Steffey, Delegates Aris Allen and William Mathews, representing Gov. Marvin Mandel, then listened as Senator Mathias said the "area of operations to be served by the new Annapolis station is the busiest area of water in the state and one of the busiest on the entire East Coast."

He noted that, while "commercial traffic has decreased by one-half in recent years, recreational boat traffic has risen by 800 percent."

He termed the facility one of the "busiest and most challenging duty stations on the coast," while tracing its growth from 1957 when the total station was one 40-foot utility boat with a crew of five to the new station, which has a fleet of six boats, a helicopter pad and a crew of 21.

Located off Thomas Point Road south of Bay Ridge, the new station will serve the Chesapeake Bay from Love Point to Chesapeake Beach.

A 10-acre site, the station has a multi-purpose main building which houses a mess, berthing, shops, garages and communications areas for the chief warrant officer and 21 enlisted men.

An entrance channel from the bay has been dredged for a distance of 3,000 feet, 50 feet wide, and is six feet deep. Navigational markings have been provided. A 160-foot pier has been constructed.

The communications center in the main building is conveniently concentrated in a console which permits the man on watch to guard both AM and FM marine frequencies. The antenna near the main building is 135 feet and is said to provide marked improvement in reception and transmission. There is also a teletype which is connected with similar equipment at all other Coast Guard stations within the group.

There are also two three-bedroom units for the station commanding officer and his executive petty officer. Several additional housing units are planned.

The station cost \$600,000. It was built by Dunton, Inc. of Annapolis, which built the station, and by Lexington Construction Co. of Annapolis, which built the housing.

Music for the event yesterday morning was provided by the Annapolis High School Band. Though officially on vacation, band members volunteered to play for the occasion.

Benediction was said by the Rev. Leslie L. Fairfield, assistant minister, St. Anne's Episcopal Church, Annapolis.

After the ceremony, guests were invited to tour the station and join the official party for refreshments.

LIKELY IMPACT OF PROPOSED MEDICAID CUTBACKS ON MENTALLY ILL OLDER AMERICANS

Mr. MUSKIE. Mr. President, as chairman of the Subcommittee on Health of the Elderly of the Senate Special Committee on Aging, I wish to express deep concern about section 225(a) of the social security amendments of 1970, as passed by the House of Representatives on May 21.

The title of section 225(a) is: "Establishment of Incentives for States To Emphasize Outpatient Care Under Medicaid Programs."

If this section lived up to its name, it would be worthy of support rather than rejection. Outpatient care, after all, is usually far less expensive than institutionalization and it is more beneficial to the patient when applied appropriately.

But, in the name of economy, section 225(a) could cause serious problems for those older Americans in need of care because of chronic illness. It would put heavy economic pressure upon State government, which would—in all likelihood—be forced to lower the quality of care available to the elderly. And it would deal a crippling blow to the usefulness of Medicaid for those most in need of its protection.

My colleagues from the Special Committee on Aging—Senators WILLIAMS of New Jersey, MOSS, HARTKE, and PROUTY are addressing their remarks to the potential impact of 225(a) on nursing homes, general hospitals, home health programs, and the health care for the elderly in rural areas.

My remarks will deal primarily with a proposed cutback in care for those older Americans in mental institutions. The Federal matching would be reduced by one-third after a patient has received 90 days' care; Federal funds would be completely eliminated after a patient had received 275 days of care.

This would mean an estimated loss of \$500,000 for my own State of Maine. Significantly, mental health services will suffer the greatest blow—somewhere in the neighborhood of \$250,000 to \$300,000.

Section 225(a) simply does not take into account the special problems and

needs of the elderly patient population in mental institutions.

The National Institute of Mental Health reports that in 1968 there were 775,000 persons aged 65 and over residing in institutions, or 4 percent of the total elderly population. Of these, 135,000 were in psychiatric institutions; the majority in State and county mental hospitals—15.5 percent—and 1.6 percent in VA hospitals, and under 1 percent in private mental hospitals.

In a paper delivered before the 1970 summer institute for advanced study in gerontology at the University of Southern California this July, Dr. Richard Redick, of the biometry branch, National Institute of Mental Health, said:

If one talks about the institutionalized aged population with mental disorders, rather than the aged population in mental institutions, then a minimum estimate of the total mentally ill aged in institutions would be 365,000 or almost half the total institutionalized population.

The National Institute of Mental Health has reported the results of studies showing that anywhere from 15 to 25 percent of elderly individuals living in their own residences also suffer from some degree of mental impairment. A minimum of 8 percent of this group are known to be severely impaired.

Mr. President, if States face a decrease in Federal matching for care of such patients in mental hospitals of 33½ percent after a 90-day stay, the result may very well mean a reinstatement of the backward "snakepit" treatment of the 19th century. Or, State hospitals may discharge elderly patients to "alternate care" facilities on a wholesale level. And what are these "alternatives"?

Foremost among likely placement categories for elderly discharged mental patients are nursing homes. But another provision of section 225(a) limits Federal matching funds for skilled nursing care for medicare patients to 90 days.

Medicaid patients are already being turned away by some nursing homes which cannot afford to give quality skilled nursing care at the present level of Federal support.

What is the other "alternative?"

The community?

Where 62 of the 165 operating community mental health centers face a denial of Federal funds?

Where the lack of trained geriatric personnel in outpatient hospital clinics makes a mockery of such care to the older population?

Where boarding homes run by well-intentioned but untrained sponsors house sick, lonely old people?

Where mentally impaired older persons wander the streets, confused and frightened, open to mugging and attack?

A boarding home, no matter how clean, spacious and well-run, does not provide the kind of treatment which allows for continued growth and rehabilitation. Home health aides are not trained to notice, or to treat, symptoms of disturbed behavior. Such symptoms—obvious to a geriatric psychiatrist, trained nurse or a geriatric social worker—are attributed to "senility" or just old age. Thus, the patient lapses back into his old behavior

and left more or less alone, his condition may worsen to the point where he returns again to the State hospital. He becomes, in effect, a body in the State hospital system—90 days here, 90 days there—never receiving the kind of treatment and care his condition requires. Ultimately, his treatment will cost the State and Federal governments thousands of dollars.

A well thought-out, coordinated system of mental health—providing intensive treatment in the State hospital, continued care in a nursing home, home for the aged, or in the community through accessible and well-staffed mental health centers—would be a far more realistic, humane, and less costly solution to his problems than the proposed section 225 (a) cutbacks.

Mental illness experienced by older people is usually not of short duration. Mental disorders among the elderly are also often closely linked with physical illness. Moreover, limited and inadequate income makes it impossible for most older Americans to avail themselves of expensive private psychiatric services in the community. Additional difficulties such as inadequate transportation, fear and embarrassment at being treated for mental illness, and an increasingly isolated life-style, create further obstacles to community mental health care for this population group. This can be verified by the fact that even though 15 to 25 percent of older persons living in their own homes are known to be suffering from some degree of mental disorder, only 2 percent of the older population utilizes outpatient mental health facilities.

Perhaps the heading of section 225—"establishment of incentives for States to emphasize outpatient care under medicare"—has meaning for younger persons who have the mobility and good physical health to make use of existing outpatient facilities. But, considering the facts and figures about mental illness and the elderly, it would appear that this section is misleading and I believe, punitive, for the older members of our population.

President Nixon has urged us to eliminate "outmoded and nonessential Federal programs" in order to "save" \$2.5 billion during the next fiscal year by eliminating or changing programs which he called "obsolete, low priority, or in need of basic reform."

The "alternatives" which exist today to psychiatric hospitalization are clearly inadequate—and if the stipulations in the social security amendments are allowed to stand, I shudder to think of future "alternatives."

During the past 10 years, State hospitals have been actively rehabilitating patients and many have been discharged to the community. However, hospitals have experienced great difficulties in finding adequate placement for this older patient group—many of whom have completely lost family ties and friendships. The community they return to after 10 to 20 years in a State hospital is a very different place from the one they left years before. This patient needs some form of continuing care, even after he leaves the hospital.

While I agree that the medicare program is in need of basic, constructive reform, I see section 225(a) as a move toward retrenchment rather than reform. I do not believe we can draw an arbitrary line between long term care and intensive treatment for the elderly. Mental illness among older persons often requires long term medical and psychiatric care. And, I can hardly agree that the provision of quality mental health care to elderly Americans is a "nonessential program." I would also question whether such care constitutes a low-priority program.

Mr. President, we must be especially careful, lest we "throw the baby out with the bath" in reforming medicare. For if we cut back funds to States for desperately needed services without considering the effect on every segment of the population, that is exactly what we will be doing.

CONCLUSION OF MORNING BUSINESS

The PRESIDING OFFICER (Mr. LONG). Is there further morning business? If not, morning business is concluded.

ORDER FOR ADJOURNMENT UNTIL 10 A.M. TOMORROW

Mr. BYRD of West Virginia, Mr. President, I ask unanimous consent that when the Senate completes its business today, it stand in adjournment until 10 a.m. tomorrow.

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

ORDER FOR ADJOURNMENT FROM TOMORROW UNTIL FRIDAY, AUGUST 7, 1970, AT 10 A.M.

Mr. BYRD of West Virginia, Mr. President, I ask unanimous consent that when the Senate completes its business on tomorrow, it stand in adjournment until 10 a.m. on Friday next.

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

ORDER FOR RECOGNITION OF SENATOR BAYH TOMORROW MORNING AND FRIDAY MORNING

Mr. BYRD of West Virginia, Mr. President, I ask unanimous consent that, immediately upon the disposition of the reading of the Journal on tomorrow morning, and on Friday morning next, the able Senator from Indiana (Mr. BAYH) be recognized for not to exceed 30 minutes on each day.

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

AUTHORIZATION OF APPROPRIATIONS FOR MILITARY PROCUREMENT AND OTHER PURPOSES

The PRESIDING OFFICER (Mr. LONG). The Chair now lays before the Senate the unfinished business, which the clerk will state.

The legislative clerk read as follows:
H.R. 17123, to authorize appropriations during the fiscal year 1971 for procurement

of aircraft, missiles, naval vessels, and tracked combat vehicles, and other weapons, and research, development, test, and evaluation for the Armed Forces, and to prescribe the authorized personnel strength of the Selective Reserve of each Reserve component of the Armed Forces, and for other purposes.

The Senate resumed consideration of the bill.

Mr. BYRD of West Virginia. 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. BYRD of West Virginia. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

LEGISLATIVE BRANCH APPROPRIATIONS, 1971—CONFERENCE REPORT

Mr. MONTOYA. Mr. President, I submit a report of the committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 16915) making appropriations for the legislative branch for the fiscal year ending June 30, 1971, and for other purposes. I ask unanimous consent for the present consideration of the report.

The PRESIDING OFFICER (Mr. BURDICK). The report will be read for the information of the Senate.

The legislative clerk read the report. (For conference report, see House proceedings of July 29, 1970, page 26396, CONGRESSIONAL RECORD.)

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

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

Mr. MONTOYA. Mr. President, the Senator from Wisconsin (Mr. PROXMIRE) wanted to be heard before the conference report is adopted. He has been notified, and he will be here shortly.

Let me say at this time that the printed conference report on the legislative branch appropriation bill for fiscal year 1971 is available for examination by all Senators.

Briefly, Mr. President, the conference figure agreed to for the overall bill is \$413,054,220. This sum is \$835,433 under the Senate bill and \$66,404,990 over the House bill; but, as Members know, the House bill did not contain the Senate items, which is customary procedure. These totaled \$65,499,464, which included appropriations for the Senate Office Buildings, the Senate Garage, a reappropriation of \$125,000 for completion of the speech reinforcement system installation in the Senate Chamber, and the \$510,000 allowed in the Senate bill for the purchase of the Plaza Hotel property, with which the Members are already familiar. Nevertheless, the net conference figure is \$8,360,679 under the budget estimates submitted in the amount of \$421,414,899 for all items in the bill.

I believe this conference report reflects a reasonable compromise, Mr. President, and the changes are explained therein. However, the major reductions relate to the Legislative Reference Service of the Library of Congress and the General Accounting Office.

For the Legislative Reference Service, a compromise figure of \$5,178,000 was determined upon. This is \$108,800 below the Senate-passed bill and \$165,000 over the House-passed bill, and will permit the employment of 40 new personnel during the fiscal year for this Service.

For the General Accounting Office, the compromise reached was \$74,020,000, a decrease of \$730,000 from the Senate bill and an increase of \$308,000 over the House bill, and will allow an additional 200 new employees for the fiscal year.

If there are any questions, I shall be glad to respond to them.

Mr. BYRD of West Virginia. Mr. President, will the Senator from New Mexico yield?

Mr. MONTOYA. I yield.

Mr. BYRD of West Virginia. I want to express my appreciation for the good work that the Senator from New Mexico has done as chairman of the Senate conferees and also as chairman of the subcommittee.

May I say that the work assigned to the Senator and his subcommittee is rather a thankless task.

Yet, it is work that has to be done, and the Senator from New Mexico (Mr. MONTOYA) in his excellent manner has shown his usual diligence, his dedication to his work, and his fine grasp of the subject matter.

In my judgment, he is not only one of the Senate's best presiding officers—to which I shall now allude incidentally—but he is also one of the best Appropriations Subcommittee chairmen we have. I have had the occasion to observe and work with him on the Senate Appropriations Committee now for several years. I know of his tenacity and about the zeal with which he approaches his work. He does a superb job in every assignment. Members of the Senate recognize this. He has excellent relations with all members of the Appropriations Committee and of the Senate.

We like him. We have confidence in him. We respect his ability and integrity. Of equal importance he has good relationships with Members of the other body, in which he served ably before coming to the Senate. I think this is a combination of the things that are required to make a good chairman of an appropriations subcommittee. And it is the key to being an effective Senator.

I know of no subcommittee in which there is more work to be done than in an appropriations subcommittee. Certainly the Senator from New Mexico has shown by his handling of this and other difficult bills and conference reports that he is equal to any task that may be assigned to him at any future time in the Appropriations Committee on which he so ably serves and in which capacity his seniority is rapidly growing.

So, again, I want to commend and express my appreciation to the Senator from New Mexico. The people of the Na-

tion are indebted to the Appropriations Subcommittee chairman, (Mr. MONTOYA). Especially indebted are those of us in the Senate who daily recognize his good work, not only on this bill, which is of such importance to the Senate, but also with respect to all of the many committees and subcommittees on which he serves.

Mr. MONTOYA. Mr. President, I thank my friend, the Senator from West Virginia, for those very fine words.

I might say that I have enjoyed working with him. I have seen his great ability displayed in the Appropriations Committee as well as on the floor. He has been a very good tutor and a good influence for me.

I thank him and am most grateful for his remarks about my chairmanship of the subcommittee.

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

Mr. MONTOYA. I yield.

Mr. PROXMIRE. Mr. President, as a member of the Subcommittee on Legislative Appropriations, I commend the Senator from New Mexico. This is a difficult bill because every Member of the Senate and every Member of the House is involved in it and concerned about it. It affects our own operations.

I am especially concerned about this, however, because, as the Senator will recall, the Appropriations Committee recommended to the Senate \$35,000 for the beginning of an economic analysis operation by the Joint Economic Committee. The Senate increased that amount to \$50,000. We had demonstrated a beginning need for \$125,000 to make it effective.

The reason this is so important is that economic analysis including component cost-benefit studies is the only way in which we can wisely reduce spending and know what we are doing and know the economic effects of a better program and how to choose the one which will do the job for less money.

We have in the transportation area an option coming up on whether to extend very greatly the highway program at a cost of literally billions of dollars—some people estimate it will be over \$320 billion in the next 15 years—or of putting less emphasis on that aspect and more on mass transit. We have several other options that are available.

No economic analysis is likely to be made in the Congress, unless our Joint Economic Committee is given the capacity to conduct task studies. This is only one example of many, where this kind of capability could save literally billions.

I know that the Senator from New Mexico is aware of this problem. I know that he tried hard in the conference to get the \$50,000 that the Senate provided.

I am deeply disappointed that this figure had to be cut back. I thank the Senator. He did return with something. He did not revert to zero. The House provided nothing. The House was not aware when it first acted that the committee had asked for it.

I want to get this not on the basis of getting additional staff for our commit-

tee—that would be an inexcusable reason. I want to get it to make the information contained in this analysis available to Congress so that we can cut expenses in the future in the wisest way.

Mr. MONTROYA. Mr. President, we did try hard to sustain the Senate figure of \$50,000. Only after considerable argument and presenting the justification that the Senator from Wisconsin was an ardent watchdog and that he wanted to serve the interest of economy through this additional facility for investigation were we able to prevail upon the House to sustain the compromise figure of \$30,000.

We tried hard in conference to sustain the full figure of \$50,000.

I am aware that the Senator is making legislative history on this matter for presentation of perhaps a better figure for next year. If the Senator is able to prove to our satisfaction that the additional money will be expended for useful and productive purposes, we will be more than happy to look into any additional requests for the next fiscal year.

Mr. PROXMIER. Mr. President, I thank the Senator very much. It is my very conservative conviction that in the event adequate funds were provided, say altogether maybe a couple of hundred thousand dollars, for this kind of economic analysis of our programs, we could literally save billions of dollars a year. And I do mean billions of dollars a year. The payoff is not merely 100 to 1. It is 1,000 to 1, or more.

I know the Senator did as good a job as he could under the circumstances. I thank him. I am grateful for his open-mindedness to this kind of an appeal next year.

Mr. MONTROYA. Mr. President, I move the adoption of the conference report.

The PRESIDING OFFICER. The question is on agreeing to the motion of the Senator from New Mexico.

The motion was agreed to.

The PRESIDING OFFICER. The clerk will state the amendments in disagreement.

The legislative clerk read as follows:

Resolved, That the House recede from its disagreement to the amendment of the Senate numbered 23 to the aforesaid bill, and concur therein with an amendment, as follows: In lieu of the matter inserted by said amendment insert:

"INQUIRIES AND INVESTIGATIONS

"For expenses of inquiries and investigations ordered by the Senate, or conducted pursuant to section 134(a) of Public Law 601, Seventy-ninth Congress, including \$456,625 for the Committee on Appropriations, to be available also for the purposes mentioned in Senate Resolution Numbered 193, agreed to

October 14, 1943, \$7,341,580, including \$200,000, to be available for obligations incurred in fiscal year 1970."

Resolved, That the House recede from its disagreement to the amendment of the Senate numbered 32 to the aforesaid bill, and concur therein with an amendment, as follows: At the end of said amendment, add a new paragraph, as follows:

"For payment to Alice C. Kirwan, widow of Michael J. Kirwan, late a Representative from the State of Ohio, \$42,500, to be immediately available."

Resolved, That the House recede from its disagreement to the amendment of the Senate numbered 35 to the aforesaid bill, and concur therein with an amendment, as follows: In lieu of the sum of \$272,243 proposed by said amendment, insert "\$253,110."

Mr. MONTROYA. Mr. President, I move that the Senate concur in the amendments of the House to the amendments of the Senate numbered 23, 32, and 35.

The motion was agreed to.

Mr. MONTROYA. Mr. President, I ask unanimous consent to have printed in the RECORD a tabulation which gives the amount of the budget estimates, the amount of the House and Senate bills, and the final amount which has just been agreed to by the two Houses.

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

LEGISLATIVE BRANCH APPROPRIATION BILL, 1971 H.R. 16915

SUMMARY OF BILL

Table with columns: Item, New budget of new (obligational) authority, 1970, Budget estimates (obligational) authority, 1971, House bill, Senate bill, Conference action. Rows include: SENATE - Vice President and Senators, Salaries, officers and employees, Contingent expenses, Other, Senate.

Footnotes at end of table.

Additional text at the bottom of the page, including a page number '1738-7-70'.

Item	Budget estimates		House bill	Senate bill	Conference action
	New budget (obligational) authority, 1970	of new (obligational) authority, 1971			
HOUSE OF REPRESENTATIVES					
Gratuities, deceased Members.....	\$85,000		\$85,000	\$127,500	\$170,000
Salaries, mileage for the Members, and expense allowance of the Speaker					
Compensation of Members.....	20,121,000	*20,165,950	20,165,950	20,165,950	20,165,950
Mileage of Members and expense allowance of the Speaker.....	180,000	*200,000	200,000	200,000	200,000
Total, Members compensation and mileage.....	20,301,000	20,365,950	20,365,950	20,365,950	20,365,950
Salaries, officers and employees					
Office of the Speaker.....	151,850	163,490	163,490	163,490	163,490
Office of the Parliamentarian.....	163,175	163,175	163,175	163,175	163,175
Compilation of precedents of House of Representatives.....	14,540	14,540	14,540	14,540	14,540
Office of the Chaplain.....	19,770	19,770	19,770	19,770	19,770
Office of the Clerk.....	2,305,000	2,527,590	2,500,000	2,500,000	2,500,000
Office of the Sergeant at Arms.....	3,200,000	3,320,905	3,300,000	3,300,000	3,300,000
Office of the Doorkeeper.....	2,395,000	*2,602,615	2,575,000	2,575,000	2,575,000
Office of the Postmaster.....	688,770	720,645	720,000	720,000	720,000
Committee employees (standing roll).....	6,000,000	6,050,000	6,050,000	6,050,000	6,050,000
Special and minority employees:					
6 minority employees.....	182,885	188,730	188,730	188,730	188,730
House Democratic Steering Committee.....	60,350	60,350	60,350	60,350	60,350
House Republican Conference.....	60,350	60,350	60,350	60,350	60,350
Office of the majority floor leader.....	128,050	128,050	128,050	128,050	128,050
Office of the minority floor leader.....	118,560	118,560	118,560	118,560	118,560
Office of the majority whip.....	96,515	96,515	96,515	96,515	96,515
Office of the minority whip.....	96,515	96,515	96,515	96,515	96,515
2 printing clerks for majority and minority caucus rooms.....	18,745	20,630	20,630	20,630	20,630
Technical assistant, office of the attending physician.....	16,845	18,540	18,540	18,540	18,540
Official reporters of debates.....	357,015	357,015	357,015	357,015	357,015
Official reporters to committees.....	354,410	*438,885	438,885	438,885	438,885
Committee on Appropriations (investigations).....	1,015,000	*1,015,000	1,015,000	1,015,000	1,015,000
Office of the Legislative Counsel.....	488,995	526,000	526,000	526,000	526,000
Total, salaries, officers and employees.....	17,932,340	18,707,870	18,631,115	18,631,115	18,631,115
Members clerk hire					
Clerk hire.....	47,850,000	48,200,000	48,200,000	48,200,000	48,200,000
Contingent expenses of the House					
Furniture.....	240,000	307,000	300,000	300,000	300,000
Miscellaneous items.....	5,010,000	5,575,000	5,875,000	5,875,000	5,875,000
Government contributions.....	4,000,000	4,300,000	4,300,000	4,300,000	4,300,000
Reporting hearings.....	325,000	373,750	373,750	373,750	373,750
Special and select committees.....	6,900,000	6,800,000	6,800,000	6,800,000	6,800,000
Telegraph and telephone.....	3,650,000	3,920,000	3,650,000	3,650,000	3,650,000
Stationery (revolving fund).....	1,308,000	1,308,000	1,308,000	1,308,000	1,308,000
Postage stamp allowances.....	320,390	320,390	320,390	320,390	320,390
Revision of laws.....	38,000	38,000	35,000	35,000	35,000
Leadership automobiles:					
Speaker.....	15,750	15,750	15,750	15,750	15,750
Majority leader.....	15,750	15,750	15,750	15,750	15,750
Minority leader.....	15,750	15,750	15,750	15,750	15,750
New edition of the District of Columbia Code.....		150,000	150,000	150,000	150,000
New edition of the United States Code.....	150,000				
Total, contingent expenses.....	21,988,640	23,139,390	23,159,390	23,159,390	23,159,390
Total, House of Representatives.....	108,156,980	110,413,210	110,441,455	110,483,955	110,526,455
Joint items					
Joint Committee on Reduction of Federal Expenditures.....	55,000	61,000	61,000	61,000	61,000
Contingent expenses of the Senate					
Joint Economic Committee.....	511,640	542,900	542,900	582,900	572,900
Joint Committee on Atomic Energy.....	433,055	434,640	434,640	434,640	434,640
Joint Committee on Printing.....	228,030	236,110	236,110	272,243	253,110
Total, contingent expenses of the Senate.....	1,172,725	1,213,650	1,213,650	1,299,783	1,260,650
Contingent expenses of the House					
Joint Committee on Internal Revenue Taxation.....	607,715	657,715	657,715	657,715	657,715
Joint Committee on Defense Production.....	118,800	118,800	118,800	118,800	118,800
Total, contingent expenses of the House.....	726,515	776,515	776,515	776,515	776,515
Office of the attending physician					
Medical supplies, equipment, expenses, and allowances.....	70,800	77,300	77,300	77,300	77,300
Capitol police					
General expenses.....	134,000	134,000	134,000	134,000	134,000
Capitol Police Board.....	900,000	885,800	880,000	880,000	880,000
Total Capitol Police.....	1,034,000	1,019,800	1,014,000	1,014,000	1,014,000
Education of pages					
Education of congressional pages and pages of the Supreme Court.....	112,307	112,310	112,310	112,310	112,310
Official mail costs					
Expenses.....	10,161,000	12,066,000	11,244,000	11,244,000	11,244,000
Statements of appropriations					
Preparation.....	13,000	13,000	13,000	13,000	13,000
Total joint items.....	13,345,347	15,339,575	14,511,775	14,597,908	14,558,775
ARCHITECT OF THE CAPITOL					
Office of the Architect of the Capitol					
Salaries.....	881,000	*938,800	938,800	938,800	938,800
Contingent expenses.....	50,000	50,000	50,000	50,000	50,000
Total Office of the Architect of the Capitol.....	931,000	988,800	988,800	988,800	988,800

Footnotes at end of table.

LEGISLATIVE BRANCH APPROPRIATION BILL, 1971 H.R. 16915—Continued

SUMMARY OF BILL—Continued

Item	New budget (obligational) authority, 1970	Budget estimates of new (obligational) authority, 1971	House bill	Senate bill	Conference action
ARCHITECT OF THE CAPITOL—Continued					
Capitol Buildings and Grounds					
Capitol buildings.....	\$2,182,900	\$2,459,600	\$2,431,600	\$2,442,526	\$2,442,526
Reappropriation.....				125,000	125,000
Extension of the Capitol.....	2,275,000				
Capitol grounds.....	902,300	881,800	881,800	881,800	881,800
Senate office buildings.....	3,456,300	3,852,500		3,855,000	3,855,000
Extension of additional Senate Office Building site.....	1,250,000	510,000		510,000	510,000
Senate Garage.....	80,000	80,000		80,000	80,000
House office buildings.....	5,599,000	6,165,000	6,165,000	6,165,000	6,165,000
Acquisition of property, construction, and equipment, additional House Office Building (liquidation of contract authority).....	(107,000)				
Capitol Power Plant (operation).....	3,532,800	* 3,915,300	3,915,300	3,915,300	3,915,300
Expansion of facilities, Capitol Power Plant (liquidation of contract authorization).....	(300,000)	(50,000)	(50,000)	(50,000)	(50,000)
Total, Capitol buildings and grounds.....	19,278,300	17,864,200	13,393,700	17,974,626	17,974,626
Library buildings and grounds					
Structural and mechanical care.....	1,057,000	1,593,200	1,555,200	1,555,200	1,555,200
Reappropriation.....	60,000		89,500	89,500	89,500
Furniture and furnishings.....	350,000	369,000	350,000	350,000	350,000
Library of Congress James Madison Memorial Building.....	2,800,000	15,610,000	15,610,000	15,610,000	15,610,000
Total, Library buildings and grounds.....	4,267,000	17,572,200	17,604,700	17,604,700	17,604,700
Total, Architect of the Capitol.....	24,476,300	36,425,200	31,987,200	36,568,126	36,568,126
BOTANIC GARDEN					
Salaries and expenses.....	623,800	672,800	672,800	672,800	672,800
LIBRARY OF CONGRESS					
Salaries and expenses.....	20,375,000	22,520,000	21,330,000	21,573,100	21,573,100
Copyright Office, salaries and expenses.....	3,398,000	3,694,000	3,548,000	3,594,500	3,594,500
Legislative Reference Service, salaries and expenses.....	4,549,000	5,484,000	5,013,000	5,286,800	5,178,000
Distribution of catalog cards, salaries and expenses.....	7,887,000	9,087,000	9,000,000	9,000,000	9,000,000
Books for the general collections.....	750,000	800,000	800,000	800,000	800,000
Books for the law library.....	140,000	140,000	140,000	140,000	140,000
Books for the blind and physically handicapped, salaries and expenses.....	7,030,000	7,598,000	7,598,000	7,598,000	7,598,000
Organizing and microfilming the papers of the Presidents, salaries and expenses.....	132,000	136,000	136,000	136,000	136,000
Collection and distribution of library materials (special foreign currency program):					
Payments in Treasury-owned foreign currencies.....	1,603,000	2,148,000	2,148,000	2,148,000	2,148,000
U.S. dollars.....	213,000	239,000	229,000	229,000	229,000
Total, Library of Congress.....	46,077,000	51,846,000	49,942,000	50,505,400	50,396,600
GOVERNMENT PRINTING OFFICE					
Printing and binding.....	30,300,000	32,000,000	32,000,000	32,000,000	32,000,000
Office of the Superintendent of Documents, salaries and expenses.....	10,045,400	13,005,000	11,382,000	11,382,000	11,382,000
Selection of site, and general plans and designs of buildings.....		3,934,000			
Payment to GPO revolving fund.....		¹⁰ 22,100,000	22,000,000	22,000,000	22,000,000
Total, Government Printing Office.....	40,345,400	71,039,000	65,382,000	65,382,000	65,382,000
GENERAL ACCOUNTING OFFICE					
Salaries and expenses.....	68,641,000	74,750,000	73,712,000	74,750,000	74,020,000
Grand total, new budget (obligational) authority.....	361,024,327	421,414,899	346,649,230	413,889,653	413,054,220
Consisting of—					
1. Appropriations.....	360,964,327	421,414,899	346,559,730	413,675,153	412,839,720
2. Reappropriations.....	60,000		89,500	214,500	214,500
Appropriation to liquidate contract authorization.....	(407,000)	(50,000)	(50,000)	(50,000)	(50,000)
Memorandum—					
1. Appropriations and reappropriations including appropriations for liquidation of contract authorizations.....	361,431,327	421,464,899	346,699,230	413,939,653	413,104,220

¹⁰ Does not include \$345,000 authorized to be transferred from "Salaries, Officers and Employees" in the 2d Supplemental Appropriation Act, 1970 (Public Law 91-305).

¹ Includes \$93,000 in H. Doc. 91-305.

² Includes \$15,000 in H. Doc. 91-273.

³ Includes \$31,830 in H. Doc. 91-305.

⁴ Includes \$84,475 in H. Doc. 91-305.

⁵ Includes \$65,000 in H. Doc. 91-305.

⁶ Includes \$550,000 in H. Doc. 91-305.

⁷ Includes \$16,000 in H. Doc. 91-305.

⁸ Includes \$277,000 in H. Doc. 91-305.

⁹ Contained in H. Doc. 91-273.

MESSAGES FROM THE PRESIDENT— APPROVAL OF BILLS AND A JOINT RESOLUTION

Messages in writing from the President of the United States were communicated to the Senate by Mr. Geisler, one of his secretaries, and he announced that the President had approved and signed the following acts and joint resolution:

On July 23, 1970:

S. 980. An act to provide courts of the United States with jurisdiction over contract claims against nonappropriated fund activities of the United States, and for other purposes; and

S. 3978. An act to extend the time for conducting the referendum with respect to the national marketing quota for wheat for the marketing year beginning July 1, 1971.

On July 24, 1970:

S. 1520. An act to exempt from the anti-trust laws certain combinations and arrangements necessary for the survival of falling newspapers;

S. 3430. An act to amend the Peace Corps Act to authorize additional appropriations, and for other purposes;

S. 3685. An act to increase the availability of mortgage credit for the financing of urgently needed housing, and for other purposes; and

S. J. Res. 88. Joint resolution to create a commission to study the bankruptcy laws of the United States.

On July 29, 1970:

S. 2601. An act to reorganize the courts of the District of Columbia, to revise the procedures for handling juveniles in the District of Columbia, to codify title 23 of the District of Columbia Code, and for other purposes.

On July 31, 1970:

S. 417. An act to authorize the Secretary of the Interior to convey certain lands in New Mexico to the Cuba Independent Schools and to the village of Cuba;

S. 759. An act to declare that the United States holds in trust for the Washoe Tribe of Indians certain lands in Alpine County, Calif.;

S. 778. An act to amend the 1964 amendments to the Alaska Omnibus Act;

S. 885. An act to authorize the preparation of a roll of persons whose lineal ancestors were members of the Confederated Tribes of Weas, Plankashaws, Peoria, and Kaskaskias, merged under the Treaty of May 30, 1854 (10 Stat. 1082), and to provide for the disposition of funds appropriated to pay a judgment in Indian Claims Commission dockets numbered 314, amended, 314-E and 65, and for other purposes;

S. 1046. An act to protect consumers by providing a civil remedy for misrepresentation of the quality of articles composed in whole or in part of gold or silver and for other purposes;

S. 1456. An act to amend section 8c(6) (I) of the Agricultural Adjustment Act, as enacted and amended by the Agricultural Marketing Agreement Act of 1937 and subsequent legislation, so as to permit marketing orders applicable to apples to provide for paid advertising;

S. 3274. An act to implement the Convention on the Recognition and Enforcement of Foreign Arbitral Awards; and

S. 3889. An act to amend section 14(b) of the Federal Reserve Act, as amended, to extend for 1 year the authority of Federal Reserve banks to purchase U.S. obligations directly from the Treasury.

REPORT ON STATUS OF THE NATIONAL WILDERNESS PRESERVATION SYSTEM—MESSAGE FROM THE PRESIDENT (H. DOC. NO. 91-372)

The PRESIDING OFFICER (Mr. LONG) laid before the Senate the following message from the President of the United States, which, with the accompanying report, was referred to the Committee on Interior and Insular Affairs:

To the Congress of the United States:
I am pleased to transmit to the Congress the Sixth Annual Report on the Status of the National Wilderness Preservation System, and to affirm this Administration's intent to pursue the objectives of the National Wilderness Act aggressively in the coming months.

Wilderness is a magnificent part of the American heritage. The wilderness that witnessed the nation's birth no longer spreads from one ocean to the other, but neither has it all been tamed. Many of these untamed lands, majestic reminders of primeval America, have been reserved and now comprise the National Wilderness Preservation System. We must do more now to preserve additional areas of this priceless national heritage.

During 1969, I signed into law the addition of two new units to the National Wilderness Preservation System. However, I am convinced that in the past we have moved too slowly, in both the executive and the legislative branches, towards the goal of completion of our national wilderness system.

I have asked that the Secretaries of Agriculture and the Interior begin immediately to augment their efforts in the study of possible wilderness areas, as directed by the Act, and to accelerate the study schedules which they have been following. I have asked them to review their needs for additional resources and will ask the Congress for any additional funding which may be needed to make this new wilderness effort possible.

On the legislative side, the Congress now has before it twenty wilderness proposals transmitted by the previous Administration and endorsed by this Administration. Early action on these measures would represent the quickest way to expand our wilderness system. Therefore, I urge the Congress to give speedy and favorable consideration

to as many of these proposals as possible at this session of the Congress.

I look forward to the next annual report on the wilderness system, confident that I will be able to report substantial and encouraging progress on both the study and the enactment of wilderness proposals. I cannot stress too strongly my conviction that we must push vigorously ahead to preserve for future generations the opportunity to enjoy the singular encounter with nature which only wilderness can provide.

RICHARD NIXON.

THE WHITE HOUSE, August 5, 1970.

REPORT OF THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION—MESSAGE FROM THE PRESIDENT

The PRESIDING OFFICER (Mr. LONG) laid before the Senate the following message from the President of the United States, which, with the accompanying report, was referred to the Committee on Aeronautical and Space Sciences:

To the Congress of the United States:

Transmitted herewith is the Twenty-first Semiannual Report of the National Aeronautics and Space Administration.

RICHARD NIXON.

THE WHITE HOUSE, August 5, 1970.

EXECUTIVE MESSAGE REFERRED

As in executive session, the Presiding Officer (Mr. LONG) laid before the Senate a message from the President of the United States submitting the nomination of J. Fred Buzhardt, Jr., of South Carolina, to be General Counsel of the Department of Defense, which was referred to the Committee on Armed Services.

Mr. BYRD of West Virginia. 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. BYRD of West Virginia. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

RECESS

Mr. BYRD of West Virginia. Mr. President, I move that the Senate stand in recess until 2 p.m., with the understanding the Chair may call the Senate into session before that time.

The motion was agreed to, and at 1:29 p.m. the Senate took a recess subject to the call of the Chair.

The Senate reassembled at 2 p.m., when called to order by the Presiding Officer (Mr. GOLDWATER).

MESSAGE FROM THE HOUSE

A message from the House of Representatives by Mr. Berry, one of its reading clerks, announced that the House insisted upon its amendment to the bill (S. 3302) to amend the Defense Production Act of 1950, and for other purposes,

disagreed to by the Senate; agreed to the conference asked by the Senate on the disagreeing votes of the two Houses thereon, and that Mr. PATMAN, Mrs. SULLIVAN, Mr. REUSS, Mr. ASHLEY, Mr. WIDNALL, Mr. MIZE, and Mr. BLACKBURN were appointed managers on the part of the House at the conference.

ENROLLED BILLS SIGNED

The message also announced that the Speaker had affixed his signature to the following enrolled bills:

S. 1703. An act for the relief of Rosa Pintabona;

S. 1704. An act for the relief of Lillian Biazzo;

S. 2427. An act for the relief of Cal C. Davis and Lyndon A. Dean;

S. 2863. An act for the relief of Mrs. Cum-orah Kennington Romney;

S. 3136. An act to confer U.S. citizenship posthumously upon Guy Andre Blanchette;

H.R. 14114. An act to improve the administration of the national park system by the Secretary of the Interior, and to clarify the authorities applicable to the system, and for other purposes; and

H.R. 14705. An act to extend and improve the Federal-State unemployment compensation program.

AUTHORIZATION OF APPROPRIATIONS FOR MILITARY PROCUREMENT AND OTHER PURPOSES

The Senate continued with the consideration of the bill (H.R. 17123) to authorize appropriations during the fiscal year 1971 for procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, and other weapons, and research, development, test, and evaluation for the Armed Forces, and to prescribe the authorized personnel strength of the Selected Reserve of each Reserve component of the Armed Forces, and for other purposes.

Mr. BYRD of West Virginia. Mr. President, for the information of the Senate, what is the pending business?

The PRESIDING OFFICER. The pending business is H.R. 17123, and the pending question is on agreeing to amendment No. 819.

Mr. BYRD of West Virginia. I thank the distinguished Presiding Officer.

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

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

YOUTH CONSERVATION CORPS—CONFERENCE REPORT

Mr. JACKSON. Mr. President, I submit a report of the committee of conference on the disagreeing votes of the two Houses on the amendment of the House to the bill (S. 1076) to establish a pilot program in the Departments of the Interior and Agriculture designated as the Youth Conservation Corps, and for other

purposes, I ask unanimous consent for the present consideration of the report.

The PRESIDING OFFICER (Mr. GOLDWATER). The report will be read for the information of the Senate.

The assistant legislative clerk read the report.

(For conference report, see House proceedings of July 28, 1970, pages 25600-25601, CONGRESSIONAL RECORD.)

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

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

Mr. JACKSON. Mr. President, as chairman of the Senate conferees, I would like to make the following statement in support of the action taken by the conference committee with respect to S. 1076, to establish a pilot program in the Departments of the Interior and Agriculture designated as the Youth Conservation Corps. The Senate passed this bill last year. The House amended it in certain respects which, in the judgment of the Senate, warranted a conference on the differences.

Both the Senate bill and the House amendment provided that the Corps will be open to "youth of all social, economic, and racial classifications." The House version contained additional language that members of the Corps shall represent "all segments of society." The conference retained the language common to both versions and adopted the additional House language in order to emphasize the intent of both Houses that the Corps be composed of youths representing as broad a cross section of American society as possible.

The statement of policy and purpose in the Senate bill limited the areas appropriate for Corps activities to areas administered by the Secretaries of the Interior and Agriculture. The House amendment contained no such limitation. Because those two Secretaries are charged with the administration of the program and most of the lands appropriate for Corps activities, the conferees decided to adopt the limitation imposed by the Senate version.

The Senate bill provided a minimum age of 14 for members of the Corps. The House amendment specified a minimum age of 16. The value of exposing the younger teenagers to the outdoors and to conservation practices was acknowledged and was balanced against a desire to assure that Corps members will be sufficiently mature to make substantial contributions to and receive significant benefits from the program. The conference committee adopted a minimum age of 15 in an effort to compromise our differences.

The Senate bill provided that a preference should be given to disadvantaged youth in the selection of Corps members. The House amendment did not contain such a preference. The conferees decided that a preference for disadvantaged youth might result in the Corps being composed entirely or almost entirely of such youths, thus detracting from the objective of both Houses that the Corps be composed of representatives of varied social, economic, and racial backgrounds. Therefore, although it is the intent and

belief of the conferees that disadvantaged youth should be significantly represented in the Corps, the conference report does not contain a statutory preference for them. We expect these young people will make and receive real contributions as a result of this program.

The Senate bill also contains a preference with respect to temporary supervisory personnel for "primary, secondary, and university teachers and administrators, and university students pursuing studies in the education and natural resources disciplines." The House amendment did not contain such a preference. The conferees acknowledged that those individuals would be among the most suitable temporary supervisory personnel because of training, experience, and availability, but decided to exclude any specific provision favoring them in order not to exclude or discourage other qualified persons from participating or seeking to participate in the program as supervisory personnel. Again, however, we feel these people will be most interested and best suited to assist in this program.

The Senate bill included in the program youth of both sexes in section 2(a). The House amendment mentioned in both section 2(a) and section 2(b) that the program should include youth of both sexes. The conference report adopts the House language to make clear that both young men and young women are intended to be included in the Corps. The Senate intended this to be the case.

The Senate bill required Corps activities to take place only on lands under the administrative jurisdiction of the Secretary of the Interior or the Secretary of Agriculture such as national parks and forests. The House amendment allowed Corps activities to take place on all public lands. The conference report adopts the Senate version, which will simplify administration without sacrificing program objectives.

The House amendment directed the Secretary of the Interior and the Secretary of Agriculture to "arrange directly or by contract with any public agency or organization or any private nonprofit agency or organization which has been in existence for 5 years for transportation, lodging, subsistence, other services and equipment for the needs of the members of the Corps in fulfilling their duties." The Senate bill merely allowed the Secretaries to arrange for such services and equipment. The intent of the additional House language was to allow the Secretaries discretionary authority to contract with appropriate agencies and organizations to operate Corps projects. The conference report adopts the Senate language with respect to support services and adds a new sentence to effect the intent of the House language.

The Senate bill provided for use of vacated civilian conservation centers and other unoccupied facilities under the jurisdiction of the Departments of the Interior and Agriculture, as well as unoccupied military facilities—upon approval of the Secretary of Defense—for the purposes of the Corps. The House amendment permitted the use of any unoccupied Federal facilities, whenever economically feasible. The conference report provides for the use of any Federal fa-

cility where economically feasible, but only upon approval of the Federal agency responsible for administering the facility.

The Senate bill required a report from the Secretaries of the Interior and Agriculture within 1 year of the date of enactment indicating "the feasibility of" initiating a cost-sharing youth conservation program with State natural resource conservation, or outdoor recreation agencies. The House amendment required an identical report, except that the report would indicate "the most efficient method for" rather than "the feasibility of" initiating such a program. The conference report reflects the language of both versions by calling for the report to indicate "the most feasible and efficient method."

Mr. President, this conference report represents the finest tradition of the legislative process. I commend the Chairman of the House Committee, the Honorable CARL PERKINS of Kentucky, and his colleagues for their fairness and cooperation. I believe we have a good bill and I am happy to recommend it to the Senate, the President, and our Nation's young people.

Mr. ALLOTT. Mr. President, I just want to say a word or two about this matter. We had a very felicitous conference committee meeting on the bill. We were able to arrive at agreements on these various matters.

One thing in particular the House did not wish to have in there was the provision we had in the bill that "primary, secondary, and university teachers and administrators, and university students pursuing studies in the education and natural resources disciplines" be preferred in the handling of these students. The feeling in the House, and I must say I agree, is that there are many people who would make excellent teachers and instructors in these outdoor programs who would not necessarily fall within the categorical description the Senate placed in the bill. I agree with this position. I do not think we should preclude by any means those classifications the Senate put in the bill; but on the other hand there are a great many able leaders and instructors who do not fall within that category. I am glad this was handled as it has been.

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

Mr. JACKSON. I yield.

Mr. JAVITS. We are now heavily engaged in the Committee on Labor and Public Welfare in writing a manpower training bill. One of the aspects of the manpower training bill relates to public service jobs. We have great differences of opinion between the minority and the majority, but it seems clear that some element of public service jobs will be included.

Will the Senator give us some view from the committee, which I think would be very useful, as to the degree of legislative oversight to be exercised, to be sure there is in this operation the input which should come from agencies dealing with manpower problems?

If we obtain all we are looking for, it would now all be concentrated under the Department of Labor.

Would the chairman or the ranking minority member give us some assurance that in this pilot plan operation, of which I approve, every effort will be made for the right hand to know what the left hand is doing and that every effort will be made to have input of experience, knowledge, and so forth, of the departments responsible for the proposed new manpower training program?

Mr. ALLOTT. I yield to the chairman of the committee.

Mr. JACKSON. We have in the Committee on Interior and Insular Affairs, on the Special Subcommittee on Legislative Oversight, a distinguished ranking member of that committee, the distinguished Senator from Colorado (Mr. ALLOTT), one other Senator, and me.

We intend to follow this program very closely, if for no other reason, that it is a pilot program. We will have to make a decision later on regarding the extension and the expansion of the program.

I believe what we have worked out here covers an area of employment that is unique and pertains, of course, to the natural resource area of our country, the lands owned by the Federal Government and managed in the Department of Agriculture and the Department of Interior.

In addition, there is the ongoing effort here of trying to provide for an orientation for these young men and women during the summer months of June, July, and August. We want them to be educated and trained to better understand nature, wildlife, and the environment as a whole.

Therefore, this program, I wish to say to my distinguished friend from New York, is unique in that respect. We have carved out an area here that is not new; it is an area where during the 1930's the Civilian Conservation Corps made great progress in one of the finest programs in the area of resource protection ever developed.

We have modified that. We have covered the youth 15 years of age to 18 years of age during the summer months only. I believe very strongly and firmly that this program has to be related to the Job Corps and other efforts aimed at hiring the youth; but we are not moving into any area of duplication, and we will follow it closely.

Mr. JAVITS. I thank the Senator. That is important.

Mr. ALLOTT. I agree it is important. We have kept this in the confines of the 2 departments concerned, with no idea of moving over into the general manpower area or the jurisdiction of the Committee on Labor and Public Welfare.

Mr. JAVITS. I wish to tell both Senators I do not care if you do move ahead if that is the important thing to do, but I want this program made as relevant as possible to the taxpayers' money being spent in manpower. We have a \$2 billion bill proposed in the Committee on Labor and Public Welfare and we may learn a lot from this \$3.5 million experience.

As Senators know, and I have had support from them, I have fought for the summer job program. Again, there is a relevancy. I want to be sure that we will see that the input of everything going on is a part of this program and it may

be that other programs should in part yield to this program, but let us not treat this as some isolated effort. I am not jealous of our jurisdiction. Let us get the benefit of manpower training just as you should get it in other departments.

Mr. ALLOTT. Mr. President, I concur in what the Senator has said.

By reason of the very nature of the places where this would occur there would always be, no matter what the money available, a certain limitation on what can be done on the youth conservation program in this area. I agree it is something we will have to watch and watch very closely and see that it works.

By way of observation, I thought the Civilian Conservation Corps got to be a little bit obnoxious at the end; but at the same time I can take the Senator out into parts of the West today and show him contouring that was done by the Civilian Conservation Corps which is still present. It can still be seen. One can see what has been done for the grasslands and the vegetation there. That is the sort of thing we can do with this program, by helping to bring about a permanent foundation for the country.

Mr. JAVITS. Mr. President, I am thoroughly in agreement.

Inasmuch as I am so heavily involved in the other manpower program, I want to be sure that this would work both ways; that is, receiving the benefit of everything they learn in manpower and being able to absorb everything from the manpower area.

We just voted public service jobs this morning. I am not in complete agreement with it, but it is in the bill, for both rural and urban areas.

I thank the Senator.

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

Mr. ALLOTT. I yield.

Mr. STEVENS. Mr. President, I have just a few comments to make. I think the importance of the bill has been overlooked in some ways. As far as my State is concerned, over one-half of the public lands of the United States are in Alaska. This is a step in the right direction in putting into Alaskan public lands the concept of the Civilian Conservation Corps. My generation does not necessarily look on the Corps with the same feeling as some of my colleagues because we have seen the public parks and facilities created during that period by the Corps and, by and large, they were very good.

I am hopeful that the administration will examine carefully the objectives that have been set forth by the chairman and the ranking member of our committee. They will notice the provision that states, "wherever economically feasible—military facilities shall be utilized for the purpose of the Corps."

There are many vacant military bases that have been abandoned, such as the NIKE sites and other bases that have recently been closed, which are very susceptible to use by the Corps; and the \$3.5 million should not be used for the physical plant in carrying out this pilot project.

If it is, it will not go very far, and we, who have half the public lands of the

United States, may not get to participate in the program unless they use the abandoned facilities that are still ready and available and could be used for the period of time contemplated by the pilot project.

I hope we will be back next year—if not then, in 2 years—to expand the program and make it much more meaningful to my State.

I thank the Senator for yielding.

The PRESIDING OFFICER. The question is on agreeing to the conference report.

Mr. JACKSON. Mr. President, may I express my deep appreciation to the senior Senator from Colorado (Mr. ALLOTT) for his strong support of this program, as well as the senior Senator from Alaska (Mr. STEVENS).

The senior Senator from Alaska, of course, has long been concerned with the possibility of using young men and women in connection with our public lands administered by the Departments of the Interior and Agriculture, because of the great opportunities in Alaska. I want to commend him for his support in making this legislation possible.

Mr. YARBOROUGH. Mr. President, the establishment of a Youth Conservation Corps will be most beneficial to this country. As a cosponsor of S. 1076, I am most pleased to endorse the conference report on this legislation. I urge Senators to join me in voting for the adoption of the report.

This legislation establishes a pilot Youth Conservation Corps program for young men and women, 15 to 18 years of age. The program will be administered in the Departments of the Interior and Agriculture. These young Americans will participate in summer work and educational projects in our national parks, forests, recreation areas, wildlife refuges, and other Federal lands.

The benefits of this program are many. It will give the youth of the Nation, who are our greatest national asset, an opportunity to engage in educational and constructive labor on our public lands. The development and improvement of our public lands will benefit all people.

There is great concern throughout the Nation for the maintenance of our natural environment. The young have been in the forefront of the move to save the environment. This program provides an opportunity for our youth to direct this concern into constructive and productive efforts. At the same time, this work will enhance their understanding of the natural environment and its relationship to them.

In this time when the overwhelming majority of our population is urban, it is very important that we provide opportunities for the young people to get out of the cities and onto the land, into the forests and parks, and to give them a deep appreciation for these great natural treasures which are theirs.

These young people will be performing a great variety of useful projects. They will work on timber stand improvement, trail maintenance, wildlife habitat improvement, basic soil and water conservation projects, and maintenance and construction of campgrounds and picnic facilities.

Mr. President, I cannot think of a better way to instill a deep and lasting appreciation of our natural heritage in a young person than to give him the opportunity to plant a tree, or build a camping facility, or to clear a trail. This personal involvement will yield many long-lasting benefits.

This is an excellent program, and I am hopeful that this 3-year pilot project will later be developed and expanded so that any young person who wishes to do so will have an opportunity to participate.

Mr. President, I urge the Senate to join me in support of this beneficial legislation and to adopt the conference report.

Mr. JACKSON. Mr. President, I move the adoption of the conference report.

The PRESIDING OFFICER. The question is on agreeing to the motion of the Senator from Washington.

The motion was agreed to.

AUTHORIZATION OF APPROPRIATIONS FOR MILITARY PROCUREMENT AND OTHER PURPOSES

The Senate resumed the consideration of the bill (H.R. 17123) to authorize appropriations during the fiscal year 1971 for procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, and other weapons, and research, development, test, and evaluation for the Armed Forces, and to prescribe the authorized personnel strength of the Selected Reserve of each Reserve component of the Armed Forces, and for other purposes.

Mr. JACKSON. 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. JACKSON. 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. JACKSON. Mr. President, the ABM is once again before the Senate. A full year has passed since we voted, on August 6, 1969, to approve Safeguard phase I by initiating deployment at Grand Forks and Malmstrom Air Force Bases.

The last year has seen many changes, a number of which should have an important influence on the issue of whether to approve an additional site to protect our land-based deterrent. The central changes I have in mind are well known to many Senators and, before we vote, I hope they will be known and seriously considered by us all:

In the last year the Soviet threat to our land-based deterrent has significantly increased, at a rate that has exceeded the intelligence projections made a year ago;

By action of the Armed Services Committee, under the chairmanship of our distinguished colleague, Senator STENNIS, Safeguard has been confined to defense of the deterrent; authorization of a thin area defense has been specifically denied;

Contrary to the expectations of many opponents of Safeguard, the SALT talks have convened and made substantial

progress toward agreement covering ABM defenses and offensive strategic weapons;

In the last year Safeguard has made excellent technical progress.

I shall discuss these developments in some detail now and in the course of the debate over the continuing deployment of Safeguard. The point I wish to emphasize is that there have been major changes since last year both in Safeguard itself and in the circumstances that surround the issue of its further deployment. I am hopeful that the debate this year will reflect these changes. To my mind they make affirmative Senate action on the further deployment of Safeguard more desirable and necessary than ever.

THE SOVIET STRATEGIC THREAT

The alarming increase in the Soviet strategic forces was discussed last year in great detail, especially in the closed session of the Senate. While I wish I could report that the threat has tapered off, as many of us hoped and some believed would happen, the inescapable fact is that the Soviets are deploying offensive weapons at a very considerable cost to themselves and at a rate that has exceeded last year's pessimistic projections.

The most disturbing increase in Soviet deployment has been in their land-based missile force, particularly the large SS-9. Last year many of us were concerned at the prospect of 1,300 Soviet ICBM's. This year we are concerned even more deeply because the number completed or under construction is now in excess of 1,450. This contrasts with 1,054 U.S. land-based strategic missiles.

Unfortunately, the contrast just begins with total numbers of launchers. Even more disturbing is the fact that the total megatonnage that the Soviets can deliver against U.S. targets with this large and increasing force is several times our own.

Mr. BYRD of West Virginia. Mr. President, will the Senator yield for a question, or would he—

Mr. JACKSON. I would prefer to wait until I finish, if my good friend would not mind.

Mr. BYRD of West Virginia. Surely.

Mr. JACKSON. This advantage in "throw weight" means that the Soviets will be able to deploy MIRV's with sufficient yield and accuracy combinations to destroy our Minuteman missiles in their hardened silos. When the Soviets succeed in perfecting a MIRV device, each SS-9 launcher, of which the Soviets now have operational or under construction more than 280, would be capable of delivering three 5-megaton warheads at intercontinental ranges. The reentry pattern of the present triplet warhead extensively tested on the SS-9 may already threaten individual Minuteman silos. The unfortunate fact is that by the mid-1970's the Soviets may be in a position to destroy all but a few tens of our Minuteman missile force, if this force remains undefended.

This gloomy projection was before the Senate last year. I hope that some of those who did not take it seriously then will reconsider their position now, in light of the intervening Soviet increases.

Mr. President, what is perhaps most ominous about the growth in the Soviet

SS-9 force is that the SS-9 is an extremely inefficient weapon for retaliating against cities. For this purpose the Soviets have available more than 800 SS-11 and SS-13 missiles similar to our Minuteman and perfectly adequate as a deterrent force. While the SS-9 is inefficiently designed as a deterrent weapon, it is extremely well adapted to a counterforce role. It is this fact—the capability of the SS-9 to destroy hardened missile silos—that cannot be ignored in deciding our strategic posture and the future security of our deterrent force.

A few months ago there were some reports in the press and elsewhere that the Soviets had stopped deploying strategic missiles. The hopes built upon these reports were profoundly disappointed early last month when Secretary Laird announced that recent intelligence confirmed several new starts of the SS-9 and other offensive missiles. To make matters worse, the newly discovered SS-9's had been started after the second phase of the SALT talks was underway in Vienna.

The Soviet buildup of land-based offensive missiles has been paralleled by an equally rapid expansion of their Y-class submarine force. The Soviets are expected to have, within the next 2 years, an operational force of from 24 to 30 Polaris-type boats, and they are presently constructing these submarines at a rate of 8 to 10 per year.

Mr. President, more than a recitation of these disturbing numbers is necessary to appreciate the magnitude and direction of the growing Soviet threat. Some other facts must be considered:

The Soviets have carried out extensive and highly successful test programs of both offensive and defensive strategic weapons systems in the last year;

The Soviets have continued to invest more in military research and development than we have, and have sustained a strategic budget that exceeds our own;

The Soviets, with a smaller GNP than ours and a serious deficiency of consumer goods, have now invested approximately \$9 billion in SS-9's alone—a figure that exceeds our entire strategic offense and defense budget for fiscal year 1971;

The Soviets have conducted extensive tests of various ABM components in the last year while continuing work on the ABM system deployed around Moscow.

The central fact around which the debate over the deployment of Safeguard should revolve is that the Soviet Union has continued to support, at great cost, a comprehensive, dynamic program of strategic weapons procurement that shows no sign of slowing down. On the contrary, the hopes of those who last year urged that we wait and see whether the Soviet buildup would continue have been bitterly disappointed.

THE SAFEGUARD PROGRAM

Mr. President, the authorization we are now debating is for the continuation of the two phase I sites at Grand Forks and Malmstrom Air Force Bases and the initiating of an additional site, identical to the others except that it will not include a PAR radar, at Whiteman Air Force Base in Missouri. In addition to these three sites, all at Minuteman bases, the

committee has provided for advanced preparation at Warren Air Force Base in Wyoming, to keep open the option of a timely addition of a fourth Minuteman defense site, should this prove necessary. As I mentioned earlier, under the leadership of its able chairman, Senator STENNIS, the committee has limited the mission of Safeguard to the defense of the deterrent. By eliminating the four additional sites requested by the administration, the committee has specifically prohibited a thin nationwide area defense.

This is a major change in the Safeguard program, Mr. President. And in making this change the committee has, to my mind, completely removed any reason for objecting to Safeguard on the grounds that the Soviets will find it "provocative." The Soviets are well aware of Safeguard's capabilities. They know that Sprint missiles and Spartan missiles with their limited ranges constitute no threat to either their population or their offensive missiles—so long, of course, as these offensive missiles remain in their silos. Moreover, the Soviets are well aware that since Safeguard offers only incidental protection to the tiny fraction of our population living on or near one of the Air Force bases where Safeguard will be installed, the Soviet assured destruction capability will in no way be imperiled. In short, although Safeguard is a more effective way of protecting our deterrent than super-hardening our missile silos—an alternative recommended by some opponents of ABM—it is certainly no more provocative, alarming, or destabilizing.

I should perhaps add, Mr. President, that none of those scientists who testified on ABM this year or last ever argued that a hard-point defense of our Minuteman bases would be provocative. Nowhere in the large body of testimony before the Armed Services and Foreign Relations Committees can the argument be found that to defend our missile sites would be destabilizing.

In these annual debates on military procurement, Mr. President, we often hear the arms race explained in terms of an action-reaction cycle. Now I do not deny that there is some truth in this explanation, but I think it is only a partial truth. For an arms race can develop as much through a cycle of inaction-reaction as action-reaction.

We have seen the inaction-reaction cycle at work for the last several years. While U.S. offensive deployments have remained constant since 1965, and while the U.S. strategic budget has been steadily declining, the Soviets have been spending increasing sums and adding to their force of ICBM's and missile-firing submarines. The point has now come where it would be dangerously foolish to indulge in continued inaction that might well stimulate continuing action on the part of the Soviet Union.

As a means of insuring that we retain a convincing second-strike capability, Safeguard has the great virtue that it does not—unlike the deployment of more offensive weapons—threaten the Soviet deterrent. I am therefore at a loss, Mr. President, to understand the reasoning of those opponents of ABM who have

urged that we should add to our Minuteman or Polaris force, rather than protect a smaller, and therefore less threatening, offense. As for the suggestion that we should base our security on a policy of launch on warning as an alternative to deploying ABM, I can only say that I have heard few proposals in my time in the Senate that exceed this one in irresponsibility.

SALT TALKS

Mr. President, Senators may recall that in June of 1968, during debate on the military construction authorization bill, some Senators expressed the fear that if we authorized an ABM, the Soviets would refuse to join us in strategic arms limitation talks. We had been trying to get the Russians to agree to these talks for 18 months, and the feeling of many opponents of ABM seemed to be that if we went ahead with the Sentinel program, this would kill any hope of the Russians accepting our offer. Well, we voted on a Monday to begin the construction of Sentinel, and on the following Thursday, Mr. Gromyko announced the willingness of his government to take part in the talks.

Again, during the debate on Safeguard last summer, we heard opponents of the system argue that if we approved the administration's request for phase I deployment, this might cause the Russians to change their minds about the talks or prevent the talks from yielding an agreement even if they got underway. But as we all know, the SALT talks began last November, and I personally have been encouraged by the progress that has been made.

In other words, Mr. President, twice in the past the fear that an ABM deployment would damage the prospects for an agreed limitation on offensive and defensive systems has proved groundless, and nothing has happened since then to make me believe that this fear is not as groundless now as it was before. On the contrary, I remain convinced that deployment of Safeguard is an essential condition for the SALT talks to succeed.

The feeling of some Senators seems to be that if the Senate now refuses to authorize Safeguard deployment at an additional site, the Soviets will interpret this as a gesture of goodwill, and that in response they will adopt a more flexible and cooperative attitude in the talks than they might otherwise. It seems to me much more likely, however, that the Soviets would interpret such a refusal on our part as a sign that this country is not committed to preserving a secure deterrent; and I think that would be a dangerous idea for them to get.

The large force of Soviet SS-11 and SS-13 missiles—more than 800—together with their expanding fleet of missile-launching submarines, constitutes for the Russians an assured retaliatory capability. The question, therefore, arises: Why have the Soviets built so many of their very expensive SS-9's, and why are they continuing to build them at such a fast rate? We can never be absolutely sure about the answer to this question, of course, but we can make a reasonable inference on the basis of what we know about the SS-9's great accuracy, the

large payload it is capable of carrying, and the fact that under certain MIRVing options, the SS-9 could become a very effective silo-killing weapon. But whatever Soviet desires or intentions may be, there is no doubt that their program, if continued, will produce a first-strike capability unless the United States takes appropriate countermeasures. I, therefore, submit that nothing could harm the chances of an agreement coming out of the SALT talks more than an abrupt halt in the impetus of the Safeguard program.

Mr. President, Safeguard is the best available countermeasure, and if the Senate suddenly arrests the rate of Safeguard's deployment, it will in effect be removing the incentive to the Russians to stop producing their SS-9's. Safeguard is the central continuing strategic program we have at this point in time. We are not building any more Minuteman missiles, and none are planned. We are not building any more Polaris submarines, and we have decided not to broaden Safeguard's mission of hard-point defense to include a thin area defense. I ask: If the Senate stops the forward motion of the Safeguard program, what are our negotiators in the SALT talks going to offer the Russians as an inducement to stop building their SS-9's?

As I see it, Mr. President, a convincing active defense of our deterrent says this to the Soviets. It says:

We intend to keep our second-strike capability; we do not intend to allow you to acquire a first-strike capability. If you want to keep on building SS-9's, that's your business, but for every additional SS-9 that you buy, we are prepared to offset it.

Safeguard as a responsive and dynamic program can say precisely that to Moscow.

My hope—and I think that it is a reasonable hope—is that the Soviet leadership will thereby understand that it is simply a waste of scarce resources for them to continue deploying SS-9's or other missiles of this type, and that they will, therefore, turn to the alternative of serious negotiation to limit both offensive and defensive systems.

While I am on the subject of the effect that Safeguard can be expected to have on the SALT talks, I should like to answer an objection that is sometimes made to our going forward with a third site at this time. This objection is that it would be a waste of money to begin deployment at the Whiteman site, since the ABM components there, as well as the ABM components at Malmstrom and Grand Forks, may well have to be totally or partially dismantled in the event of an agreement between us and the Russians to limit the level of antimissile defense. The first thing to be said about this objection is that it is by no means certain that the SALT talks are going to succeed. If they fail, if the Russians refuse to accept a reasonable ceiling on the number of their offensive ICBM's, including a reasonable ceiling on their SS-9's and comparable ICBM's, then we are going to need the full four-site Safeguard program, with ABM components not only at the three sites I mentioned earlier but at Warren Air Force Base as well. Indeed, if the talks should fail and the threat

should continue to grow, we may have no choice but to undertake additional measures—possibly including a supplementary program of dedicated hard-point defense—to protect the credibility of the American deterrent.

This said, Mr. President, I can only add that if the SALT talks succeed, I for one will not consider whatever small sum has been spent on Safeguard as wasted money. My view is that in spending this money, we will be improving the chance of success in reaching a significant arms control treaty; and I, personally, would pay a very high price to do that.

Let me speak plainly: Any Senator who is tempted to vote against the proposed deployment of Safeguard must understand the risks that are involved for the President's negotiating position at the SALT talks.

TECHNICAL PROGRESS

Mr. President, the Safeguard program made impressive technical progress last year in the development of the several system components. The development record includes the following:

Spartan test program: There have been eight successful tests of the Spartan missile since January 1969. There have been only two failures, both from known and now corrected causes.

Sprint test program: Since January 1969, there have been 15 tests of the Sprint missile of which 10 have been complete and three partial successes. As in the case of the Spartan, the two failures resulted from known faults which have now been corrected. Both the Sprint and Spartan test programs have been exceptionally productive and successful.

Perimeter acquisition radar—PAR: The PAR radar, as is well known in the scientific community, is well within the state-of-the-art. Since the summer of 1969, there has been a limited engineering test model in operation at the manufacturer's plant. By September of this year approximately 95 percent of the components for the PAR will be released for production.

Missile site radar—MSR: The MSR has been successfully operating under test at the Kwajalein facility since September 1968. It has a remarkable record of meeting or bettering most of its design specifications. It has actually tracked ICBM's fired from Vandenberg Air Force Base.

Software development: The software is constantly undergoing test routines at Meck Island where, after 20 months of close adherence to schedule, it remains perfectly on schedule.

Mr. President, I report this excellent record of progress in the Safeguard system development because I wish it to be clearly understood that the experience of the last year has been fruitful. Nothing that we have learned in the last year suggests to our systems planners and designers that successful development and deployment of the system is any way in doubt.

At the same time it would be idle to assume, and foolish to argue, that there might not be developmental problems. No new system can ever be developed without changes, modifications, the exploitation of potential improvements and the

like. To single out routine development problems, of which Safeguard has been remarkably free, as an argument against a new system—any new system—is to approach new technology with all the wisdom and foresight of the proverbial ostrich.

There has been some talk recently about completing the two sites authorized last year before initiating deployment at the third requested this year. According to this view, we should wait until the mid-1970's before beginning the completion of the Safeguard defense of the deterrent.

Mr. President, I can assure my colleagues that if the Soviets would agree to wait until at least the mid-1970's before deploying any additional offensive missiles, I, for one, would seriously consider waiting to finish the two approved sites before going on to deploy a third at Whiteman Air Force Base. Unfortunately, we can have no assurances that the Soviets will accommodate our desire for a leisurely defensive deployment program. We cannot wait, Mr. President, because there is no evidence whatever that the threat will wait.

I have no doubt that we could increase our confidence in the likely effectiveness of, say, the antipoverty effort if we were to try all of its individual programs on an experimental basis first, waiting until all the results were in before implementing the programs on a significant scale. But the ravages of malnutrition will not wait while we experiment with food stamp programs any more than the threat to our security will wait while we experiment with Safeguard. The degree of confidence we have in the effectiveness of Safeguard is high—certainly high enough for prudent men to approve the recommendation of the Armed Services Committee.

Mr. President, I began by calling the attention of my colleagues to the changes that have taken place since we debated the decision to deploy Safeguard a year ago. The threat has changed, unhappily for the worse. The Safeguard program has been changed by your Armed Services Committee so that it is now limited to the defense of the deterrent. The diplomatic context has changed with an impressive record of serious discussion in the SALT talks. The technical development has proceeded satisfactorily in a most orderly fashion.

I hope the debate in the Senate this year will reflect the new facts and the new situation.

I shall be surprised, for example, to hear Senators assert that Safeguard is provocative to the Soviets. Since we have acted in committee to limit the system to the defense of our missile sites, it can hardly be considered a provocation.

Since this defense in no way diminishes the Soviet Union's retaliatory capability, I hope it will not be argued that the Soviets are forced to respond to Safeguard. Unless they wish to acquire the capability to destroy our deterrent, the Soviets should be indifferent to our efforts to protect the Minuteman force.

Again, I shall be astonished to hear opponents of Safeguard argue that there is no threat to Minuteman, as some did

last year, while also arguing that land-based missiles are obsolete because they are irretrievably vulnerable.

These are but three of a litany of arguments made against Safeguard last year which, if they were not then foolish, certainly are now.

Mr. President, the country is experiencing a wave of hostility to the military at the moment, a hostility that makes fair and objective debate on a question of defense spending a difficult thing to achieve. From the belief that we have been doing too little to solve our domestic problems—a view that I share with many Senators—it is all too easy to pass to the belief that we have been spending too much on defense. It is too easy in the present climate of opinion to persuade ourselves that an attack on the Pentagon is an attack on pollution or poverty. It is too easy to slip into the view that if we could only drastically cut back on our military spending, these problems would somehow melt away.

Mr. President, I believe that this country is rich enough in moral and material resources to provide for its security and solve its domestic problems as well. I am confident that the Senate will reject the counsel of those who would endanger that security and the prospects for a negotiated arms control agreement simply to achieve a pyrrhic victory over the Pentagon.

Mr. President, I ask unanimous consent to have printed in the RECORD the section of the report of the Armed Services Committee on the Safeguard anti-ballistic-missile system.

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

RECOMMENDATION AND REPORT OF THE SENATE ARMED SERVICES COMMITTEE, JULY 14, 1970

SAFEGUARD ANTI-BALLISTIC-MISSILE SYSTEM

The need for Safeguard

The Committee has examined with concern the continued expansion of Soviet strategic forces which pose a serious potential threat to the American land-based deterrent. The United States cannot permit such a threat to develop without taking suitable countermeasures to provide for the continuing survivability of sufficient strategic weapons for credible retaliation and confident deterrence.

Even if the Soviets should not install additional missile launchers, the present number already deployed or under construction constitutes a delivery capability which, with qualitative improvements, would pose a serious threat to our land-based Minuteman deterrent in the mid-1970's. These qualitative improvements, which are well within Soviet capabilities, include an improved accuracy for the SS-11 and an accurate MIRV on the SS-9.

Preferable to an increase of American offensive forces, especially at this stage of serious arms control negotiations, is the addition of further anti-ballistic missile defenses to protect the land-based deterrent. The Committee hopes that the Strategic Arms Limitation Talks will succeed in stabilizing the strategic balance; but prudence demands that the United States take appropriate measures to guarantee the survivability of our retaliatory capability.

The Committee shares the President's judgment that defense of the U.S. deterrent in no way jeopardizes the security of the Soviet deterrent and, in fact, provides additional incentives for the Soviet Union to

enter a substantial arms limitation arrangement.

Committee recommendation

The Committee has decided to confine the authorization for the continuation of the Safeguard program to those sites devoted to the defense of the deterrent. Thus the Committee has approved continuation of the Phase 1 sites at Malmstrom and Grand Forks, as well as full deployment at Whiteman and advanced preparation at Warren Air Force base.

In taking this action, the Committee wishes to establish the primacy of active defense to increase the survivability of the land-based deterrent. By striking from the authorization the House approved administration request to proceed now to advanced preparation of four area defense sites, the Committee affirms its conviction that there is no compelling need to move now to the deployment of an area defense of our population against Chinese Communist ICBM attack.

While the impact of the Committee's action on the Safeguard authorization is only \$10 million, the long term effect, should this decision be perpetuated in subsequent years, is substantial.

Present circumstances do not justify a diversion of our resources from the primary task of defending the deterrent to the less urgent objective of providing a defense against the evolving Chinese Communist threat. Whether the development of a thin area defense is a wise response to a future Chinese nuclear capability remains to be demonstrated.

It is the Committee's considered judgment that the proposed deployment, sufficient for our national security requirements and conducive to strategic arms control, deserves the full support of the Senate.

General summary of funding for Safeguard system

The budget request contains a total of \$1.459 billion (including military construction) for the Safeguard Anti-ballistic Missile System. Of that amount \$1.359 billion requires authorization.

The bill as reported recommends authorization of \$1.349 billion. The Committee, in restricting advance site preparation to Warren only rather than the five sites requested, reduced the authorization by only \$10 million. However, the Committee action, based on the current situation, will reduce the total projected acquisition cost (Research and Development, Procurement, and Military Construction) from \$10.7 billion for the twelve site deployment of \$6.5 billion for the four site deployment protecting only the Minuteman deterrent, an ultimate savings of \$4.2 billion.

Moreover, of the \$6.5 billion total projected cost for the four site Minuteman defense, about \$2.2 billion has been obligated and would not be recovered even if the program were terminated. Thus the remaining cost of the four site Minuteman defense is \$4.3 billion. It should be emphasized that the total authorization recommended by the Committee amounts to \$1.349 billion for fiscal year 1971.

2. Spartan Missiles and launchers for Malmstrom and Whiteman sites.

3. Total complex at the Warren site if deployment is subsequently authorized.

Technical considerations

In an effort to assess the capabilities of the Safeguard system, the Committee heard extensive testimony on its technical effectiveness. The Committee believes that the technical reservations brought to its attention (e.g., radar blackout, radar discrimination, refraction and the like) have been given proper consideration by the Department of Defense, and concurs in the judgment of the Department that such developmental problems as may remain are capable of solution within the overall system design.

The Committee wishes further to note that many of the technical limitations on the system are associated with, and only pertain to doubtful, uncertain and high-risk modes of attack against it; strikes of the nature that one would expect from an adversary requiring a high-confidence attack strategy should not seriously degrade the technical performance of the system, given the levels of offensive threat presently projected. Should the threat increase beyond present projections, the Committee would look to supplementary components as a means of assuring that an adequate retaliatory deterrent would survive attack.

The Committee is convinced that a considerable measure of protection of the Minuteman force will result from deployment of Safeguard at the scheduled Minuteman complexes. The Committee is of the opinion that the Soviets would be unlikely to attack the Minuteman force unless they were certain to destroy all but a few tons of missiles. In this event, a planned Soviet attack would first encounter the entire inventory of Safeguard interceptors before destroying those missiles that come under Safeguard's protective cover. The number of Minuteman thus protected is substantially larger than has been suggested by some critics who have assumed that the Soviets would allow three hundred Minuteman to survive a first strike against the force.

The Committee evaluated the possible need to supplement Safeguard should the Soviet threat to Minuteman grow beyond the levels which Safeguard is designed to counter. The Committee accepts the view that the relevant criterion for the evaluation of a system of active defense is not the defense cost per Minuteman silo saved, or the relationship between the cost of the protection and the cost of the missile itself. It is, rather, a comparison of the cost of the defense to the cost of the offense to offset that defense.

In considering supplementary components to augment Safeguard defense of Minuteman against high attack levels that might possibly evolve if the Soviets both expand and qualitatively improve their ICBM forces, the Committee also examined alternatives to Safeguard for the defense of Minuteman. The alternatives fall into two classes. First, there are the interim systems which are derived by modifying existing air defense systems or air-to-air weapons systems. These modifications, when carefully engineered and tested to establish confidence in their performance equivalent to Safeguard are unlikely to be available any earlier than Safeguard. An even more serious deficiency is that the lower radar power and slower interceptor missiles designed for attacking aircraft make these interim systems very "brittle"; i.e., relatively minor changes in the threat make these interim systems useless, and these interim systems could not be upgraded to accommodate those changes in the offense which would render them useless.

The second class of alternative ABM systems for defense of Minuteman are the "dedicated" hard-site defenses made of new components optimized for defending Minuteman.

SAFGUARD PROGRAM FOR FISCAL YEAR 1971 RELATED ONLY TO PROTECTING THE DETERRENT AND NOT AREA DEFENSE

[In millions of dollars]

	Phase 2					Total
	Phase 1	Due to added SPRINTS at GF and MALM	Due to the Whiteman site	Due to advance prep Warren	Due to other	
Authorization:						
R.D.T. & E.	365.0					365.0
Procurement	457.4		178.0	115.0		650.4
Family housing	8.8					8.8
Military construction	161.0	35.0	120.4	.4	8.4	325.2
Subtotal in bill	992.2	35.0	298.4	15.4	8.4	1,349.4
Other not subject to authorization:						
Procurement	.6					.6
Military construction	8.0		6.1	3.0	2.9	20.0
Operations and maintenance	42.0				11.0	53.0
Military personnel	12.0				2.0	14.0
Subtotal	62.6		6.1	3.0	15.9	87.6
Total ABM program	1,054.8	35.0	304.5	18.4	24.3	1,437.0

¹ Defense request for advance preparation for 5 area sites was \$25,000,000.

² Defense request for advance preparation for 5 area sites was \$15,000,000.

Use of fiscal year 1971 procurement funds for Safeguard

The \$650.4 million in new procurement obligational authority is contained in the total Army request for missile procurement. The bill itself does not specify the use to which the procurement funds would be put.

The supporting information furnished to the Committee by the Department of the Army states that the planned procurement for fiscal year 1971 is as follows:

1. Sprint missiles and Launch Equipment (Grand Forks).
2. Spartan missiles and Launch Equipment (Grand Forks).
3. One Perimeter Acquisition Radar (Malmstrom).
4. Two Missile Site Radars (Malmstrom and Whiteman).
5. One Missile Site Radar Data Processor (Whiteman).
6. Partial funding for training equipment.
7. Equipment for the Ballistic Missile Defense Center and the Tactical Software Control Site.
8. Advanced procurement for the Grand

Forks, Malmstrom and Whiteman sites and Advanced Preparation for one additional site at Warren.

Prior and future funding

The major items to be procured with prior fiscal year funds are as follows:

1. One Perimeter Acquisition Radar and Data Processor (Grand Forks).
2. One Missile Site Radar and Data Processor (Grand Forks).
3. One Missile Site Radar Data Processor (Malmstrom).
4. Initial Equipment for the Ballistic Missile Defense Center.
5. One Perimeter Acquisition Radar Data Processor (initial use at Tactical Software Control Site; final use at Malmstrom).
6. Partial funding for training equipment.

The remaining major procurement items for Modified Phase 2, as approved by the Committee, subsequent to 1971 are as follows:

1. Sprint Missiles and launchers for the Whiteman site and augmentation of Grand Forks and Malmstrom sites.

Development of this kind of system is being initiated by the Department of Defense in fiscal year 1971, but it is unlikely that such a system can be deployed and operational until several years after a three or four site Safeguard defense of Minuteman. The delay would result in an unacceptable risk in the 1975-1980 time period. However, the development of new dedicated hard-site defense components should be undertaken so that the Safeguard defense of Minuteman could be augmented if necessary. The Committee notes that Safeguard will have a continuing useful life even if augmented in response to a threat which exceeds its design capability.

Finally, the Committee observes that many of the arguments offered in opposition to Safeguard are directed at the defense of population against the Communist Chinese threat rather than the defense of the land-based deterrent. Technical criticism of the PAR radar for example, while far from compelling with respect to defense against a Chinese Communist threat, is even less important a consideration to the system capabilities to protect Minuteman missile sites. Concern that the Soviets would react to Safeguard deployment by additions to their offense is unfounded if the mission of the Safeguard system is protection of the deterrent. The premise that the system must work perfectly is not applicable when defending the deterrent forces since only a fraction of that force must survive to assure successful retaliation.

The Committee wishes to emphasize that defense of the deterrent is the only proper alternative to the proliferation of our offensive forces. The wisdom of increasing our security in this manner—by defending a fixed force rather than adding to it—is central to the subject of stable deterrence. In this way only can we manifest our concern for the legitimate security of our adversaries, while discouraging them from attempting to acquire a first-strike capability.

Safeguard and the SALT talks

It is the position of the Committee that the authorization of further ABM deployment to protect the strategic deterrent is not prejudicial to the SALT talks. Nowhere in the extensive hearings of the Committee or its Subcommittee on Strategic Arms Limitation Talks was the view expressed that defense of the deterrent would adversely affect the current negotiations. On the contrary, the Secretary of Defense, the Director of the Arms Control and Disarmament Agency and others argued forcefully that unilateral termination of the Safeguard program would undermine the American negotiating posture and diminish, rather than increase the likelihood of a successful agreement.

The importance of Safeguard to an agreement at SALT should be self-evident. As one of the central limitations to be negotiated in conjunction with limitations on offensive forces, Safeguard is essential to the American position. Without Safeguard the Soviets would have little incentive to agree to constrain increases to their offensive forces. The progress thus far in the SALT talks has served to confirm the view that Safeguard is essential to their successful conclusion.

While the Committee would welcome an agreement that would obviate the need for Safeguard, there can be no assurances that such an agreement will be reached. In the event of an agreement Safeguard could be halted and, if necessary, such construction as might have been completed could be dismantled. Should our best efforts to achieve agreement fail, however, Safeguard would be an important element in the maintenance of a secure deterrent force. To delay the modest deployment authorized for fiscal year 1971 would, in the opinion of the Committee, put the SALT talks, and our national security, at risk.

Mr. GOLDWATER. Mr. President, will the Senator from Washington yield?

Mr. JACKSON. I yield.

Mr. GOLDWATER. I want first to congratulate the distinguished Senator from Washington for what I consider to be the wisest statement made on the floor of the Senate on this subject in both debates that we have experienced.

I hope that the Senate will have the Senator's extreme experience in this field for as many years to come as it is possible, because I can see a continuing opposition by those in our country and those in Congress who are dedicated to the unilateral disarmament of our country.

I hope that the Senator is around for many, many years to give us the kind of backing and assurance we need.

I have one question, though, that I do not quite understand.

On page 3 of the statement, the Senator says in the third paragraph:

Mr. President, what is perhaps most ominous about the growth in the Soviet SS-9 force is that the SS-9 is an extremely inefficient weapon for retaliating against cities.

Later on the Senator speaks about the great accuracy of this weapon. I wonder what caused the Senator to draw that conclusion.

Mr. JACKSON. Mr. President, if the SS-9, which has a throw weight of 25 megatons, were designed as a second strike weapon, they would not be wasting that much payload or fissionable material to attack so-called soft targets, or cities.

The obvious inference here is that this kind of system has the capability of destroying hard targets. These, of course, include Minuteman silos. Otherwise, why would they build a weapon system capable of delivering 25 megaton warheads or three 5-megaton warheads at an adversary?

What they would do, for retaliatory purposes, would be to have a series of missiles with a lower yield which would more than take care of cities.

Mr. GOLDWATER. Mr. President, I understand. I thank the Senator from Washington for explaining that. I have one more question that the Senator did not cover in his report.

Would I be correct in assuming that at the same time the Soviets have been very rapidly and dangerously improving their offensive capability, they have also made some extremely important improvements in their defensive capability?

Mr. JACKSON. The Senator is correct. They have been effective in developing an ABM capability since about 1957, when they first undertook to develop such a system.

They started to deploy it, as I recall, in the Leningrad area in about 1962. They now have some 64 launchers in the Moscow area.

In addition, and this is the significant part, they are engaging in an active program of research and development. They are doing a lot of testing. It is quite clear that they are in the process of developing a new generation of ABM's.

I would add further that there is the so-called Tallinn system. This system was named for the capital of Estonia.

That system in the past has been con-

sidered by some as having a potential ABM capability. The majority view in the past has been that it was capable of intercepting only air breathers, meaning, of course, primarily aircraft.

I think there is a serious question at the present time as to whether this system, which is deployed all over Russia and is part of the largest defense system the world has ever known, could indeed have an ABM capability.

I believe there are those who feel quite strongly about this. This view is becoming more prevalent in the intelligence community.

Mr. GOLDWATER. I thank the Senator for yielding. In closing, I again thank him not only as a Senator but also as an American for making this brilliant disclosure on the floor today.

I hope that our colleagues who have not been able to hear the Senator will read his statement in the RECORD. I can assure them, being a student in this field myself, that they cannot learn about this matter quicker than by reading what the Senator had to say. If they do read it, I am confident that the vote will be overwhelmingly in favor of it.

Mr. JACKSON. Mr. President, I thank my colleague, the Senator from Arizona, for his kind and generous remarks.

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

Mr. JACKSON. Mr. President, I am happy to yield to the Senator from Colorado.

Mr. DOMINICK. Mr. President, I, along with the Senator from Arizona, thoroughly appreciate the work that the Senator from Washington has put into his presentation. The presentation was extremely fine. There are a couple of points that I thought perhaps a colloquy might further develop.

In the statement, the Senator approaches the SS-9 as a first-strike potential. He refers to the SS-11 and the SS-13 as retaliatory forces.

Is it not true, however, that the SS-11 has the capability of being used on hard-site targets, Minuteman targets, as well as the SS-9's?

Mr. JACKSON. The Senator is correct. Improved accuracy on the SS-11 would make this a definite possibility.

Mr. DOMINICK. So, we are actually facing not only an increase in the SS-9 production over what was estimated during the debate of last year, but we are facing an increase in the SS-11's, both as estimated in regard to its range and also in regard to its increased accuracy.

Mr. JACKSON. The Senator is correct. In the SS-11's, there have been increases that have not been contemplated. The same is true of the SS-13's. This is in addition to the new sites that have been discovered that are referred to in my remarks on the SS-9.

Mr. DOMINICK. Mr. President, I have been constantly struck, as I am sure the Senator from Washington has been, by the arguments of some of those who have spoken in opposition to the ABM. When we ask them what should be done in the way of offsetting the increasing threat from the Soviet Union or the Red Chinese, almost inevitably, the answer one gets is that, "We ought to increase the number of Minutemen or increase the number of Polaris submarines."

These are obviously offensive weapons. Is that not correct?

Mr. JACKSON. The Senator is correct. I cannot think of anything more provocative than to exercise that option at this point and proceed with offensive systems when the other option of providing for an active defense is available.

Mr. DOMINICK. I think that really we ought to make this point over and over again. What we have been doing is holding our strategic force relatively stable for a large number of years, while the Soviets in the face of that—and they do know what we are doing, and we might as well acknowledge that—have rapidly increased their offensive forces. It has not done any good—as many of the opponents of the ABM have argued—to try to show the Soviets that we are exercising good faith by not increasing our offensive weapons. They are going ahead anyway.

Mr. JACKSON. The Senator is correct. Not only have they increased the numbers, but the most disturbing aspect of those numbers pertains to the yield accuracy and MIRV potential of those missiles.

They now have operational or under construction over 1,450 to our 1,054.

The significant point that I want to make very clear here is that the destructive capability of the 1,450 exceeds our land-based capability by several fold.

This is the most disturbing aspect of what they are doing.

Mr. DOMINICK. Mr. President, I remember that the Senator from Washington and myself discussed this point several years ago, saying that on a projection, this could happen. I remember that many opponents of this system and other strategic systems that we have been considering say that it never would happen, that it could not happen, that we would obviously be predominant in all phases.

The Secretary of Defense indicated the other day that by the middle of the 1970's, at the present rate of Soviet expansion compared with our defense weaponry, they would be superior to us in every single phase of armament. Does the Senator agree with that?

Does the Senator agree with that?

Mr. JACKSON. I do. I think that an examination of the Soviet strategic forces and what is going on in connection with those strategic forces makes it very clear to me; and as I said last year and before that, the Soviets are determined not only to offset our land-based deterrent, but also they are determined to offset our bomber capability, and our Polaris missile capability.

I think it is clear, as I have indicated here, that they now exceed us in number and megatonnage in land-based missiles.

It is clear if they continue to turn out the Polaris-type submarines—the Y class submarines with 16 missiles per boat, by mid-1975 they will have more Polaris-type boats than we, probably around 50.

I indicated that within the next 2 years they will have 24 to 30, and they are turning out approximately 10 a year. So they will exceed our Polaris capability.

In addition, as Admiral Rickover has pointed out in one single year the Soviets

turned out five highly sophisticated different type attack submarines. These are attack submarines designed to nullify our Polaris force at sea in the 1970's.

Then their Polaris force, of course, makes it possible during the same time frame—that is, 1974-75—to reach every one of our SAC bomber bases. This places in jeopardy our SAC bomber force.

When one looks at that picture, it is not very encouraging. Therefore, one must undertake every necessary step to make sure that the American nuclear deterrent—sea-based, our manned bombers, and our ICBM's—is credible to the adversary.

Mr. DOMINICK. I certainly appreciate the comments of the Senator from Washington and I hope the country does.

I saw in a recent news release, I believe it was yesterday or the day before, that the Soviets have again started to build their FOB—that is the fractional orbit bombardment system—which uses the SS-9 as a launcher. This is something we do not have at all in our armament. It could create a satellite system over this country which, upon being triggered, could launch a nuclear weapon which, I understand, could strike within 3 minutes.

Mr. JACKSON. The Senator is correct.

Mr. DOMINICK. This is an extremely dangerous type situation we face.

The other thing that bothers me is the size of their attack submarine fleet, which is very, very large, as I understand, in comparison to what we have; and which is the most efficient method they have yet found of trying at least to track our Polaris submarines; so if they get good enough at that they could keep track of where we are, even under water.

Mr. JACKSON. I think it is clear the Soviet strategic effort is not confined to offsetting our Minuteman land based ICBM capability; they are going after all three deterrents, including bombers and sea-based forces.

Mr. DOMINICK. As I understand the situation with which we are faced on the floor, an amendment is pending or about to be offered, and I am not sure, which would cut out phase 2 as authorized by the committee. Is that correct as to the situation at the moment, as far as the Senator knows?

Mr. JACKSON. I believe the amendment has been offered and that it is the pending business.

Mr. DOMINICK. I have not seen it and I have not heard it thoroughly explained, but if my recollection is correct, this amendment would simply cut out some \$300 million authorization for phase II. Is that correct, as far as the Senator knows?

Mr. STENNIS. The amendment would eliminate all funds for that part of phase II as reported by the Committee on Armed Services.

Mr. DOMINICK. And yet what we are talking about is the defense against this continued growth of the Soviet threat, and this year's actual spending under that authorization is estimated by the Department of Defense as being somewhat under, as I recall it, \$50 million.

Mr. JACKSON. I believe it is \$40 million.

Mr. DOMINICK. \$40 million.

Mr. STENNIS. Yes.

Mr. DOMINICK. It would seem that if we agreed to this amendment we would certainly be gambling on the good faith of the Soviet leaders which certainly has not been proven from past history, at least from my point of view, and I would believe from the point of view of the people in Czechoslovakia. I believe they would agree with that assessment also.

I thank the Senator. I think the Senator has done a masterful job in presenting the ABM case.

Mr. JACKSON. I thank my good friend from Colorado for his excellent comments and questions.

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

Mr. JACKSON. I am happy to yield to the distinguished Senator from Mississippi.

Mr. STENNIS. Mr. President, our committee is certainly indebted to the Senator from Washington, as is the entire membership of the Senate and the entire Congress, for his wonderful background of knowledge in connection with this problem and the complications that go with the entire matter, including his detailed knowledge of the situation with respect to the ABM system and more particularly, the one we are developing now. I think the Senator made a splendid statement in presenting the data necessary to get a grasp of the picture. Another thing that has been so well put together have been the alternatives, which make it as clear as a bell. I highly commend the statement to every Member of this body for reading and for analysis.

I know the Senator's statement will reach not only the membership of this body but a great number of the staff.

I think the facts about the Soviet increase have been well put together and well stated. It sticks out like a pointed arrow with a warning signal on top of it.

I wish to address myself to a question which comes up about what is left in the bill and what it can be used for. I will do this in the way of a question.

Included now in this \$1.027 billion is \$365 million which the Senator from Kentucky said the other day "would be available for advance research and development, for research and development of a system specifically designated to protect the Minuteman ICBM force."

It is extremely important to understand that the \$365 million is required for what we call "Safeguard." Without the \$365 million for research and development, the deployment at Grand Forks and Malmstrom could not effectively take place.

Is that a correct statement about the facts?

Mr. JACKSON. This is definitely my understanding. It is in direct support of the phase I Safeguard.

Mr. STENNIS. Yes. It is in a different account but it is just the same. As a practical matter it is for those two sites I have mentioned at Malmstrom and Grand Forks.

Mr. JACKSON. In any new weapons system the first phase always includes the ongoing R. & D. requirements as a part of the initial system and it is car-

ried that way in this account, as it has been in other weapons systems accounts.

Mr. STENNIS. I emphasize, too, that the \$365 million is a part of the funds required to continue the deployment at Grand Forks and Malmstrom. Contrary to what the Senator from Kentucky inferred, the funds would not be available for research and development for a new system, and that is my point. I call that to the attention of the Senator from Kentucky. We want to be sure we are talking about the same thing. This \$365 million goes with the Safeguard and not for any new system. That is my only point.

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

Mr. STENNIS. I yield.

Mr. JACKSON. To follow the Senator's able statement, the \$365 million requested includes the funds necessary to complete work on the MSR. It includes funds for the development of the PAR. It includes funds for the development and testing of the Sprint and Spartan interceptors. It includes funds for the software without which Safeguard could not be built.

In sum, without these funds, Safeguard would be effectively dead. In other words, the money cannot be used for any other purpose than provided for in the bill and as submitted by the administration, and that is in support of the two sites the Senator from Mississippi mentioned earlier.

In short, there is no program under which these additional funds could be used for any other R. & D. effort.

I think there is a misunderstanding here, and I think it ought to be clarified.

Mr. STENNIS. That is the only reason why I bring it up, particularly at this time, to make sure that we get together on this \$365 million. I agree that it is for the purposes the Senator has already indicated. It buys test targets for the Spartan and Sprint missiles. It buys Spartan and Sprint missiles for flight testing. It pays for range documentation for missile testing. This money is in the bill for those purposes, and those purposes alone, and will not be spent for any other purpose.

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

Mr. JACKSON. I yield.

Mr. COOPER. I regret that I did not hear all of the distinguished Senator's speech, but I have glanced quickly through a copy. I appreciate, as do all of us, his work in the Armed Services Committee for our country and his vast knowledge in this field.

I would like to speak to the question raised by the Senator from Mississippi (Mr. STENNIS): I start by saying, as I did last year, that we appear to be talking about different types of systems to protect the missile bases. The Senator speaks of Safeguard, and I speak of an advanced antiballistic missile system.

The Senator from Mississippi asked if there was any way, other than on Safeguard, on which the \$365 million could be spent. As I understood the Senator from Washington, he said "No." I would like to ask the Senator from Washington and the Senator from Mississippi if in

the hearings before Armed Service Committee there was a discussion of what is termed a "hard-point system."

Mr. JACKSON. Yes, indeed.

Mr. COOPER. I have read the hearings dealing with such a system and also the very comprehensive hearings held by the subcommittee of the Committee on Appropriations of the House of Representatives, under the chairmanship of Mr. MAHON. I found on page 591, and following pages of the House report, the section entitled "Hard Site Defense System."

The point we are making and expect to debate on this amendment is that the \$365 million for research and development ought to be spent on a hard point missile site defense system which would protect missile sites. Last year we were told by the Department of Defense, and it was said again and again on the floor of the Senate, that the system was ready to deploy. The argument was made, "Let us not wait; let us deploy this system to protect our missile sites." The truth of the matter is that a year has passed and there has been no deployment, and in that time the Department of Defense, including the Secretary of Defense, including Assistant Secretary Johnson, who, I understand, directs the program and Mr. Gilstein, a scientist in the Department of Defense, testified that the Safeguard system would be inadequate to meet a threat posed by the Soviet Union through a growing deployment of the SS-9.

Is it not a fact that money in this bill has been set aside for work upon small radars, for work upon smaller Sprints, and upon a new system which is designated a hard site defense system?

Since last year a great many of the questions we raised are now agreed to by the Department of Defense and by the proponents of the bill.

The first argument for this system was that as Sentinel it would protect people and cities. Then the proposal came before us in a new guise, to protect against missiles launched accidentally and against the Chinese threat. The Armed Services Committee has abandoned the Chinese threat argument. Since last year the Department of Defense has admitted that the Safeguard system will not protect our missile sites. It is spoken of as a transition system. This testimony is in the hearings.

There is \$1 billion in this bill for deployment at the two sites, which our amendment does not touch. Over \$1 billion, including a carryover of \$224 million, was obligated last year. No question of leadtime is involved. No question of an ongoing Safeguard system remains. Over \$2 million has been made available for the two sites in phase I.

What we are arguing, as we argued last year, is that if the SALT talks fail—and I hope they will not fail—and the Soviets continue to deploy the SS-9 system and the other systems mentioned, then, for the security of this country and for the security of its people, it would be a mistake—it would be more than a mistake, it would be a dereliction of our duty to the people, to spend money on a system which the Department of Defense is say-

ing will not work if the threat continues. That is the argument we make.

This year we heard, in the Foreign Relations Subcommittee chaired by the Senator from Tennessee (Mr. GORE), scientist after scientist—some heard before the Senate Armed Services Committee; some before the House Committee on Appropriations—testified almost unanimously, that this Safeguard system will not work.

The Senators on the committee have good information, and know that the scientists gave many reasons why Safeguard would not work. For instance, with one MSR covering a field, soft as it is, it could be destroyed by one SS-11, eliminating protection for the entire field.

The Defense Department is engaging in a program to develop small radars. It has also been stated that Safeguard missiles exploding at greater heights than advanced and smaller Sprints, which could be detonated closer to the earth, would not give as good protection and these scientists also testified that the advanced system would be a cheaper system than Safeguard.

Mr. JACKSON. Mr. President, will the Senator yield for a moment?

Mr. COOPER. I yield.

Mr. JACKSON. Just for the purpose of trying to clarify my understanding with that of my good friend from Kentucky, I have before me the statement the Senator made at the time the amendment was introduced. He said:

The sum of \$365 million—

Referring to the R. & D.—

would be available for advanced research and development, for research and development of a system specifically designed to protect the Minuteman ICBM force. Such a "dedicated hard site system" has been advocated by many distinguished weapons scientists.

I think there is a misunderstanding here, and maybe we can clarify it.

The \$365 million, as we have it in the bill before us, is for research and development in support of Safeguard phase I. This means that the \$365 million is necessary to develop the system for the two sites that have been authorized: Malmstrom in Montana and Grand Forks in North Dakota.

We have looked into this question of a system of hard-site defense in some detail, and I fully respect my good friend's position on the need to get into this subject.

The Armed Services Committee held hearings on this subject when we were going through the whole Safeguard program for this year, and approved \$58 million requested by the administration for the purpose of R. & D. on hard-site defense.

The fact is that this program—the hard-site defense program—is adequately funded. After the statement was made, I wanted to be certain about the adequacy of these funds, so I contacted the Department of Defense. The Defense Department has informed me that it is not certain whether the program in question can get organized so as to effectively spend even the entire \$58 million we have approved in the committee for fiscal year

1971. The addition of more funds would, the department informs me, "pretty much result in chaos."

In short, Mr. President, there is no program for hard-site defense under which these additional funds can be used. That is the judgment of the Department of Defense, and that was our judgment, I might say, when we held the hearings.

I wanted to make this statement because I think there is a misunderstanding as to the purpose of that \$365 million for research and development.

When we start work on a new weapons system, we always include, at the outset, as a part of the initial system, funds carried under research and development. Then after that, it moves out of that phase to include ongoing so-called series production, which is no longer carried as research and development.

I believe, in order to be helpful here, that that is where the misunderstanding may have originated. I did want, Mr. President, to make very clear the meaning of the \$365 million in the budget.

I emphasize again that in addition to that \$365 million, there is \$58 million for hard-site defense research and development. This is separate and apart from the other amount, and appears in the budget of the Advanced Ballistic Missile Defense Agency.

I thought my friend from Kentucky would like to have that explanation. I realize that the \$365 million carried as research and development might have been construed as being a flexible sum of money that could be used for all aspects of research and development in connection with missile defense. But the facts are, as I say, that the \$365 million is a specific research and development supporting fund for Safeguard, for the two sites that I referred to earlier.

I hope that will be helpful to the Senator.

Mr. COOPER. Does the Senator mean to say that that the funds could not be used for any research to improve the original design of the Safeguard system, or to modify it in any way?

Mr. JACKSON. It can be used to improve the components going into those two sites, MSR, PAR, Sprint, Spartan, data processing and software and testing and evaluation, but it is not an experimental research and development program for hard point defense.

Because this hard-site defense is more in the area of the unknown, we deliberately put it in a separate category. Those funds are to be found in connection with the \$58 million that I referred to earlier.

I want to say to my good friend—and I know how frugal he is on these matters—that the Department has assured us that they may not be able to spend that entire \$58 million, let alone \$365 million, more for this purpose.

Mr. STENNIS. In context with that point, Mr. President, will the Senator yield to me?

Mr. JACKSON. I yield.

Mr. STENNIS. The \$58 million to which the Senator refers, as a matter of fact, is over in the research and development account, and not connected with procurement, as the bill is kept. It is in pure research and development, and for

advanced work beyond the Safeguard concept; is that not correct?

Mr. JACKSON. The \$58 million is for the Army Advanced Ballistic Missile Defense Agency.

Mr. STENNIS. Yes.

Mr. JACKSON. And that is separate and apart from the \$365 million that is for research and development in support of the components going into those two sites, one in Montana and one in North Dakota.

Mr. STENNIS. If I may make this statement—and I think this is carefully put together—the major share of the \$365 million is for the testing and evaluation phase of the Safeguard development. This is the part that shows the system will work, which confirms that Safeguard will do the job that it is intended to carry out. Although it is in R. & D., it is really development.

Mr. JACKSON. Let me be as clear and direct as possible: if we take the \$365 million and divert it from Safeguard R. & D. to "advanced" R. & D., phase 1 is dead.

Mr. STENNIS. Yes.

Mr. JACKSON. I mean it is dead, period; we have killed the technology, including the sites in Montana and North Dakota. I cannot think of a more simple explanation of what would happen if that \$365 million were to be used for "a dedicated hard-site system."

Mr. STENNIS. I will agree that that is correct. It kills it dead, if you take out the \$365 million, as I understand it.

Mr. JACKSON. The Senator is correct, absolutely. It means that the phase 1 program for Montana and North Dakota cannot go forward.

We do have the funds in the bill for hardsite R. & D., and I commend the Senator from Kentucky for raising this point about the need for research and development on a hard-point defense. I simply thought it was essential that Senators understand what would happen if the \$365 million were singled out for the purpose of hard-point defense.

Mr. COOPER. Mr. President, I wish to respond briefly.

I say, with the greatest respect, to the Senator from Washington (Mr. JACKSON) and the Senator from Mississippi (Mr. STENNIS), and also the Senator from Colorado (Mr. DOMINICK), that I know that they have served long upon the Armed Services Committee, they have access to very detailed information and are dedicated to their work. But I must say that, after 3 years of misinformation from the Department of Defense and two administrations about the purpose of Safeguard and its mission, we should look very carefully at what is being offered now. I believe it only natural that the Senate members of the Armed Services Committee would begin to question very closely statements regarding the purpose and the effectiveness of this system.

I said earlier—and the Senator is aware of this—that the anti-ballistic-missile system was first offered to Congress and to the American people as an area defense system to protect the people. Nothing pulls at one's heart more than such a claim. Two years ago it was

the burden of the argument for the Sentinel. It was argued that it would save 5,000 or 10,000 or more Americans. And who can argue with that? But we knew it would not provide such protection.

Then Secretary McNamara came to Congress with a modified Sentinel. It was to protect our Minuteman missiles sites. It was to protect against the Chinese threat. It was to protect against an accidental launch. How the Senate argued the necessary protection of the people of this country against the Chinese threat. The committee has dropped the argument of Chinese threat.

Now we are approached as last year with the argument that Safeguard is hard site, hard point missile defense. Last year the Department of Defense would not budge from its position that this was ready and an adequate defense, and we could not delay any longer.

But even last year the Department of Defense was beginning to work on alternatives on an advanced system contradicting what was said last year. \$158 million is made available for an advanced system, is it not?

Mr. JACKSON. It is \$58 million.

Mr. COOPER. For special hard point defense.

I should like to read from the hearings of the House Committee on Appropriations. I will place the entire exchange in the RECORD, because I do not want to quote the chairman of the committee, Mr. Mahon, out of context. I do not know what his views are about this Safeguard system, and it would be unfair for me to quote him out of context. This is the question Mr. MAHON asked of Dr. Gilstein of the Department of Defense on page 160 of the hearing record:

It generally has been agreed that Safeguard was not, as now conceived, really adequate to defend Minuteman against a Soviet attack that might come with just the numbers of weapons they have today. So, what threat are you talking about over and above the one the Secretary of Defense has been discussing?

Dr. GILSTEIN. We are talking about the growth threat that goes beyond the time frame. This involves a possible carrying of reentry vehicles per booster of the SS-9 class, rather than three per booster as they are now showing in their R. & D. phase.

Now I refer to Mr. Johnson, Assistant Secretary of the Army, on page 161. He was asked the question by Mr. WYMAN:

What is wrong with it?

He is talking about Safeguard.

Mr. Johnson replied:

The decision to deploy it would be a function of the growing threat. The decision to develop it is associated with the fact that it is very clear that, should he choose to develop the multiple warhead approach and to upgrade the accuracy of his SS-11 so they now become silo attackers, should he choose to do that, then it is clear you will need it. It would be inappropriate to wait to have the development ready until you see him doing that. So, the decision to proceed with the development is that it is a rather straightforward attack that he could provide if he developed along the lines of the multiple vehicles and the upgraded SS-11's. Therefore, the development, we feel, should proceed. The deployment decision then depends upon your intelligence in the out years.

Of course, so long as all the money is put into the development of Safeguard components, which witnesses say is inadequate to defend our ICBM missile sites, money will not be available for the development of a hard point system which even Department of Defense officials say is necessary if SS-9 is continued to be deployed. It may be argued that time will be lost in the development of our advanced system. I should like to read what Dr. Gilstein said about this. On page 162 he was asked this question:

Is it more or less in the scientist's mind at the present time?

Dr. GILSTEIN. It is more than that. It is in operating condition in various facilities. The data processors exist. The software for the processors is being written. The processes are starting to be demonstrated. The technology for much of the radars, the phased array antennas, the crossfield antenna tubes, modulators, and so on, also exist as components. They exist in full scale right now and have been demonstrated. An integrated radar has not been made.

At another point in the hearing—unfortunately, I cannot put my hand on it at this time, but I will supply it for the RECORD—a witness was asked whether there would be any significant time between the deployment of Safeguard, as it has been described for us last year and this year, and an advanced system; and the answer was there would be no significant time. I will insert this colloquy in the RECORD.

My point is this: The Senator is concerned about the continued deployment of SS-9 and other weapons systems, and I am, and I think all of us who have heard the testimony on this subject. Suppose the SALT talks fail and deployment continues? Shall we end up with a system which leading scientists say will not be able to protect missiles? We are arguing that whatever money is in the bill for research and development should go on improvements in the Safeguard system, whatever they may be. My judgment is that the Department of Defense has made the decision to move away from Safeguard to an advanced system, but it is not frank enough to say the decision is made.

Mr. JACKSON. Mr. President, first, let me see if I can clarify one or two things. There is nothing new about research and development in connection with hard point defense. It dates back almost a decade to the first studies and research in 1961. I have a complete list here of the effort up to date. I think there are some 61 studies and contracts concerned with hard point defense, going back to an ARPA study in 1961. This is only a partial list of the programs on the subject initiated within the Department of Defense since 1961.

The point of the discussion my good friend from Kentucky referred to is that the necessity of deploying a hard site defense is tied to what the Soviets do. Obviously, if the Soviet threat exceeds the capability of Safeguard, then the need to take additional steps to protect the deterrent, of course, will be essential. One such step might be to augment Safeguard at the proposed four sites. Another might be to supplement it by adding on to Safeguard a dedicated hard-site system.

What we are doing here is trying to deal with the current situation, the known situation. I do not know what the Soviets will do. I am sure, looking into the future, that if they go ahead and expand on a very large scale, there may be a need to go beyond, possibly, an active defense, and we may well have to take steps to add to our offensive capability.

What we are trying to do here is, No. 1, to protect the credibility of the American deterrent, to protect the security of the United States, and to give to the President a steady hand in negotiating for arms limitation with the Soviets.

Now, if these things fail, then we have to take whatever steps beyond that which are necessary to protect the security of this country.

I am only suggesting here that there are options available. We are now implementing one option. All of these things are relative. As we look ahead, we may have to take and exercise additional options, depending entirely on what the Soviet threat turns out to be.

My good friend from Kentucky knows that a year ago in debate, both in the open and closed sessions, the general feeling was, on the part of many Senators, that the growth of the SS-9 threat, at least, would taper off or stop.

We now know that, of course, even during the period of the SALT talks, even in the midst of the Vienna talks on SALT, the Soviets were then and there starting new SS-9 sites.

These are disturbing facts, which seem to me to have a direct bearing on what we do here in connection with the ABM.

I did wish to emphasize that the hard point approach, the hard point research and development effort, is not new and that it has been going on all these years. It has to be geared to the ongoing threat. We hope that threat will come to an end with some kind of understanding in Vienna or Helsinki.

ORDER OF BUSINESS

Mr. HANSEN. Mr. President, has the rule of germaneness expired?

The PRESIDING OFFICER (Mr. SCHWEIKER). The Chair would inform the Senator from Wyoming that the rule of germaneness has expired and the Senator is recognized.

Mr. HANSEN. I thank the Chair.

MR. JOHNSON, VETERANS' ADMINISTRATION ADMINISTRATOR

Mr. HANSEN. Mr. President, I have read with interest the remarks on the floor yesterday regarding a speech made by the Veterans' Administration Administrator, Mr. Donald Johnson.

Without discussing the merits of the McGovern-Hatfield amendment or Mr. Johnson's reaction to it, let me say I hope I did not read between the lines of the RECORD an implied threat that Mr. Johnson will be given a hard time when next he appears before a congressional committee on behalf of the veterans.

I am sure we can all agree that the McGovern-Hatfield amendment and the welfare of America's living veterans of all wars are two different matters.

I am confident that no Senator would let his anger at Mr. Johnson affect his feeling for the welfare of those who have so nobly defended our country's interests in Vietnam, Korea, and throughout the world.

REDUCTION OF AIR POLLUTANTS FROM EXHAUSTS OF AUTOMOBILE ENGINES

Mr. HANSEN. Mr. President, last week, I witnessed here in Washington a demonstration of a simple but highly efficient method for bringing about the reduction of air pollutants coming from the exhaust of automobile engines.

Atlantic Richfield Co., one of the country's leading petroleum-energy firms, invited me to a special showing of a system developed to help individual motorists contribute to the reduction of a major source of air contamination in our congested cities.

This progressive company is making a positive contribution in the direction of cleaning the air we breathe before we are no longer able to breathe it and, in my judgment, is to be highly commended.

On C Street, just outside the New Senate Office Building, I saw skilled technicians, in less than 10 minutes, diagnose the volume of certain air contaminants coming from the exhaust pipe of a car and recommend simple, relatively inexpensive corrective measures.

Atlantic Richfield has invested more than \$1 million in this program, assembling its "Clean Air Caravan"—a fleet of vehicles equipped with sophisticated exhaust analysis systems, and manned by competent personnel. Units from the "Clean Air Caravan" have been made available to provide the motoring public with exhaust emission analysis—as a public service, at no charge—in such metropolitan areas as Los Angeles, Chicago, Pittsburgh, San Francisco, Sacramento, Dallas, District of Columbia suburbs, and have been scheduled for a number of other cities within the next couple of weeks.

Since June 15, when this system was introduced in Los Angeles, more than 20,000 drivers around the country have had their cars tested. I am told that the reaction of motorists to this service has been very enthusiastic. There is no doubt in my mind that this enthusiasm is sparked by Atlantic Richfield's sincere, noncommercial operation of the "Clean Air Caravan." When a driver receives an account on the condition of his car with advice for improving it, there is no effort made to promote the company's products, according to reports.

The analysis hardware for this operation consists of a group of infrared and electrical sensing units that quickly measure carbon monoxide and unburned hydrocarbon emissions at idle and normal engine operating speeds, and a pollution control valve testing system.

Sun Electric Corp., Chicago, manufacturer of electronic automotive testing equipment, is the developer of the exhaust emission tester.

The hydrocarbon and carbon monoxide analysis processes were developed through an intensive effort between Atlantic Richfield and Sun Electric.

The analysis procedure is relatively simple: While the car engine is running, a metal guide is inserted into the exhaust tailpipe, a unit for electrically measuring engine speed is clamped onto a spark plug wire, and another device is attached to the engine oil filter opening. All of these lead to the analysis equipment. Panel instrumentation measures hydrocarbon parts per million and percentage of carbon monoxide in the exhaust, engine r.p.m., and pressure level of the crankcase ventilation system.

From the instrumentation readings, trained service personnel can determine the existence of such discrepancies as an improper air/fuel mixture, dirty air filter or a plugged pollution control system—all contributors to exhaust pollutants through inefficient fuel combustion and all usually easily corrected by simple adjustment or part replacement.

A fouled spark plug and broken spark plug wires are other malfunctions that can often be detected through the system.

It is important to recognize that the procedure I have been talking about gives each motorist a share of the credit for environmental gains accomplished. The technicians can analyze and advise on corrective measures, but the actual cleanup of pollutants is accomplished by each motorist taking prompt action as advised. Naturally, the cars in most need of improvement will show the greatest gains.

Let me quote one top Atlantic Richfield executive:

The "Clean Air Caravan" is a result of recent research activity, but Atlantic Richfield early recognized the need for controlling exhaust pollutants. In 1960, an extensive program was initiated to control nitrogen oxide emissions using an exhaust gas recirculation technique.

These activities reflect our company's concern for the solution of pollution problems—not only in the air we breathe but also in water and in our visual environment.

We also consider that individual citizens have a share in environmental responsibility. The "Clean Air Caravan" helps each motorist make a meaningful response to the pollution challenge by correcting problems in his own car.

Atlantic Richfield Co. is to be congratulated for its progressive, public-minded policies in this major effort toward cleaner air. In my opinion, this is an excellent example of the cooperation between government and industry that is necessary to overcome many of the problems facing us in the United States today.

MESSAGE FROM THE HOUSE

A message from the House of Representatives, by Mr. Berry, one of its reading clerks, announced that the House had passed a bill (H.R. 18260) to authorize the U.S. Secretary of Health, Education, and Welfare to establish educational programs to encourage understanding of policies and support of activities designed to preserve and enhance environmental quality and maintain ecological balance, in which it requested the concurrence of the Senate.

HOUSE BILL REFERRED

The bill (H.R. 18260) to authorize the U.S. Secretary of Health, Education, and Welfare to establish educational programs to encourage understanding of policies and support of activities designed to preserve and enhance environmental quality and maintain ecological balance, was read twice by its title and referred to the Committee on Labor and Public Welfare.

AUTHORIZATION OF APPROPRIATIONS FOR MILITARY PROCUREMENT AND OTHER PURPOSES

The Senate continued with the consideration of the bill (H.R. 17123) to authorize appropriations during the fiscal year 1971 for procurement of aircraft, missiles, naval vessels, and tracked combat vehicles, and other weapons, and research, development, test, and evaluation for the Armed Forces, and to prescribe the authorized personnel strength of the Selected Reserve of each Reserve component of the Armed Forces, and for other purposes.

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

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

The Senator from Michigan is recognized.

Mr. HART. Mr. President, we are in a sense resuming a debate that is not new to this Chamber, the debate on the deployment of the Safeguard antiballistic missiles.

While the system we debate today is the same as the system the Senate authorized by a one-vote margin last August, events or a lack of events have changed, to some degree, the emphasis of the debate.

Yesterday, Senator COOPER and I introduced an amendment dealing with Safeguard. That amendment was sponsored by Senators CASE, BROOKE, BURDICK, CHURCH, CRANSTON, EAGLETON, GOODELL, GRAVEL, HARRIS, HARTKE, HATFIELD, INOUE, JAVITS, KENNEDY, MANSFIELD, MCCARTHY, MCGOVERN, MATHIAS, MONDALE, MUSKIE, NELSON, PELL, PROXMIER, SAXBE, SCHWEIKER, TYDINGS, YARBOROUGH, and YOUNG of Ohio.

In order to spell out the effect and meaning of that Safeguard amendment, I will briefly outline what the amendment does and then cite events of last year which affect this debate.

The administration requested \$1,359 billion to continue deployment at Grand Forks, N. Dak., and Malmstrom, Mont., the sites approved last year; to purchase additional Sprint missiles for those sites; to begin site preparation at Whiteman Air Force Base, Mo., and at Warren Air Force Base, Wyo.; and to begin preparations at four additional sites which the Pentagon admitted would be part of a thin area defense.

The Senate Armed Services Committee reduced that request \$10 million by striking the authorization for the four sites officially dedicated to an area defense.

Our amendment would reduce the authorization by an additional \$322 million, striking all funds for the Missouri and Wyoming sites, but leaving authorization to continue deployment at Grand Forks and Malmstrom and to add Sprint missiles at those sites.

Our amendment then would authorize an expenditure of \$1.027 billion, or about \$332 million less than requested by the administration.

The amendment was drawn with certain recent events in mind.

Despite last year's argument that deployment was needed at Grand Forks and Malmstrom to work out bugs in the system, Congress is asked to expand the system with little or no work having been accomplished at those sites.

Last year, despite the contention of Safeguard opponents that the system was not likely to work, and if it did, that it could be easily overcome, supporters of Safeguard urged approval because it was "the best we have." This year, Pentagon officials admit that the system can be overwhelmed, and want additional funds to develop new radars and to purchase additional interceptor missiles.

Last year, arms limitation talks—SALT—were a hope. This year, the talks are in progress and a worthwhile agreement is the hope.

Last year, we were told that we needed authority to deploy two Safeguard sites as a bargaining chip for SALT. This year, we are told we need additional Safeguard sites as bargaining chips.

Against this background, Senator COOPER and I do not consider this amendment so much a compromise as a rational, modest but important effort to help stem the ever escalating arms race and, specifically, to stop the momentum of this particular weapons system.

To those who believe we should seek to strike all money except for research and development, let me emphasize that a vote for this amendment in no way endorses what we opposed last year.

Rather, we are addressing ourselves to the critical questions of stopping the momentum of a weapons system which, if fully developed, could cost—and you can almost name your favorite big figure—as much as \$50 billion, and of stopping the momentum of an arms race, which, with each new escalation, decreases rather than increases the national security.

To those who say that increased costs resulting from any delay in moving ahead with what has been called phase II of Safeguard will offset any immediate savings, we reply that an ultimate expenditure of \$50 billion and deployment of a weapons system which could push the arms race to the ultimate destruction of the world should not be decided on whether a savings of \$300 million may or may not evaporate.

And to those who wish to push that argument, remember that the same could be said for pennywise-pound-foolish reductions in expenditures for urban re-

nawal, mental health, hospitals, and education.

Mr. President, before turning to specific questions about our amendment, I think it might be helpful if we try to define exactly what we are debating.

In rejecting the Pentagon's proposal for Safeguard sites dedicated to an area defense, the Senate Armed Services Committee said:

The committee affirms its conviction that there is no compelling need to move now to the deployment of an area defense of our population against Chinese Communist ICBM attack.

Mr. President, I agree with that conclusion.

However, as shall be developed later, I do not agree with the contention of the committee that the sites at Malmstrom, Grand Forks, Whiteman, and Warren can be considered solely or even chiefly as devoted to the defense of deterrent.

For the sake of clarity then, we should not use interchangeably, as the committee report appears to do, the terms "Safeguard" and "defense of deterrent."

The question at hand is neither whether we may need at some time in the future a hard-point defense of our deterrent, nor, as indicated in the committee report, "unilateral termination of the Safeguard program."

Rather, as I indicated previously, we are debating critical questions of momentum.

In a world increasingly threatened by nuclear extinction with each new round of the arms race, does the Senate wish to take a small step to slow the momentum of a race to oblivion?

In a nation which must do more to fight pollution and poverty, which must do more to improve its delivery of health care, to fight crime, to build housing, does the Senate wish to take a small step to slow the momentum of a weapons system of doubtful reliability and at best of marginal need which, if fully deployed, could cost as much as \$50 billion?

The Senate can take those steps by voting for our amendment to stop deployment of phase II of Safeguard.

And the Senate can vote yes on the amendment if it answers these two questions in the negative:

First. Is phase II of Safeguard vital to the success of SALT?

Second. Is phase II of Safeguard vital to the national security?

Let me deal with those questions in order.

SAFEGUARD AND THE ARMS RACE

Mr. President, a discussion of the relation of Safeguard to the arms race can be divided into two parts.

First, does the United States need to expand the Safeguard system to strengthen chances of securing an arms control agreement which promises a real limitation on arms development and deployment?

And second, does deployment of Safeguard affect the arms race?

Mr. President, history does not indicate that the policy of arming to disarm holds much promise. To the contrary, the arms limitation agreements we have reached with the Soviet Union have been preceded by the absence of such a policy.

Those conclusions are not mine alone, but are based on research developed by Adrian S. Fisher, dean of the Georgetown University Law Center and former Deputy Director of the U.S. Arms Control and Disarmament Agency.

In June of 1946, the United States, with a monopoly on nuclear weapons, attempted to negotiate the Baruch plan. The plan would have established international control of the production, development and use of nuclear material.

Based on the reasoning that we should expand Safeguard to win concessions at SALT, it would appear that our overwhelming strength in 1946 would have put pressure on the Soviet Union to accept our proposal.

Of course, the opposite happened. Fearful that the United States intended to relegate Russia to a second-class power, Moscow declined to agree and began an intensive effort to catch up in the nuclear arms race.

In 1957 after the launching of Sputnik, Moscow, dealing from a position of strength, sought an agreement limiting strategic nuclear delivery systems.

Based on the reasoning that we should expand Safeguard to win concessions at SALT, it would appear as if the Russians' overwhelming strength in 1957 would have pressured us into accepting their proposal.

Of course, the opposite happened. Fearful that we might be relegated to a second-class power, we declined to agree and began an intensive effort to catch up in the race for nuclear delivery systems.

However, when President Eisenhower sought a treaty to maintain the Antarctic a nuclear-free zone, he did not embark and this Nation did not embark on a program to deploy nuclear weapons in the Antarctic.

And today we have an agreement not to place nuclear weapons in the Antarctic.

When President Kennedy sought a treaty banning atmospheric testing of nuclear weapons, he did not embark and this Nation did not embark on an accelerated program of atmospheric testing. To the contrary, he announced that not only would the United States suspend all such testing so long as other nations did not test, but he promised that this Nation would not be the first to resume testing.

Under the argument that we should expand Safeguard, that statement should not have been made, but today we have an agreement controlling atmospheric testing of nuclear devices.

When President Johnson sought a treaty to control the proliferation of nuclear weapons, he did not launch and this Nation did not launch a program to give nuclear arms to other countries.

To the contrary, the U.S. Senate, under the leadership of Senator PASTORE, helped create the atmosphere which resulted in the signing of a nonproliferation agreement.

During the negotiations, Moscow expressed concern that under one guise or another, the United States might seek to transfer nuclear weapons to West Germany.

The Pastore resolution commended the President's efforts to negotiate a nonproliferation treaty. The wording of that resolution, combined with its legislative history, and the expressions of the Senator from Rhode Island in the course of the hearings helped convince Moscow that we had no intention of transferring nuclear arms to West Germany.

Under the reasoning that we should expand Safeguard, that resolution should not have been passed; the proper course would have been to amend the Atomic Energy Act to permit the transfer of nuclear weapons to other countries. But today, because of our restraint at the time, we have a nonproliferation treaty.

Mr. President, on April 9 of this year the Senate passed, by a vote of 72 to 6, a resolution urging the President to seek an immediate suspension by the United States and the Soviet Union "of all offensive and defensive nuclear strategic weapons systems."

Mr. President, the Senate should support rather than undercut the intent of that resolution, a resolution in keeping with actions taken in the past which have helped lead to arms limitation agreements.

Mr. President, we can support the intent of that resolution, we can remain consistent with its expression of a desire to halt the arms race by voting against deployment of phase II of Safeguard.

In doing that, we leave the President with a formidable bargaining chip he says he needs—the sites at Grand Forks and Malmstrom—but we make clear to the world that we are not anxious to escalate the arms race.

In that way the Senate would be acting in a responsible way to help slow the momentum of that race to oblivion.

To those who fear that an expression of a desire to end the arms race might be interpreted as a sign of weakness, I say that Moscow knows the big bargaining chip is not found in partial deployment of a system of doubtful reliability, but is found in the uncontested authorization request for research and development on a more effective defensive system and in the awareness that if SALT fails, such a system will undoubtedly be installed.

Those who contend that deployment of Safeguard as proposed by the Senate Armed Services Committee is not provocative and will not escalate the arms race cannot have it both ways.

Either Safeguard is provocative and a bargaining chip, or it is not provocative and is not a bargaining chip.

If Safeguard is not provocative, even supporters of phase II of Safeguard must admit that the argument that phase II is needed as a bargaining chip does not hold water.

If Safeguard is provocative, then supporters of phase II must admit deployment threatens to escalate the arms race, and must weigh that danger against what history tells about the value of arming to disarm.

It seems to me that Safeguard is provocative. Let me explain.

The national security of this country and of the Soviet Union is built on the ability of the nuclear deterrent of each nation to inflict an unacceptable amount

of damage on the other even after being subjected to attack.

Any weapons system that downgrades the effectiveness of one nation's deterrent upsets the balance and forces that nation to develop a new weapon to restore the balance.

An area defense system which is designed to protect cities could, if it worked, downgrade the deterrent value of existing weapons.

For that reason, while a hardpoint defense of deterrent missiles may not escalate the arms race, deployment of an area defense will.

The Senate Armed Services Committee contends that by eliminating the four sites designated for area defense, it has made clear that Safeguard is for defense of the deterrent.

Unfortunately, words in a committee report do not change the fact that Safeguard components were originally designed to provide area defense.

Unfortunately, the words of the committee report do not change the testimony of Pentagon witness after Pentagon witness that the sites at Warren and Whiteman, as well as the sites at Grand Forks and Malstrom, can be building blocks for an area defense.

The Pentagon made quite clear its intentions for Safeguard when, in response to a question submitted by the Armed Services Committee, it wrote:

In one sense, we have already started the area defense at the two sites authorized last year for Phase I because those two sites contribute to all the objectives the Safeguard system, if fully deployed, would meet. They would protect not only Minuteman but they also form an integral part of the area defense of the entire country. (Page 289, Authorization for Military Procurement, Research and Development, Fiscal Year 1971, Hearing before Senate Armed Services Committee)

I submit that the strategic planners in Moscow have every reason to accept the position stressed over and over again by ranking Pentagon officials.

Dr. W. K. H. Panofsky, Director of the Stanford Linear Accelerator Center, put the situation well when he submitted this statement to the Senate Armed Services Committee:

I disagree with the statement that "Safeguard poses no threat to the Soviet deterrent." I agree that Phase I and Phase II-A of Safeguard clearly do little to "protect the population." However, the announced policy of covering the country with an anti-Chinese ABM designed to avoid damage if at all possible, signals an intent to go further. Just the fact that Safeguard is poorly designed for its announced objective of defending the deterrent, and the policy of an anti-Chinese "virtually infallible" defense emphasizes to the USSR that retaining the option of expansion to a thick city defense is an important ingredient of the Safeguard decision.

Also, most of the pro-ABM public witnesses have made it unmistakably clear that they view the entering wedge role of Safeguard toward a city defense against the USSR as its most important function, the President's statements notwithstanding. (Page 2820, Authorization for Military Procurement, Research and Development, Fiscal Year 1971, Hearing before Senate Armed Services Committee)

And to use the words of Defense Secretary Laird:

The fundamental driving force in an arms race is what one country perceives as possible objectives of another country's actions. (Associated Press luncheon, New York City, April 20, 1970.)

Secretary Laird and his assistants have spelled out in great detail the possible objectives of deploying Safeguard, and those possible objectives would clearly escalate the arms race.

SAFEGUARD AND THE NATIONAL SECURITY

Mr. President, it has been said that the question of going ahead with phase II of Safeguard is a policy question as to whether we should pursue the weapon which offers the greatest prospect of protecting our land-based ICBM deterrent force.

I do not agree, for posed in that way, the questions of whether our total deterrent is endangered and whether Safeguard will provide any real protection are ignored.

If, indeed, our total deterrent were threatened, and if indeed Safeguard would provide significant protection, one would have to weigh the effect of deployment of phase I on the arms race against the extent of the threat to our national security.

But neither of those contingencies is correct.

Let us assume that phase I and phase II of Safeguard work and are fully deployed. A chart prepared from public information by Dr. Panofsky and printed on page 2222 of the Senate Armed Services Committee hearing on this bill, shows the following:

If Moscow limits itself to producing SS-9 missiles at its present rate, our present ICBM land-based deterrent would be threatened at the start of the next decade. At that point in time, Safeguard would provide some protection, but by continuing production of SS-9's, Moscow shortly would have enough missiles to overwhelm Safeguard.

If the Russians increase the rate of production, or improve the accuracy of the SS-9, or go to MIRV's, all of which they would be most likely to do if they were intent on going for a first-strike capability, they would have the capacity to overwhelm Safeguard before it is deployed by mid-decade.

If a SALT agreement results in a leveling of missile deployment, then Safeguard will not be needed.

In other words, for upwards of \$12 billion we will be purchasing a defense system which will be effective only if the Soviet Union follows a very narrow range of options, and even then, only for a very short time.

This fact was in essence admitted by several Pentagon witnesses when they testified in support of authorizations needed to finance research on more effective ways to protect our land-based deterrent.

Let me cite just three examples from testimony given the Senate Armed Services Committee.

Dr. John S. Foster, Jr., Director of Defense Research Engineering, made the following statement:

Mr. Chairman, it is true that a level of offense can be obtained that will overwhelm

any defense. Secretary Laird and others of us in the testimony have said that the Soviet offensive force could grow to the point where the Safeguard Phase II deployment level could be overwhelmed.

To guard against that possibility, we have initiated in the fiscal year 1971 program the development of a smaller and less costly radar to provide point defense for the Minuteman fields.

Should the threat continue to grow, we would have the opportunity to deploy these smaller radars in larger numbers than the MSR's, so that they could cope with a significantly increased threat.

Lt. Gen. A. W. Betts, Chief of Research and Development, said:

The reason that we have a considerable increase this year (in research funds) is that a decision has been made that we should protect our options for the future possibility that the Soviet threat to Minuteman will continue to advance beyond that which could be handled by the Safeguard system, and in the event that it does, and the decision is made that we need to put a hard site defense of a greater capability in the Minuteman fields than we now have as we plan Safeguard, then we would want the technology that is represented by these developments. (Page 815, Authorization for Military Procurement, Research and Development, Fiscal Year 1971, Hearing before Senate Armed Services Committee.)

The third witness, Secretary of the Air Force Robert C. Seamans, Jr., said:

If the Soviets continue to increase the threat, it may prove more cost effective to rely upon a broader mix of defensive measures—close-in hard point defense, hardening, and multibasing, as examples. (Page 908, Authorization for Military Procurement, Research and Development, Fiscal Year 1971, Hearing before Senate Armed Services Committee)

Now let me turn to the question of whether our total deterrent is in danger.

Our deterrent rests with ICBM Minuteman missiles, nuclear submarines, strategic bombers, and a vast array of tactical nuclear weapons located abroad.

Only if all of these deterrents are endangered, and only if all of them can be wiped out simultaneously, can a strong case be made for the need to defend our Minutemen.

That case has not been made and, I suspect, cannot be made.

But even if one fears that the impossible can happen, and even if one believes that we should spend \$12 billion for a defense which can only be effective if the Russians refuse to exercise any of several options, and then only for a short time, one must still answer the very serious technical objections raised against Safeguard.

In brief, there are a large body of scientists and technicians who believe that the computer which will direct Safeguard missiles cannot work with the reliability required to provide a credible defense.

There is considerable doubt within the scientific community, acknowledged by the Pentagon, that the system will significantly increase our defense posture because the radar which directs the Safeguard missiles is easier to destroy than the Minuteman missiles Safeguard is supposed to protect.

Finally, persons experienced with developing sophisticated weapons systems point out that such systems have almost always required rigorous and realistic field testing and sometimes actual use to iron out all the bugs, and I think it is safe to say that Safeguard is one of the most, if not the most, sophisticated weapons system ever proposed.

Unless we are willing to subject Safeguard equipment to missile attacks, it will never be tested as it should.

Mr. President, the objections which argued against deployment at Grand Forks and Malmstrom last year argue even more strongly against expansion of the system this year.

I do not think it is incorrect to suggest that some members of this body supported deployment at Grand Forks and Malmstrom last year on the grounds that useful knowledge on eliminating operational bugs could be developed by actual field deployment.

Now, however, with little or no work done on the site authorized last year, the Pentagon is asking us to approve an expansion of the system.

This request we made despite this statement made last year by Secretary Laird:

So to those who are concerned about whether the SAFEGUARD system will work, I would say let us deploy Phase I and find out. Only in this way can we be sure to uncover all of the operating problems that are bound to arise when a major weapon system is first deployed. Since it will take five years to deploy the first two sites, we will have ample time to find the solutions through our continuing R&D effort to any operational problem that may arise. And only then will we be in a position to move forward promptly, and with confidence, in the event the threat develops to a point where deployment of the entire system becomes necessary. (Page 237, Senate Armed Services hearings, 1970, on S. 3387)

I, for one, remain unconvinced that there is any great need to hurry into deployment on an untested system costing billions of dollars and which, if allowed to grow as envisioned in the Pentagon, can only escalate the arms race and the arms budget of both this nation and the Soviet Union.

Rather, I am convinced that the Senate should take a small step to slow the momentum of the race to oblivion. Normally, we make such pleas on behalf of generations to follow, but in this case, there may be no generation to come.

Rather, I am convinced that the Senate should take a small step to slow the momentum of an expensive weapons system of doubtful reliability and at best of marginal need.

We can do no less for a nation which must do vastly more to fight pollution and poverty, to improve its health care delivery system, to achieve educational excellence, to fight crime, to build needed housing and all the rest of the litany of nonmilitary domestic needs, the failure adequately to respond to which can more effectively destroy our future than any threat from overseas.

We can take those steps by striking authorization for expansion of Safeguard from this bill—the step that is proposed by the amendment offered by the Senator

from Kentucky and myself, and many others.

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

Mr. HART. I yield.

Mr. COOPER. Mr. President, I congratulate the Senator from Michigan upon his address to the Senate today on the amendment which he has offered, and in which I have joined with a number of other Senators. As always, his approach has been one based upon reason and experience, and made in good temper. I have no doubt, as the debate proceeds and he continues to draw upon his knowledge and experience and present it to the Senate, that it will have great effect. I know that, in discussions with a number of Members of the Senate who are concerned about this problem, he has shown his desire to reach a solution that would protect the principle in which he so strongly believes—one which would also be considered reasonable by other Members of the Senate, and one that would not in any way damage our country's position in the SALT talks.

I will ask the Senator if he does not consider that the acceptance which the amendment offers of the action that was taken last year, one which appropriated more than a billion dollars for phase I of the Safeguard system, plus the billion dollars that will be authorized this year in the pending bill—provide a very ample and generous position for any use of the SALT talks.

Mr. HART. Mr. President, first I thank the Senator from Kentucky for his kind comments, and remind my colleagues that it was he who initially undertook this fight several years ago. We are all delighted to be with him, and hope this time he can have a measure of success.

Now to his question. I think the argument can be made that casting the authorization in the form this amendment would cast it makes the chip, if there is such a chip, stronger than proceeding either as recommended by the administration or by the Armed Services Committee, by authorizing them to concentrate their efforts on what the kinks are.

Actually, there are those two sites provided for in phase I. Undertaking to develop this Safeguard system, to me—and I am sure to the Senator from Kentucky as well—would provide a stronger, more compelling kind of poker threat than advancing without any experience or feedback yet from phase I to phase II.

As Secretary Laird, last February a year ago, said:

So to those who are concerned about whether the Safeguard system will work, I would say let us deploy Phase I and find out. . . . Since it will take five years to deploy the first two sites, we will have ample time to find the solutions through our continuing R&D effort to any operational problem that may arise. And only then will we be in a position to move forward promptly, and with confidence, in the event the threat develops to a point where deployment of the entire system becomes necessary.

If he was sound then, he is sound now in providing, as this amendment does, the tools to proceed at phase I along with basic research, we believe, that would make stronger and not weaker the

chip, if indeed there is any validity to the argument.

Mr. COOPER. I would appreciate the Senator's comments about the threat which is talked about so much. If it should become a reality, would not the preservation of a deterrent and the security of our country be better assured by the amendment we offer, rather than the continuing deployment of a system which almost the entire scientific community admits is faulty and many in the Department of Defense have stated in testimony is inadequate?

Mr. HART. I believe, and we believe, that it would enhance the security and better safeguard the security of this Nation.

I thank the Senator.

Mr. COOPER. I thank the Senator from Michigan.

Mr. PELL. Mr. President, I congratulate the senior Senator from Kentucky and the senior Senator from Michigan on their amendment, of which I am proud to be a cosponsor. I trust that with their skilled management, the amendment will prevail.

HANOI'S CRUEL TREATMENT OF PRISONERS OF WAR

Mr. PELL. Mr. President, we have seen evidence on many occasions that the deliberations of this body do not pass unnoticed in the capital of North Vietnam. For that reason, I should like to address myself to a subject of intense concern to every American—indeed, to every humane person anywhere in the world—and one where the true interests of our adversaries in Hanoi happen to be identical with our own. If the leadership in Hanoi could only be brought to recognize where their own advantage lies in this matter, much needless pain and suffering might be lifted from the lives of many innocent victims of the unfortunate conflict in which we are mutually engaged.

I refer, of course, to the plight of the many hundreds of American servicemen either missing in action or known to be captives in Vietnam. At this moment we cannot even be certain how many of these men are alive or dead. The total of captured and missing is somewhere in the neighborhood of 1,500. But the authorities in North Vietnam continue to treat the names of captured Americans as though they were military secrets—to the deepening distress and anguish of the wives, parents, and children innocently involved. As one wife so poignantly pleaded of the North Vietnamese delegation to the talks in Paris:

You should at least be willing to tell me whether I am a wife or a widow.

The unfortunate families of these men, in order to foster exchanges of the pathetically limited information which comes to us, have formed the National League of Families of American Prisoners of War and Missing in Action in Southeast Asia. I had the honor of attending the opening of an office and communications center in the building of the Reserve Officers Association right across from us here in the Capitol. Their appeal

is to the conscience, not only of their countrymen, but of men of goodwill throughout the world. I hope they will have the wholehearted support of the Congress and of the executive officials of our Government; certainly they shall have mine.

In this regard, we are assured by the Department of Defense that all benefits which accrue to families of service members are extended equally to the families of those missing in action or known to be captured; also the rights, privileges, or benefits of a serviceman's family are the same whether the man is a prisoner of war or is listed as missing in action. Full pay and allowances continue in either case. I believe that this is the least we can do for those who have sacrificed so much, and I pledge, personally, to support the efforts of any family to assure that its rights are fully honored.

As a Member of the U.S. Senate and of the Foreign Relations Committee, I have never hesitated to question either the wisdom or the justice of my own country's actions in this conflict. For example, I was an early and strong opponent of the bombing sorties into North Vietnam. I believed that they would prove to be counterproductive; that they would contribute more to prolonging the war than to shortening it. Furthermore, of those Americans now prisoners of war or missing in action, more than half are pilots or crewmembers of aircraft downed over North Vietnam during those bombing raids.

My opposition to those raids was not then popular with the leaders of my own party who were responsible for the decisions I opposed, nor with a substantial number of my own constituents. But such was my honest conviction, and I felt obliged to express it. In all matters pertaining to the war in Vietnam, I have endeavored to act without consideration of political consequences, with a maximum of objectivity, and yet with—in the words of the authors of the Declaration of Independence—"a decent respect for the opinions of mankind."

All this is worth mentioning today only because it should be made clear that those of us who opposed the policies which produced the capture of our POW's are as concerned—are as passionately interested—in their welfare as those who originally advocated the same policies. I hope this fact will not be overlooked in Hanoi.

There are, I suggest, only three principal concerns which might reasonably influence a government's policy for dealing with prisoners of war. They are: First, a fundamental concern for law and decency; second, the attempt to achieve some military objective; and, third, the pursuit of some political goal. If I were speaking now to the government of North Vietnam, I would argue that their present treatment of war prisoners is harmful to their own self-interest not merely on one of the grounds I have mentioned, but on all three.

In the first instance, how can any nation fail to gain advantage from honoring international agreements into which it has solemnly and voluntarily entered? For the basic human rights of prisoners

of war are not merely matters of subjective judgment; they are clearly and explicitly spelled out in the Convention on Protection of Prisoners of War concluded at Geneva in 1949 and acceded to by North Vietnam in 1957. The same convention was ratified by the United States in 1955 and by South Vietnam in 1953, so that it is legally binding on all of the combatants in the present hostilities. That the convention represents the collective judgment of mankind on minimum standards of justice and decency is indicated by the fact that it was signed by more than 125 parties, including more than 100 members of the United Nations. Can any power which seeks international recognition and support hope to further its own interests by continuing disdain for such an overwhelming body of world opinion?

The convention is quite specific. In addition to the right to receive mail and packages and to send a minimum of two letters and four cards each month, the Geneva convention specifies minimum standards of detention, diet, and hygiene. It requires repatriation of the ill or seriously wounded. It specifies that the detaining power shall accept the offices of some neutral power or respected international organization such as the Red Cross as a protective power for the prisoners. And it requires that the detaining power provide the names of the prisoners it holds to their families and to the neutral power or the International Committee of the Red Cross.

That the Government of North Vietnam has steadfastly ignored these and all other provisions of the Geneva convention is too well documented to require detailing here. It is sufficient to repeat that they:

Refuse to release the wounded and sick;

Refuse to identify the prisoners they hold, with the result that hundreds of wives, children, and parents do not know whether their loved ones are dead or alive;

Refuse to allow a reasonable level of correspondence or delivery of packages to the POW's; and

Refuse to permit inspection of its POW camps by the International Committee of the Red Cross, which regularly inspects all POW camps in South Vietnam.

It has been suggested that, since no officially declared state of war exists between our two countries, Americans are not subject to the protection of the convention. But article 2 of the Geneva convention, to which North Vietnam acceded on June 28, 1957, explicitly provides that—

It shall apply to all cases of declared war or any other Armed conflict which may arise between two or more of the High Contracting Parties, even if the state of war is not recognized by one of them.

It would be hard to recall an international agreement whose purpose was spelled out more clearly.

Attention has also been called to the reservation put forward by the Government of North Vietnam to article 85 of the convention, with the suggestion that Hanoi's present conduct toward prisoners may be somehow justified by that res-

ervation. This, too, is insupportable. The article in question states in its entirety:

Prisoners of war prosecuted under the laws of the Detaining Power for acts committed prior to capture shall retain, even if convicted, the benefits of the present Convention.

North Vietnam declined to accept this article as written, specifying instead that—

The Democratic Republic of Vietnam declares that prisoners of war prosecuted and convicted for war crimes or for crimes against humanity, in accordance with the principles laid down by the Nuremberg Court of Justice shall not benefit from the present Convention, as specified in Article 85.

This reservation cannot be used to justify Hanoi's present course because, in its own words, only those "prisoners of war prosecuted and convicted" for war crimes or crimes against humanity are to be denied protection by the convention. Despite a great deal of rhetorical propaganda about "war criminals" and so forth, there have been no prosecutions and no convictions of American POW's by North Vietnam, even under its own laws or in its own courts. American POW's are, therefore, entitled to all their rights under the Geneva convention by Hanoi's own definition of those rights.

The record is clear: under any possible interpretation of law or history, North Vietnam, by her continued violation of the basic rights of prisoners of war, holds herself aloof from the most fundamental humane instincts of the community of nations—and does so in violation of a solemn compact into which she entered voluntarily with more than 100 other nations. I confess that it is impossible for me to imagine how her leaders could expect such actions to work for the advantage of their country.

Another consideration which might reasonably influence the treatment of war prisoners, I have suggested, is the hope for military advantage. And on this ground, too, the present policy of North Vietnam seems to me to work clearly against Hanoi's own best interests. Ill treatment of prisoners is to the military disadvantaged of any belligerent. The expectation of such treatment only redoubles the enemy's determination to fight to the end. It encourage in him the attitude stated long ago by Plato that—

He who allows himself to be taken prisoner may as well be made a present to his enemies; he is their lawful prey, and let them do what they like with him.

Military advantage gained from the treatment of prisoners of war has invariably stemmed from applying the principles of leniency and justice, not those of harshness and vengeance. In World War II, for example, the Allies took great pains to give their prisoners humane treatment and to advertise this fact to the enemy. Interrogation of German POW's who surrendered voluntarily showed that an overwhelming majority of them expected good treatment, in spite of strenuous efforts by the German Government to make them believe otherwise.

If the Government of North Vietnam pursues its present course in hope of

military gain, therefore, I suggest that its policy is as unwise as it is inhumane.

A third consideration which might affect the conditions of detention for POW's is some hope of political gain on the part of the captor. One line of reasoning is that, if Hanoi waits long enough, the anxiety and frustration of the prisoners' families will turn to bitterness and frustration of the American people toward their own government. They will blame, not Hanoi, but Washington's obstinacy over the settlement of the war for the prisoners' plight. This, in turn, will increase pressures from the American people for ending hostilities.

I sincerely hope that no such thought is taken seriously by the authorities in Hanoi. In fact, no course of action could be more counterproductive. Continuing maltreatment of POW's in North Vietnam—and the deepening doubts such treatment creates about the nature and intentions of the Hanoi government—could easily become the largest single obstacle to peace. Conversely, few acts could redound more to Hanoi's credit than an immediate decision to honor the repeated pleas of the Secretary General of the United Nations, the Vatican, the International Red Cross, and the governments of scores of nations—not to mention the most important and saddening voices of all: those of the parents, wives, and children who now live in unrelieved doubt and torment because of a policy which produces no advantage for the government which pursues it.

Let us have done with legalisms and logic chopping. All prisoners of war taken by the United States and other non-Communist forces in South Vietnam are treated, not only in strict accordance with the Geneva convention, but with a liberality which goes even beyond that convention. Under the convention, for example, guerrilla forces are entitled to prisoner-of-war status only if they are subject to a commander, carry arms openly, wear a uniform or other distinctive sign recognizable at a distance, and comply with the laws and customs of war. By those standards, a great many Vietcong would not qualify. They are, however, uniformly afforded prisoner of war status by both the United States and South Vietnam.

There are currently six POW camps in South Vietnam. U.S. military advisers are assigned to all of them and each is regularly inspected by the International Committee of the Red Cross to make certain that the rights of some 33,000 prisoners, under the Geneva Convention, are enforced. In a formal statement to the General Assembly of the United Nations last November, the U.S. delegate, Dr. Rita E. Hauser, observed:

The United States understands that every country believes that it is right and its enemy wrong. But . . . the Geneva Convention was designed specifically to meet this problem. It imposes upon all combatant powers the obligation to treat military personnel made helpless by their captivity in accordance with a single objective and verifiable standard.

We know that there have been documented cases of maltreatment in the POW camps of South Vietnam. But these complaints were lodged by the Interna-

tional Red Cross which, in contrast with the North, has full access to the prison camps of the South and is in a position to protect the prisoners from a continuation of such abuses. As our delegate to the United Nations also said:

Let me be clear that we are not claiming a perfect record on this subject. War is ugly and brutal by nature, and violations by individuals have occurred. The point is, however, that the Allied command has made every effort to ensure that the Convention is applied.

We ask no more from North Vietnam in regard to prisoners under their control.

I would hope that the leaders of North Vietnam would soon recognize that their cruel treatment of war prisoners is a treatment which not only horrifies public opinion throughout the world, but which is also harmful to the long-term interests of Hanoi itself. When this realization occurs to them, then we can hope for a change of heart and policy.

To help bring about that realization, it would be most helpful if our friends in France, Sweden, and other countries would make their humanitarian voices heard in Hanoi with the same vigor they have shown in criticizing our own policies in Vietnam.

Mr. JAVITS. Mr. President, I should like to compliment the distinguished Senator from Rhode Island (Mr. PELL) for a very fine, studied, and considered statement on this very vexing prisoner-of-war issue. I heard his speech and I think he did a very fine job.

Let us hope and pray that they listen and, even more importantly, that our own allies listen.

Mr. PELL. I thank my good friend from New York.

CULEBRA

Mr. JAVITS. Mr. President, over the course of the last several months, the plight of the residents of a tiny American island in the Caribbean—Culebra—has come increasingly to public attention.

Culebra is part of the Commonwealth of Puerto Rico, and its citizens are American citizens. Yet much of the island has for years been owned by the Navy, and it is now used for practice firing of naval ordnance to the increasing dismay of the Culebrans.

As a Senator from New York, which has many residents of Puerto Rican extraction, and as a former member of the Commission on the Status of Puerto Rico, I have taken an interest in this matter, and I am pleased to say that others, including some of my colleagues here in the Senate, the Governor of my State, and members of the press, have likewise taken an interest.

Governor Rockefeller recently released the following letter to the Secretary of Defense:

Hon. MELVIN R. LAIRD,
Secretary of Defense,
The Pentagon,
Washington, D.C.

I am in full sympathy with our American Citizens on the island of Culebra off Puerto Rico who object to the use of Culebra by the U.S. Navy for Target Practice. Surely, the Navy can find an uninhabited spot for test-

ing missiles, bombs and shells rather than disturbing the tranquillity and safety of a place that is home to over 700 people. On behalf of thousands of Puerto Ricans in New York State who sympathize with the residents of Culebra, I strongly urge that the Navy curb its plan to lease more of the island, find another firing range and restore the Culebrans their peace.

Sincerely,

NELSON A. ROCKEFELLER.

Both the New York Times and the Washington Post have editorialized against the Navy's use of this island, and I ask unanimous consent that these editorials be printed in the RECORD.

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

[From the New York Times, July 10, 1970]

CULEBRA AND GOLIATH

Can anyone really believe that the only suitable target area in the entire Atlantic Ocean for testing a new generation of guided missiles and glide bombs is a 7,000-acre island off Puerto Rico which 726 American citizens call home? So says the United States Navy, which already owns a third of the island of Culebra and now intends to lease and eventually buy another third.

What the Navy has really wanted to do for fifteen years is to buy all of Culebra and resettle the island's residents elsewhere. But Culebra is a municipality of Puerto Rico and can be dissolved under the Commonwealth's Constitution only by vote of its residents. A survey indicates that 95 per cent of the Culebrans oppose the Navy's current expansion plan and at least 75 per cent want the Navy to pull out altogether.

Under existing conditions, Culebrans must cope with a nerve-racking, noise-pollution problem from shelling, bombing and low-flying Navy jets. Culebrans find their freedom of movement curtailed by Navy maneuvers and security requirements, their economy and development menaced by the Navy's expansion plan.

As part of what they Navy calls the "inner range portion" of the Atlantic Fleet Weapons Range complex, Culebra unquestionably offers substantial advantages for the development of new systems. What is equally obvious is that the Navy for a long time remained insensitive to the rising resentment of the Culebrans and dragged its feet on examining possible alternatives to the use of this inhabited island.

It would be a salutary example of what one likes to think the United States is still all about if the mightiest Navy in the world now decided on its own to weigh anchor and go elsewhere to explode its new arsenal, leaving 726 poor islanders in peace and quiet.

[From the Washington (D.C.) Post, July 4, 1970]

WHY BOMB AN INHABITED ISLAND?

It is time that high-level attention be paid to the controversy over Culebra. The Navy, which already owns about one third of this 7,000-acre island in the Commonwealth of Puerto Rico, is trying to obtain another third of it so as to expand its training operations there, with the installation of a Walleys missile target on the immediately adjacent small island of Culebrita. The move is bitterly resisted by most of the 726 inhabitants and many other Puerto Ricans on the ground that the use of the island as a target has already made life there almost intolerable.

The Puerto Rican Civil Rights Commission has described the military training operations on Culebra as "excessively intense, continuous, irregular and dangerous." The cattle business on the island is said to have been virtually ruined. Fishing has been gravely

impaired, and since these two industries have been the chief source of income for the families living on the island, the economic impact of the shelling and bombardment has been severe. Equally troublesome is the effect on education. One teacher reports that the school buildings "tremble with every explosion" and that the children are too frightened, distracted by noise and plagued by loss of sleep (from the night bombing) to give serious attention to their studies.

Repercussions from this use of an inhabited island as a target have spread far beyond Culebra itself. Many Puerto Ricans see in it evidence of a general lack of sensitivity in Washington to commonwealth problems. Tensions on the island have risen notably since the shelling and bombing on Culebra have been stepped up. A columnist for the San Juan Star recently suggested that if Congress should grant the Navy's request to take over more of the island it "could swing popular sentiment toward independence or at least away from statehood more effectively than anything else."

Aside from the injustice of inflicting conditions akin to warfare on the people of Culebra, therefore, the Navy's policy threatens to complicate the relations between the United States and the commonwealth. Just now those relations are in a delicate state. Sentiment in favor of independence has been growing along with sentiment for statehood, although a substantial percentage of the people still seem to favor the existing commonwealth status. It would be most unfortunate if the government in Washington should unduly influence the outcome of the debate now going on in regard to Puerto Rico's future by continuing a shortsighted and inhumane policy in Culebra.

The need for good relations between Puerto Rico and the United States will remain an imperative of the future whether the commonwealth is retained or statehood is requested. For one thing, the Roosevelt Roads Naval Base is the second most important naval installation in the Caribbean. For another, the relations between Washington

and San Juan are enormously influential in our dealings with the rest of Latin America. Even though the Navy finds Culebra a convenient area for its training operations, we simply cannot afford as a nation to get into the posture of putting bombs ahead of people.

Mr. JAVITS. Mr. President, I have little doubt that, if this kind of Navy target practice took place in close proximity to inhabited portions of a State represented in this Senate, the Senator from that State would insist—and rightly so—that, if there were any alternative, the practice be terminated and that the Navy find an uninhabited place to test its weapons.

But Puerto Rico has no Senator, and yet it has the whole Senate, whose responsibility it is to protect the rights, tranquility, the safety of every American citizen.

Because of that responsibility, I have written to the Secretary of the Navy about this matter, and I have also urged the chairman of the appropriate Senate subcommittee to investigate it and to see if this intrusion on the lives of, and danger to, the Americans living on Culebra is really unavoidable, or if the Navy can and should find alternative sites for the use of the Navy.

I hope very much that the Navy will likewise seek to adjust its practices, voluntarily, to the legitimate needs and aspirations of the people of Culebra.

RECOGNITION OF SENATOR GURNEY AND SENATOR GOODELL TOMORROW

Mr. BYRD of West Virginia. Mr. President, I ask unanimous consent that on

completion of the remarks by the able Senator from Indiana (Mr. BAYH) tomorrow, the Senator from Florida (Mr. GURNEY) be recognized for not to exceed 30 minutes; and that upon the conclusion of his remarks, the Senator from New York (Mr. GOODELL) be recognized for not to exceed 20 minutes.

The PRESIDING OFFICER (Mr. WILLIAMS of New Jersey). Without objection, it is so ordered.

ADJOURNMENT TO 10 A.M. TOMORROW

Mr. BYRD of West Virginia. Mr. President, if there is 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. tomorrow.

The motion was agreed to; and (at 5 o'clock and 9 minutes p.m.) the Senate adjourned until tomorrow, August 6, 1970, at 10 a.m.

NOMINATION

Executive nomination received by the Senate August 5, 1970:

DEPARTMENT OF DEFENSE

J. Fred Buzhardt, Jr., of South Carolina to be General Counsel of the Department of Defense.

CONFIRMATION

Executive nomination confirmed by the Senate August 5, 1970:

U.S. DISTRICT COURT

G. Thomas Eisele, of Arkansas, to be U.S. district judge for the eastern district of Arkansas.

HOUSE OF REPRESENTATIVES—Wednesday, August 5, 1970

The House met at 12 o'clock noon. Father John T. Creed, St. Margaret's Church, Saugus, Mass., offered the following prayer:

Heavenly Father, almighty and eternal God, we ask Your blessing on these Members of the House of Representatives.

Bestow on them Your guidance in order that they might perform their duties in helping all God's people who are in need. Lord, we call upon Your Holy Spirit to assist those who are educating our youth so that they might be well prepared to take on the many responsibilities that a great nation demands of its people.

We further beseech You, O Lord, to help our Nation to unite that, regardless of race, color, or creed we may be truly one nation under God.

This we ask in Your name. Amen.

THE JOURNAL

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

MESSAGES FROM THE PRESIDENT

Sundry messages in writing from the President of the United States were

communicated to the House by Mr. Geisler, one of his secretaries, who also informed the House that on the following dates the President approved and signed bills and joint resolutions of the House of the following titles:

On July 10, 1970:

H.J. Res. 1284. Joint resolution authorizing the President's Commission on Campus Unrest to compel the attendance and testimony of witnesses and the production of evidence, and for other purposes.

On July 13, 1970:

H.R. 2047. An act for the relief of Roseanne Jones;

H.R. 5000. An act for the relief of Pedro Irizarry Guido; and

H.R. 12858. An act to provide for the disposition of certain funds awarded to the Tlingit and Haida Indians of Alaska by a judgment entered by the Court of Claims against the United States.

On July 16, 1970:

H.R. 5106. An act for the relief of Rogelio Tabban;

H.R. 16739. An act to extend until July 3, 1974, the existing authority of the Administrator of Veterans' Affairs to maintain offices in the Republic of the Philippines;

H.R. 17868. An act making appropriations for the government of the District of Columbia and other activities chargeable in whole or in part against the revenues of said District for the fiscal year ending June 30, 1971, and for other purposes; and

H.J. Res. 224. Joint resolution to change the name of Pleasant Valley, Canal, Calif., to "Coalinga Canal."

On July 17, 1970:

H.J. Res. 746. Joint resolution to amend the joint resolution authorizing appropriations for the payment by the United States of its share of the expenses of the Pan American Institute of Geography and History.

On July 23, 1970:

H.R. 11766. An act to amend title II of the Marine Resources and Engineering Development Act of 1966.

On July 22, 1970:

H.R. 2036. An act to remove a cloud on the titles of certain property located in Malin, Ore.

H.R. 7618. An act to provide for the conveyance of certain real property of the Federal Government to the Board of Public Instruction, Okaloosa County, Fla.

On July 24, 1970:

H.R. 7517. An act to amend the Canal Zone Code to provide cost-of-living adjustments in cash relief payments to certain former employees of the Canal Zone Government, and for other purposes.

H.R. 16595. An act to authorize appropriations for activities of the National Science Foundation, and for other purposes.

On July 29, 1970:

H.R. 12758. An act to authorize the Secretary of the Interior to establish a volunteers in the park program, and for other purposes.